



## Does CITES Conserve Biodiversity?

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### **Abstract**

CITES is a wonderful example of what can be achieved by the international community to deal with the loss of biodiversity, with the substantial increase in CITES membership over the years indicating international concern for conservation. There is no denying, however, that CITES has been a controversial treaty generating considerable debate about the conflicting goals of conservation and development. This is particularly so in developing countries. Despite its shortcomings, CITES is an important tool for conserving the world's rapidly diminishing biodiversity. It also provides invaluable information on global trade patterns for numerous threatened species. The ultimate success of CITES will depend on the willingness of all of the Parties to abide by the provisions of the Convention, and to ensure citizen compliance as well. It is also important to remember that CITES will not achieve the conservation of biodiversity on its own. Many other initiatives are needed, including strong domestic legislation and enforcement. Other international conventions like the Convention on Biological Diversity and the World Heritage Convention also have an important role to play in protecting the biodiversity of the planet. The author concludes that without CITES more of the world's endangered species would probably have vanished from the earth.

### **Key Words**

Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), TRAFFIC, World Wide Fund for Nature, biodiversity, turtles, fisheries, forests

## Why CITES?

The 1960s and 1970s marked a new era in environmental awareness. The United Nations Convention on the Human Environment was held and the international community began to focus on the impact that people were having on the world. As a part of this, people also began to focus on the rate at which the world's animals and plants were being threatened by unregulated international trade.<sup>1</sup> The idea that trade significantly impacted on wildlife populations was nothing new. It had long been postulated that one of the major causes in the decline of many of the world's species has been due to the increasing and uncontrolled trade of the world's fauna and flora. The realisation as to the seriousness of the impact was highlighted in the early part of the 20th Century through the extinction of numerous high profile specimens including the Caspian Tiger,<sup>2</sup> several species and subspecies of wolf,<sup>3</sup> one species of seal<sup>4</sup> and numerous species of birds.<sup>5</sup> Although the international trade in wildlife has existed for centuries, the 1960s marked the beginning of a dramatic increase in volume.<sup>6</sup> Increasing globalisation, with many remote areas being opened up with efficient transport links for the first time and newfound affluence all had their effect. As a result, many more species were becoming vulnerable to human impacts and with improved communications people were for the first time seeing the effects of their actions.

By 1969 imports of endangered species in to the United States alone had reached in excess of 1300 Cheetah skins, 13500 Jaguar, 9600 Leopard and 129000 Ocelot skins annually,<sup>7</sup> whilst worldwide as many as 40000 primates, 1 million orchids, 10 million reptile skins, 4 million live birds, 15 million pelts from wild furbearers, and over 350 million tropical fish are still traded annually.<sup>8</sup> However, the number of

1 US Fish and Wildlife Service at <<http://international.fws.gov/pdf/CITESfall01.pdf>>.

2 The Caspian Tiger (*Panthera tigris virgata*) became extinct in 1950 and the Javan Tiger (*Panthera tigris sondaica*) became extinct in 1970.

3 The Japanese Wolf (*Canis hodophilax*), Kenai Peninsula Wolf (*Canis lupus alces*), Newfoundland Wolf (*Canis lupus beothucus*), Banks Island Wolf (*Canis lupus bernardi*), Cascades Mountains Wolf (*Canis lupus fuscus*), Northern Rockies Wolf (*Canis lupus irremotus*), Mongollon Wolf (*Canis lupus mogollonensis*), Texas Grey Wolf (*Canis lupus monstrabilis*) Great Plains Wolf (*Canis lupus nubilus*), Southern Rockies Wolf (*Canis lupus youngi*), Florida Red Wolf (*Canis rufus floridanus*) and the Texas Red Wolf (*Canis rufus rufus*) all became extinct between 1905 and 1970.

4 The Caribbean Monk Seal (*Monachus tropicalis*) became extinct in 1936.

5 For example the Paradise Parakeet (*Psephotus pulcherrimus*) became extinct in 1927.

6 M.A. Peters "The Convention on International Trade in Endangered Species: An Answer to the Call of the Wild?" (1994) 10 *Connecticut Journal of International Law* 169-191 at 174.

7 A. Holt "From the Editor" (1998) 19 *Environmental Perspectives* (a newsletter publication of the Environmental Policy & Management Research Centre: University of Otago) 1 at 3.

8 S. Fitzgerald *International Wildlife Trade: Whose Business Is It? World Wildlife Fund* (1989). Cited in C. Wold "Multilateral Environmental Agreements and the GATT: Conflict and Resolution?" (1996) 26 *Environmental Law* 841-921 at 868.

animals actually taken from the wild to support this trade is significantly higher. For example, 14 to 20 million birds are taken from the wild each year to supply pet stores with 3.5 to 5 million birds.<sup>9</sup> Today some estimates suggest that up to forty per cent of vertebrate animals that are endangered or threatened with extinction today were brought to that point, in part, by the uncontrolled trade in wildlife.<sup>10</sup>

As a result of the extent and global nature of the trade the international community recognised that “international cooperation is essential for the certain species of wild fauna and flora against over-exploitation through international trade”.<sup>11</sup>

### **What is CITES?**

As the name implies the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) covers the international trade in endangered species of animals and plants. That is the movement of certain selected species, whether alive or dead, whole, in pieces or a derivative across national boundaries. The aim of CITES is to ensure that any international trade in wildlife is done in a sustainable manner. It is not there to completely stop or ban wildlife trade, as many people seem to think.<sup>12</sup> In fact the language of CITES actually indicates that some exploitation of wildlife will be tolerated, for example the Convention states, that “Parties shall ensure that specimens shall pass through any formalities required for trade with a minimum of delay.”

CITES entered into force internationally in 1975 and in Australia on 27 October 1976.<sup>13</sup> Prior to this there was no international agreement on monitoring the trade in endangered species nor was there an international system of listing endangered species.<sup>14</sup> Nowadays CITES is one of the world’s flagship treaties with over 150<sup>15</sup> countries that are currently Party to the Treaty, making it one of the most extensive treaties ever committed to.

9 “The Wild Bird Trade: When a Bird in the Hand Means None in the Bush” (1992) 2 *Wildlife Conservation International*. Cited in C. Wold “Multilateral Environmental Agreements and the GATT: Conflict and Resolution?” (1996) 26 *Environmental Law* 841-921 at 868.

10 The Humane Society of the United States at <<http://www.hsus.org/ace/352>>.

11 Text of the Convention.

12 Critics of the Berne Criteria argued that “CITES has become a vehicle, not for regulating wildlife trade, but for stopping the use of wildlife altogether.” See J.L. Garrison “The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate over Sustainable Use” (1994) 12 *Pace Environmental Law Review* 301-393 at 316.

13 Department of Foreign Affairs and Trade at <<http://www.dfat.gov.au/environment/cites.html>>.

14 A. Holt, note 7 at 3.

15 As at April 2002 154 countries were Party to the Convention. CITES website at <<http://cites.org/eng/parties/index.shtml>>.

So why is the conservation of endangered species a matter of international concern? The reason is that even though biological resources are often found within a particular country, the benefits of conservation are, in part, global in character. International action helps give States where the resources are found an incentive to conserve, by sharing in the benefits of conservation.<sup>16</sup> So what is CITES role? CITES operates by dampening demand<sup>17</sup> and despite being a general wildlife protection treaty, is included in the category of treaties that attempts to conserve biological diversity by focusing on a species, or groups of species.<sup>18</sup> The Convention establishes an international legal framework for the regulation of trade in species of wild animals and plants with regulation being brought about through a system of permits and certificates that are required for the export, re-export, or import of wildlife and wildlife products. The degree of regulation applying to trade in particular animal and plant species depends upon the appendix in which a species is listed.

The three appendices are:

- Appendix I – species threatened with extinction that are, or could be, affected by trade. For the most part international trade in these species is forbidden;
- Appendix II – species not necessarily in danger of extinction but which could become so if trade in them were not strictly regulated, as well as those for which trade must be strictly regulated in order to render effective the measures taken on behalf of the former. International trade in these species is regulated to a level so as not to endanger their survival; and
- Appendix III – species which individual Parties to the Convention choose to make subject to regulations and for which the co-operation of the other Parties is required in controlling trade. Unlike species in Appendices I and II, these species do not require a vote of the Conference of the Parties to be listed.<sup>19</sup>

Approximately 5000 species of animals and 25 000 species of plants are currently afforded the protection of CITES.<sup>20</sup> Whilst this may seem to only cover a small portion of the 1.75 million species fauna and flora that have so far been identified (most of these are small creatures such as insects) and an even smaller percentage of

16 D.M. “Bodansky International Law and the Protection of Biological Diversity” (1995) 28 *Vanderbilt Journal of Transnational Law* 623-634 at 627.

17 C.D. Stone “Environment 2000 - New issues for a New Century: Land Use, Biodiversity and Ecosystem Integrity: Land Use and Biodiversity” (2001) 27 *Ecology Law Quarterly* 967-1001 at 978.

18 See D. M. Bodansky “International Law and the Protection of Biological Diversity” (1995) 28 *Vanderbilt Journal of Transnational Law* 623-634.

19 For a more detailed explanation of how the Appendices work see W.C. Burns “CITES and the Regulation of International Trade in Endangered Species of Flora: A Critical Appraisal” (1990) 8(2) *Dickinson Journal of International Law* 203-223 at 208-210.

20 CITES website at <[www.cites.org/eng/disc/species.shtml](http://www.cites.org/eng/disc/species.shtml)>.

the 13 million species<sup>21</sup> that scientists suspect may exist, many of the species that are covered by CITES are important ecological components that provide import habitat and environmental stability for other species, thus supporting biodiversity.

Some of the species listed on the appendices of CITES and thus subject to its protection include the Tiger (*Panthera tigris*), the Rhinoceros (*Diceros bicornis* and *Ceratotherium simum*), the Scarlet Macaw (*Ara macao*), populations of the Brown Bear (*Ursus arctos*) in Bhutan, China, Mexico and Mongolia and numerous species of plants. Whilst the treaty is available to protect all forms of animal and plant life, it is particularly important for vertebrate species with some reports estimating that up to 40 per cent of the vertebrates that are threatened with extinction, are primarily threatened due to trade.<sup>22</sup>

## Failures

Over 25 years have now passed since the original signing of the treaty. Though surprisingly, as the membership of CITES has increased so has the extinction rate of endangered species,<sup>23</sup> with almost 250 000 species becoming extinct since the early 1990s alone. This rate is approximately 1000 to 10 000 times the rate of extinction estimated for the past 65 million years. Whilst few of these species were protected by CITES, there has also been a corresponding decline in the populations of a number of species that have been afforded the maximum protection under CITES. In fact, despite the introduction of the convention, the often-unsustainable trade in endangered wildlife has continued to flourish and in some instances has increased.

This increase in trade has been able to occur partly due to the fact that in many instances the implementation of the treaty has been sadly lacking. Countries such as Thailand, Yemen, Vietnam and Fiji have all been criticised for their lack of controls. Further, it is estimated that forty-five per cent of all CITES transactions affecting animals go unreported, even when the countries involved submit annual reports. When the World Wildlife Fund studied the reporting patterns of members of the European Economic Community, it found an “appalling lack of compliance.” One-third of the members of CITES completely ignore reporting requirements and have never submitted a report, while others are consistently late. Thus, no one can really be sure how effective CITES protection is or pinpoint violations of its provisions.<sup>24</sup> Further examples have also been found by TRAFFIC who through research conducted in 1994–1996 found that the Russian Customs Service does not control the trade in certain wildlife groups of species and products. In particular, TRAFFIC found that brown

21 Estimates range from 3 to 100 million.

22 S. Fitzgerald (1989) *International Wildlife Trade*. Cited in J.R. Berger “The African Elephant, Human Economies, and International Law: Bridging the Great Rift for East and Southern Africa” (2001) 13 *Georgetown International Environmental Law Review* 417–462 at 421.

23 R.A. Braun “Lion, Tigers and Bears [Oh my]: How to Stop Endangered Species Crime” (2000) 11 *Fordham Environmental Law Journal* 545–583 at 554.

24 D.M. Kueck “Using International Political Agreements to Protect Endangered Species: A Proposed Model” (1995) 2 *University of Chicago Law School Roundtable* 345–360.

bear gall bladders (CITES Appendix II) are not controlled during export and that reptiles and large parrots were largely overlooked during import.<sup>25</sup> Likewise, Fiji recently reported that its Customs Department at Nadi International Airport does not verify the volume of commodity exported. Customs officials rely on permits issued by relevant authorities and does not independently verify any coral or clam shipments.<sup>26</sup> This poor implementation of the treaty has the potential to seriously undermine the effectiveness of the Convention. Whether the poor implementation by the few will be enough to undermine the treaty and significantly contribute to the loss of biodiversity is yet to be seen.

By 1993 it had been estimated that the international illegal trade in wildlife was worth between US\$ 5-17 billion per year.<sup>27</sup> In the United States alone, the US Fish and Wildlife Service estimated that illegal animal and plant trafficking was worth US\$100 million per year.<sup>28</sup> As recently as November 2001 there were indications that legal and illegal trade in rare reptiles was on the increase in some African countries, including Comoros, Madagascar, Mozambique and South Africa.<sup>29</sup> In Port Klang Malaysian Customs recently intercepted a shipment of 1200 frozen pangolins (CITES Appendix II). In Hong Kong it is reported that “a substantial endangered species trade still exists”.<sup>30</sup> In Latin America illegal animal trafficking remains one of the largest exports, second only to drugs.<sup>31</sup> In the United Kingdom, the Metropolitan Police seized over 20 000 endangered species items being sold illegally in London during the in the first two years of Operation Charm.<sup>32</sup> Whilst seizures of this type are regularly held up by governments as successes of CITES, unless they work to effectively reduce demand they must be seen as failures as they fail to preserve biodiversity as the species has already been killed and removed from the gene pool. The level and frequency of seizures around the globe indicates that the removal of species from the biodiversity pool still occurs on a significant level in every corner of the world.<sup>33</sup>

25 I. Chestin “Wildlife Trade in Russia and Central Asia” (1998) *TRAFFIC Europe* at 78.

26 CITES Oceania Regional Report 2002.

27 D.S. Favre “Debate Within the CITES Community: What Direction for the Future” (1993) 33 *Natural Resources Journal* 875-918 at 889.

28 D.S. Favre “Debate within the CITES Community: What Direction for the Future” (1993) 33 *Natural Resources Journal* 875-918 at 889.

29 Eighteenth meeting of the Animals Committee, San José (Costa Rica), 8-12 April 2002.

30 J. Bloch “Conservation in a Concrete Jungle: Political, Legal and Social Obstacles to Environmental Protection in Hong Kong” (1994) 6 *Georgetown International Environmental Law Review* 593-622 at 594. Cited in B.L. Liebman “Autonomy through Separation?: Environmental Law and the Basic Law of Hong Kong” (1998) 39 *Harvard International Law Journal* 231-301 at 246.

31 R.A. Braun “Lion, Tigers and Bears [Oh my]: How to Stop Endangered Species Crime (2000) 11 *Fordham Environmental Law Journal* 545-583 at 561-2.

32 Operation Charm began in 1995. Metropolitan Police website at <<http://www.met.police.uk/wildlife/charm4.htm>>.

Perhaps the highest profile example of a species that has declined despite CITES protection is the Tiger, which has suffered population declines of as much as 90 per cent since the introduction of the treaty.<sup>34,35</sup> Even today trade continues to pose a threat to wild Tiger populations with the World Wide Fund for Nature estimating that at least one tiger continues to be killed every day in the wild in order to meet the demand for traditional medicines.<sup>36</sup>

But why is this the case? Two major recognised impediments to the success of CITES is the ineffective or non-existent executing legislation in a large number of Party states, and the lack of enforcement by many Parties. One author has written: “Enforcement has since CITES’ inception, proved to be the weakest link in the chain of its controls over trading. The profits deriving from wildlife trafficking far outweigh the resources available, nationally and internationally to stop the trade in wildlife ...”.<sup>37</sup> Compliance with the treaty remains problematic and various States have achieved divergent levels of success in implementing the Convention. This is not only a problem faced by CITES. International agreements generally face inherent enforcement and compliance obstacles, especially when the agreement has as many members as CITES. Each member’s respective political and economic pressures pose threats to effective compliance with the treaty.<sup>38</sup>

A prime reason for these divergent levels of success lie, in part, with the wording of the convention itself. The CITES convention “recognises that the peoples and States are and should be the best protectors of their own wild fauna and flora and that international cooperation is essential for the protection of certain species of wild fauna and flora through international trade”.<sup>39</sup> As a consequence Parties are required to enact domestic legislation that controls the international trade of certain wildlife species. In Australia the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* was enacted to fulfil Australia’s commitments to CITES.<sup>40</sup> Whilst this recognition of the role that States and people play in the conservation of biodiversity

33 *New Straits Times* 20 April 2002. Despite being intercepted by law enforcement authorities (and a success for them), this is considered by the author as a failure of the Convention to protect biodiversity as the animals were killed as a result of trade and can no longer contribute to the ecological population.

34 R.A. Braun note 31 at 550.

35 World Wide Fund for Nature at <<http://www.worldwildlife.org/species/species.cfm?sectionid=123&newspaperid=21>>.

36 Operation Charm at <[www.met.police.uk/wildlife/charm1.htm](http://www.met.police.uk/wildlife/charm1.htm)>

37 P. Birnie *The Case of the Convention on Trade in Endangered Species* (1995). Cited in G.F. Maggio “Recognizing the Vital Role of Local Communities in International Legal Instruments for Conserving Biodiversity” (1998) 16 *UCLA Journal of Environmental Law & Policy* 179-227 at 195 at 195

38 S. Patel “The Convention on International Trade in Endangered Species: Enforcement and the Last Unicorn” (1995) 18 *Houston Journal of International Law* 157-213 at 186.

39 Text of the convention.

40 The *Wildlife Protection (Regulation of Exports and Imports) Act 1982* was repealed at the beginning of 2002 and its provisions incorporated into the *Environment Protection and Biodiversity Conservation Act 1999*.

is good and the altruistic goal of international cooperation is applauded it fails to take into account that for many countries the protection of wildlife is often secondary to goals such as trade and development. Although the Convention requires parties to take appropriate measures, nowhere does it dictate uniform provisions for each State to follow. As a result, this individuality gives states flexibility in implementing CITES.<sup>41</sup> Whilst this may be one of the features that makes it attractive to States and acts as an incentive for them to join, this flexibility also has drawbacks with internal political pressures often directing governments to override ecological considerations in favour of immediate development and commercial goals.

The Convention largely fails to take into account the lack of resources and technical skills that many underdeveloped countries have. Whilst this is partly addressed through training provided by the CITES Secretariat, other Parties and non-government organisations like TRAFFIC, the burgeoning illicit trade in wildlife products has encouraged over harvesting of the more valuable species together with the poaching of endangered species, even in the most protected parks and preserves, to such an extent that it is rapidly outstripping the financial ability of most Third World (and many developed) countries to cope with the problem. Many Asian countries for example, have appropriate legislation in place to implement CITES, but many are unable to effectively control the wildlife trade largely due to the lack of available resources. For example, the Taiwanese government claimed that its efforts to control the trade have been limited by a shortage of personnel and funding for wildlife protection.<sup>42</sup> Other issues such as corruption, lack of training and a lack of government resolve also play significant roles. Asian countries are not alone in this regard, developed countries such as Australia, the United States and the United Kingdom all continue to consume and trade in endangered wildlife, despite being some of the better resourced Parties of CITES.

Even where effective laws are in place punishments are often ineffective at preventing further breaches of CITES regulations. This is not only a problem faced by developing nations. For example in a recent case in the UK magistrates only imposed a £1500 on a company that had imported £350 000 of shatoosh wool shawls<sup>43</sup> – less than one half of a percent of the value. It was estimated that up to 1000 animals had been killed to make the 138 shawls. Unfortunately this does not appear to be an isolated incident, the average fine imposed in the UK for wildlife

41 J. Rincenau “Enforcement Mechanisms in International Environmental Law: Quo Vadunt?” (2000) 15 *Environmental Law and Litigation* 147-177 at 157.

42 J. Cheung “Implementation and Enforcement of CITES: An Assessment of Tiger and Rhinoceros Conservation Policy in Asia” (1995) 5 *Pacific Rim Law & Policy Journal* 125-159 at 133.

43 Shatoosh wool comes from the coats of the endangered Tibetan antelope (*Pantholops hodgsonii*). To obtain the wool the antelope is killed.



offences over the last four years has been only £963,<sup>44</sup> with similar situations occurring in many other countries including Australia.

Consequently, the unsustainable trade in wildlife has continued and many populations of protected species have continued to plummet at alarming rates in the years since CITES entered into force.<sup>45</sup> As a result, many endangered species are no less endangered than prior to the treaty entering into force.<sup>46</sup> Examples can be seen in species such as the Red Panda (*Ailurus fulgens*)<sup>47</sup> for which the pet and fur trade is still considered to be a significant cause for the decline and the Buffy-Tufted-Ear Marmoset (*Callithrix aurita*), which since its listing in 1977 has declined from Vulnerable to Endangered.<sup>48</sup> In fact, some commentators suggest that every transfer of a species from Appendix II to Appendix I could be considered as an example of the failure of the Parties to fulfil their obligations under the Convention.<sup>49</sup> Unfortunately this has been observed on numerous occasions.

For example the Hyacinth Macaw (*Anodorhynchus hyacinthinus*), native to Brazil, Bolivia and Paraguay was first listed in Appendix II of CITES in 1981. In 1987, after a continued decline in numbers the species was upgraded to Appendix I. However, despite the increased theoretical protection Appendix I offers, the wild population continues to decline. The Red List 2000 quotes that “this species qualifies as Endangered since the remaining small populations are probably undergoing very rapid reductions as a result of illegal trapping for the cage-bird trade and habitat loss.”<sup>50</sup> For this species CITES listing has made little difference. Once widespread throughout much of South America it is now listed as endangered with the 1996 IUCN Red Data book stating that the species “has been seriously reduced by massive, illegal trade to an estimated 3000 birds”. Given that much of this reduction appears to have occurred after this species was listed with CITES it suggests that CITES listing and trade restrictions have failed to halt any decline.

Likewise the Moluccan Cockatoo (*Cacatua moluccensis*), a native to Indonesia and Papua, was also listed in Appendix II in 1981 and was also required to be upgraded to Appendix I.<sup>51</sup> The IUCN 2000 Red List quotes that the Moluccan Cockatoo

44 J. Vidal “UK a Haven for Traffickers of Rare Species - Report for WWF Warns Against Lax Laws and Small Fines” *The Guardian* 2002.

45 A.E. Vulpio “From the Forests of Asia to the Pharmacies of New York City: Searching for a Safe Haven for Rhinos and Tigers” (1999) 11 *Georgetown International Environmental Law Review* 463-490 at 469.

46 R.A. Braun note 31 at 546.

47 See <<http://www.animalinfo.org/species/carnivor/ailufulg.htm>>.

48 See <<http://www.animalinfo.org/species/primate/callauri.htm>>.

49 W. Wijnstekers *The Evolution of CITES: A Reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES Secretariat, Lusanne Switzerland: 1992) at 233.

50 2000 IUCN Red List of Threatened Species. IUCN Species Survival Commission at <<http://www.redlist.org/>>.

51 The Moluccan Cockatoo was upgraded to Appendix I in 1990 at <<http://www.cites.org/eng/resources/fauna.shtml>>.

“qualifies for Vulnerable because, like its congeners, it is a very popular cage-bird and has suffered a rapid population decline as a result of trapping for trade combined with deforestation in its small range. Moreover, this decline is projected to continue and perhaps accelerate.”<sup>52</sup> This despite its CITES listing.

### The Turtle Trade

The failure of CITES to adequately protect species continues even today. A current area in which CITES is failing to have an impact is in the trade in turtles. Whilst data on the impact of wild turtle populations is scant, it is clear that international trade is a contributing factor to the decline of most species, and in many cases it is the main cause.<sup>53</sup> Despite this only about 58 species of turtles are listed in either Appendix I or II of the Convention, despite 67 species of freshwater turtle in Asia alone being considered as threatened.<sup>54</sup> Some estimates indicate that the number of critically endangered freshwater turtles has more than doubled in the last four years, with three quarters of Asia’s freshwater turtles now listed as threatened and over half listed as endangered.<sup>55</sup>

In Asia two primary types of trade in turtle occurs. One is a high volume, commodity-type trade in turtles or turtle parts for consumption. The other is the pet trade that involves smaller numbers of specimens, but each with a higher individual value.<sup>56</sup> In Asia the trade for turtles for consumption generally originates in the source countries of the South-east and South Asia and ends in the consumer countries in East Asia eg China. Whilst a large proportion of the turtles captured are consumed locally, the majority of the turtles are exported.<sup>57</sup>

One particular example of the decline in turtle numbers due to trade can be seen with *Pelodiscus sinensis*. This species is listed as Vulnerable with the IUCN.<sup>58</sup> Yet it is not listed on CITES, therefore there are no restrictions on its trade. While this species is commercially farmed in vast numbers (several millions per year) for the food trade, the wild populations continue to be exploited for food and possibly farm founder stock, resulting in a decline in abundance throughout its range.<sup>59</sup> Without

52 See <<http://www.cites.org/eng/resources/fauna.shtml>>.

53 TRAFFIC at <[www.traffic.org/cop11/briefingroom/turtles.html](http://www.traffic.org/cop11/briefingroom/turtles.html)>.

54 Of the 90 species of Asian freshwater turtles and tortoises, 74 percent are considered threatened TRAFFIC at <[www.traffic.org/news/turtles.html](http://www.traffic.org/news/turtles.html)>.

55 TRAFFIC at <[www.traffic.org/news/turtles.html](http://www.traffic.org/news/turtles.html)>.

56 Asian Turtle Trade Working Group (1999). Conclusions from the workshop on trade in tortoises and freshwater turtles in Asia. Report from the workshop held 1-4 December 1999, Phnom Penh, Cambodia.

57 Ibid.

58 2000 IUCN Red List of Threatened Species. IUCN Species Survival Commission at <<http://www.redlist.org/>>.

restrictions on the trade in this species it is probable that it will become extinct in the wild. Yet despite this it is not entitled to the protection of the Convention.

However, the situation with turtles is not all bad and improvements are being made. Prior to the last CoP in 2000, Germany and the United States of America proposed that all species of Asian Box Turtle (*G. Cuora*) be listed in Appendix II of the convention.<sup>60</sup> Not only does this listing add a level of protection for vulnerable species, but it also adds protection for other species that look similar to those found in trade. The successful inclusion of this genus within CITES shows how the international community can work together to preserve the world's resources and that the conservation of biodiversity, no matter where it occurs is a matter of international concern.

### Fisheries

The failure of the treaty to protect biodiversity often occurs before many species even reach the protection of being listed in the Appendices. CITES requires a two-thirds vote to grant protection to a species (Appendix I and II), this allows for the situation where biological considerations can be overridden by international politics.<sup>61</sup> As a result almost every decision at the Conference of the Parties (CoP) involves compromise and trade-offs between the opposing sides of conservation and trade.<sup>62</sup> Whilst this may have its benefits, it can also have serious implications with species that are either data deficient or with which there is an established trade that a Party is reliant upon. This means that species may potentially miss out on valuable protection, regardless of the scientific data or the precautionary principle.<sup>63</sup> Recent examples with this have been seen with the attempted listing of the Southern Bluefin Tuna<sup>64</sup> and the Great White Shark.<sup>65</sup>

59 Ibid.

60 Ibid.

61 S. Charnovitz "Free Trade, Fair Trade, Green Trade: Defogging The Debate" (1994) 27 *Cornell International Law Journal* 459-525 at 495.

62 CNN. Summit laws unable to protect most endangered species at <[www.cnn.com/2000/NATURE/05/11/our.planet/](http://www.cnn.com/2000/NATURE/05/11/our.planet/)>.

63 The precautionary principle provides that a lack of scientific certainty shall not be used as a reason for postponing decisions aimed at protecting the environment.

64 In 1992 and again in 1994, conservation groups attempted to seek a listing of the Western Atlantic bluefin tuna under Appendix II of CITES. This would have required monitoring of trade in bluefin.

65 At the 2000 CoP in Kenya Australia attempted to have the Great White Shark listed on Appendix I of the Convention. This motion was defeated primarily due to opposition from countries involved in the fishing industry or which provide large markets for shark fins and other shark products. Australia has subsequently listed the Great White Shark on Appendix III however, Japan has entered a Reservation to this listing.

In fact, fisheries as a whole is an area where CITES has failed to have an impact. Virtually no commercial fishery species with the exception of Sturgeon (Order *Acipenseriformes*) and the Coelacanth (*Latimeria chalumnae*) are listed in the CITES Appendices, this is despite the sustainability of many of the world's fisheries being endangered due to international trade. Some figures actually estimate that as much as 38 per cent of many countries annual catch is exported.<sup>66</sup> In fact apart from the above two species, only five species of fish are listed on Appendix I and only two species are listed in Appendix II.

### Forests

Another failure that is laid at the feet of CITES, whether rightly or wrongly, is in the preservation of forests and ecosystems. The depletion of the world's tropical rain forests constitutes one of the greatest crises facing the world today. Brazil, the United Kingdom, Nigeria, Laos, the Philippines, Thailand and Papua New Guinea are all reporting increases in illegal logging, despite recent efforts to curb the trade. Illegal logging in Cambodia for example, has reduced forest cover from around 70 per cent in the early 1970s to approximately 35 per cent by 1999.<sup>67</sup> In Indonesia it has been estimated that approximately 2 million hectares has been affected by illegal logging.<sup>68</sup> In fact, the logging of tropical timber for the export market is considered to be the primary cause of deforestation in South-east Asia.<sup>69</sup> Despite the fact that "illegal logging involves the international community... businessman from Singapore and China allegedly smuggled logs from the forests of Sumatra, Kalimantan and Papua"<sup>70</sup> CITES is powerless to stop this trade. Though forests and ecosystems provide important habitats for many endangered plant and animal species, they are often not protected by CITES as the individual species that make up these environments are often not technically threatened.<sup>71</sup> CITES failure to act is due to the fact that CITES only operates one species at a time<sup>72</sup> and does not readily

66 H.F. French *Costly Tradeoffs: Reconciling Trade and the Environment* (1993) at 16-17. Cited in D.M. Driesen "What is Free Trade?: The Real Issue Lurking Behind the Trade and Environment Debate" (2001) 41 *Virginia Journal of International Law* 279-363 at 324.

67 J.L. Peters "Land Resource Management: The Illegal Trafficking of Timber in Cambodia" (1999) *Colorado Journal of International Environmental Law Yearbook* 1999 102-115 at 102.

68 Organisation of Asia-Pacific News Agencies (2002). Megawati calls for international support to combat illegal logging.

69 K.K. Peng "A Third World Perspective of the Forest Resource Crisis" in V. Shiva *et al* (eds) *Forestry Resources Crisis and Management* (1992). Cited in H.A. Wolf "Deforestation in Cambodia and Malaysia: The Case for an International Legal Solution" (1996) 5(2) *Pacific Rim Law & Policy Journal* 429-449 at 429.

70 Statement by the Chairman of the Indonesian Forest Concession Holders Association In: Organisation of Asia-Pacific News Agencies (2002). Megawati calls for international support to combat illegal logging.

71 H.A. Wolf "Deforestation in Cambodia and Malaysia: The Case for an International Legal Solution" (1996) 5(2) *Pacific Rim Law and Policy Journal* 429-449 at 448.

recognise the interrelationships that exist between species. As at 1999 CITES only listed three species of timber as being endangered.<sup>73</sup>

Brazil, like Cambodia is experiencing a similar situation with large amounts of the Amazon being illegally felled. Again like Cambodia much of this timber is exported for international consumption. Last year for example the USA imported over US\$94 million of mahogany, with an estimated US\$37.5 million coming from Brazil.<sup>74</sup> Brazil is the worlds largest exporter of mahogany, the IUCN Red Data Book lists Brazilian Mahogany (*Swietenia macrophylla*) as being vulnerable with selective logging being listed as the major threat to this species. Some figures estimate that as much as 80 per cent of the trees that are exported are felled illegally.<sup>75</sup> However, CITES is beginning to play a role in this. In an effort to preserve its resources Brazil outlawed much of its mahogany trade and in 1998 listed its populations in Appendix III of the convention, with Bolivia and Peru subsequently also listing their populations in Appendix III. Over the several months preceding May 2002 the US Agriculture Department and Customs Service stopped approximately 15 shipments of Brazilian Mahogany bound for its markets. Regardless, the illegal felling and trade in timber continues.

In fact, CITES failure to adequately preserve forests is in part systematic of a wider failure with many species of flora. Although the Convention's Appendices contain more plant species than animal species, implementation of the Convention with regard to trade in plants is a reason for concern. The continuing insufficient level of implementation in respect to plants is caused by a number of factors. The main factor that has been proposed as most likely is simple: a lack of interest by the Parties, for which the trade in plants from an economic (and public interest) point of view is far less important than the trade in animals and their parts and derivatives.<sup>76</sup> Other factors such as those of a technical nature also contribute to this.

However, CITES does have ways in which Parties can work around this and better protect their resources. Unlike Appendices I and II, a vote by the Parties is not needed for species to be added to Appendix III. Therefore countries are able to place species that are of concern to them under the protection of the Convention. Whilst this solution is not ideal, it only applies to the country undertaking the listing other

72 J.C. Kunich "Fiddling Around While the Hotspots Burn Out" (2001) 14 *Georgetown International Environmental Law Review* 179-263 at 197.

73 H.A. Wolf "Deforestation in Cambodia and Malaysia: The Case for an International Legal Solution" (1996) 5(2) *Pacific Rim Law and Policy Journal* 429-449 at 447.

74 J. Heilprin "Mahogany Shipments from Brazil Detained at US Ports in Effort to Protect Amazon Forests" *Associated Press Newswires* (2002).

75 J.L. Peters "Land Resource Management: The Illegal Trafficking of Timber in Cambodia" (1999) *Colorado Journal of International Environmental Law Yearbook* 1999 102-115 at 102.

76 W. Wijnstekers "The Evolution of CITES: A Reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES Secretariat, Lusanne Switzerland: 1992) at 233.

countries are only requested to cooperate, it does provide for some measure of protection and when combined with other strategies such as “shaming” can be a powerful tool. CITES also allows for an ecological approach to species management to occur. The Convention uses the phrase “geographically separate population” in its definition of species. The provisions of CITES further reinforces this ecological perspective by requiring the Scientific Authority of each member State to keep the population level of a species “at a level consistent with its role in the ecosystems in which it occurs.”<sup>77</sup>

### **Loopholes**

So how are these failures able to happen? Some problems could be considered the self-doing of the Convention itself. Despite its intentions the CITES text contains loopholes that allow Parties to continue to trade in endangered species regardless of the sustainability. Paragraph 3 of the Convention states that “during the period of 90 days provided for by sub-paragraph (c) of paragraph 1 or sub-paragraph (l) of paragraph 2 of this Article any Party may by notification in writing to the Depositary Government make a reservation with respect to the amendment. Until such reservation is withdrawn the Party shall be treated as a State not a party to the present Convention with respect to trade in the species concerned”. A reservation therefore, is an opportunity for States to opt out of certain provisions contained within the treaty. The result is that the State is not bound by those provisions for which it has entered a reservation.<sup>78</sup> This effectively allows countries to continue trading in listed endangered species with full authority of the Convention, potentially reducing the ability of the CITES to protect endangered wildlife and biodiversity from the effects of trade. In fact, reservations have been used frequently under CITES, often to the detriment of the listed species.<sup>79</sup> For example the second largest importer of wildlife and wildlife products, Japan has held fourteen reservations on Appendix I species alone.<sup>80</sup> Given the large volume of wildlife trade for which nations like Japan are responsible, such a large number of reservations has the potential to destroy CITES objectives.

77 D.S. Favre “The Risk of Extinction: A Risk Analysis of the Endangered Species Act as Compared to CITES” (1998) 6 *Environmental Law Journal* 341–366 at 353.

78 A. Holt note 7 at 3.

79 P. Sands *Principles of International Environmental Law I: Frameworks, Standards and Implementation* (1995) at 385–86. Cited in J.C. Kunich “Fiddling Around While the Hotspots Burn Out” (2001) 14 *Georgetown International Environmental Law Review* 179–263 at 197.

80 M.A. Peters “The Convention on International Trade in Endangered Species: An answer to the call of the wild?” (1994) 10 *Connecticut Journal of International Law* 169–191 at 186.

An example of a particular reservation can be seen with the falcons. Saudi Arabia has entered reservations to approximately 14 Appendix I listed species of Falcons.<sup>81</sup> This, despite one of the species, the California Condor (*Gymnogyps californianus*) being listed as Critically Endangered.<sup>82</sup> Examples can also be seen with Iceland, Japan and Norway, who have all entered reservations with respect to certain species of Cetaceans, despite two species being listed as endangered and one as data deficient.<sup>83</sup> As mentioned above, this effectively allows these three countries to continue trading in these species regardless of the sustainability of the trade or the impact upon the species.

However, CITES does have some inbuilt safeguards against this process that can protect the species of greatest international concern. Trade for some species such as the African Elephant is totally banned and thus no reservation can be entered for them.<sup>84</sup> Despite this loophole, some commentators consider that the removing of a Parties ability to enter a reservation may actually be counterproductive to the overall aim of CITES. Examination of the number of reservations placed in relation to the convention show that only about 8 per cent of species in Appendix I and less than 0.5 per cent in Appendices II and III are affected by reservations.<sup>85</sup> Given the small number of species affected may actually do more harm than good as removal of a Parties ability to enter a reservation may discourage some states from remaining as Parties.

An additional constraint on CITES' effectiveness arises from the treaty's failure to define "commercial purposes" under the permit system. CITES applies to trade for commercial purposes only. Hence, "potential for abuse stems from the exemption from regulation of specimens found to be 'personal or household effects', captive-bred plants and animals, non-commercial loans between scientists or museums, and those forming part of a travelling zoo, circus, menagerie, plant, exhibition or other travelling exhibition." Given this breadth of exemptions, the definition of 'commercial purposes' has proved vulnerable to manipulation by the importing countries for economic rather than preservationist ends.<sup>86</sup>

81 As at 26Mar2002.

82 2000 IUCN Red List of Threatened Species. IUCN Species Survival Commission at <<http://www.redlist.org/>>.

83 2000 IUCN Red List of Threatened Species. IUCN Species Survival Commission at <<http://www.redlist.org/>>.

84 A. Holt note 7 at 3.

85 Ibid.

86 See example with Pandas in D.M. Kueck "Using International Political Agreements to Protect Endangered Species: A Proposed Model" (1995) 2 *University of Chicago Law School Roundtable* 345-360 at 354.

## Does CITES Go Far Enough?

In addition, to its loopholes many critics accuse CITES of not reaching far enough. They criticise the treaty of not providing overreaching protection for either ecosystems or habitats in which endangered species live, they criticise it for not offering protection for hotspots<sup>87</sup> nor for requiring that Parties fix the causes of biodiversity loss. CITES has also been criticised for only focusing on international events and not doing anything to control the trade within a country.<sup>88</sup> This, despite the fact that much of the loss of the world's biodiversity is taking place from actions entirely within national boundaries. In Cameroon for example, hunters are slaughtering gorillas and chimpanzees, selling their meat in city markets whilst in the Philippines, fishermen using cyanide are wiping out vast areas of coral reefs.

To a large extent this is true. CITES does little to address any of the issues of habitat loss, fragmentation, invasive species or any of the myriad of other factors that contribute to the loss of biodiversity. However, by the same token, CITES was never intended to delve into these areas. CITES was only ever intended to focus on one of the factors that have led to biodiversity loss – trade. Conventions such as the World Heritage Convention (WHC), the Convention on Biological Diversity (CBD) and regional agreements such as the South Pacific Environmental Program focus on the other factors, either singularly or as a whole. In fact, the WHC contains a number of Biosphere reserves, tropical forests and biogeographical regions that fall under its protection,<sup>89</sup> likewise the CBD requires that Parties “establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity” and to “promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings” amongst other measures.<sup>90</sup> If CITES attempted to cover all these areas and become “all things to all people” it is highly likely that significantly fewer countries would have become party to the convention. Instead CITES has acted in a way to further the ecological

87 The core concept of hotspots is that there are certain eco-regions that contain “exceptional concentrations of species with exceptional levels of endemism” and that “face exceptional degrees of threat”. For more information on the concept of hotspots see J.C. Kunich “Fiddling Around While the Hotspots Burn Out” (2001) 14 *Georgetown International Environmental Law Review* 179-263 at 181.

88 *Ibid* at 197.

89 For a list of areas protected under the Convention see <[http://whc.unesco.org/toc/toc\\_index.htm](http://whc.unesco.org/toc/toc_index.htm)>. Some examples include Yellowstone and the Everglades in the USA and Manovo-Gounda St Floris National Park in the Central African Republic. Natural heritage refers to outstanding physical, biological and geological formations, habitats of threatened species of animals and plants and areas with scientific, conservation or aesthetic value.

90 CNN. Summit laws unable to protect most endangered species at <[www.cnn.com/2000/NATURE/05/11/our.planet/](http://www.cnn.com/2000/NATURE/05/11/our.planet/)>



and sustainable message that has laid the groundwork and created an atmosphere in which conventions such as the CBD can succeed.

The criticisms aimed at CITES are not entirely just, on occasions CITES does require that countries instigate local measures designed to conserve biodiversity. An example of this was seen with Sturgeon. On 22 June 2001 the CITES Standing Committee agreed to recommend that all imports of caviar and other sturgeon products be suspended from four Caspian Sea States in 2002 unless they implement a series of time-sensitive measures designed to stem the depletion of sturgeon stocks in the region.<sup>91</sup> The Parties to CITES acknowledged that the listing would not be enough in itself, and approved Resolution Conf. 10.12 (Rev.) which details numerous conservation management initiatives including: fishery management programmes; improving legislation; promoting regional agreements; development of marking systems; aquaculture and the control of illicit trade. At this stage it is too early to see what impact, if any, these measures will have on the management and survivability of the species.

### Successes

Despite its failures and the criticisms levelled at it, CITES has had many successes. Whilst some commentators argue that any specific success of CITES cannot be pinpointed, CITES has generally been praised for protecting dozens of near-extinct species, including wild crocodiles, African elephants, leopards and even Butterflies.<sup>92</sup> CITES has subsequently been labelled as “perhaps the most successful of all international treaties concerned with the conservation of wildlife”.<sup>93</sup> In some cases CITES has been considered more effective at conserving wildlife than any other treaty. In Papua New Guinea for example, CITES is considered to be more successful at conserving wildlife than the CBD.<sup>94</sup>

91 CITES website at <[www.cites.org/eng/programme/sturgeon.shtml](http://www.cites.org/eng/programme/sturgeon.shtml)>.

92 B.L. Bacon “Enforcement Mechanisms in International Wildlife Agreements and the United States: Wading Through the Murk” (1999) 12 *Georgetown International Environmental Law Review* 331-363 at 345.

93 J.B. Heppes & E.J. McFadden “The Convention on International Trade in Endangered Species of Wild Fauna and Flora: Improving the Prospects for Preserving Our Biological Heritage” (1987) 5 *Boston University International Law Journal* 229 (quoting S. Lyster *International Wildlife Law* (1985) at 240).

94 A. Telesetsky “Graun Bilong Mipela Na Mipela No Tromweim: The Viability of International Conservation Easements to Protect Papua New Guinea’s Declining Biodiversity” (2001) 13 *Georgetown International Environmental Law Review* 735-780 at 744.

## The Elephant

The African Elephant is often touted as being CITES biggest success. In fact, the African elephant is touted as an example of a species that literally has been saved from extinction by the regulatory mechanisms of CITES. In the eight years (1981–1989) preceding the implementation of an Appendix I listing for the African elephant, which prohibits all commercial trade in elephants and elephant parts, the population of African elephants in Africa declined from 1.2 million to 600 000 individuals.<sup>95</sup>

In 1989 the CoP went a step further and voted to ban all international trade in Ivory. The group had previously attempted to implement a nation-by-nation quota system for elephants to be killed annually and allow regulated trade in uncarved ivory. However, this system failed with as much as three quarters of the first years legal quota believed to have been illegally poached.<sup>96</sup> In Kenya the elephant population, after falling from about 165 000 to less than 20 000 in the two decades preceding the ban, increased by as much as 13 000 in the decade following the ban. Poaching during the same period dropped from more than 3 000 elephants per year prior to the ban, to about 50 or less in the years afterwards. Elephant populations in other parts of Africa also stabilised and in some areas have been increasing.<sup>97</sup> In fact, populations in some areas, eg South Africa, are now so abundant that wildlife management authorities kill approximately 350 elephants each year to keep population levels under control.<sup>98</sup>

## Cats

Like the elephant, many species of cats have fared well under the Convention. When CITES entered into force in 1975 all felids were listed in either Appendix I or II of the Convention.<sup>99</sup> Prior to their listing, spotted cat furs had been highly prized for centuries and exploitation reached a recent peak in the 1960s and 1970s. Fear that many species were threatened with extinction led to a public outcry against use of

95 Edward B. Barbier et al *Elephants, Economics and Ivory* (1990). Cited in C. Wold "Multilateral Environmental Agreements and the GATT: Conflict and Resolution?" (1996) 26 *Environmental Law* 841–922 at 872.

96 S. Fitzgerald *International Wildlife Trade: Whose Business Is It?* *World Wildlife Fund* (1989). Cited in J.R. Berger "The African Elephant, Human Economies, and International Law: Bridging the Great Rift for East and Southern Africa" (2001) 13 *Georgetown International Environmental Law Review* 417–462 at 424.

97 *Ibid* at 427.

98 C.L. Kriepps "Sustainable Use of Endangered Species Under CITES: Is it a Sustainable Alternative" (1996) 17 *Pace Journal of International Economic Law* 461–504 at 462.

99 K. Nowell and P. Jackson *Wild Cats: Status Survey and Conservation Action Plan* (1996). See the IUCN at <<http://lynx.uio.no/catfolk/public8z.htm>>

wild furs. Meanwhile, the implementation of CITES reduced this exploitation by banning international commerce in the most threatened species and imposing licensing controls on others in order to monitor trade and to obtain early warning of potential threats. Commercial hunting and trapping of jaguars for their pelts has declined drastically since the mid 1970s, after anti-fur campaigns gathered steam and CITES controls progressively shut down international markets. Organised poaching rings, in which fur buyers travelled through the country supplying traps and buying pelts from local people, are now a thing of the past.<sup>100</sup>

Likewise CITES has also been praised for its success in conserving populations of the leopard. After eight years in Appendix I, the leopard population had increased to the point where some parties felt that limited trade could safely occur, particularly in countries where populations known not to be endangered. At the same time, countries remembered the reckless slaughter of previous years for furs and trophies and wanted to prohibit commercial trade in leopard skins. As a compromise, the parties retained all populations of leopards in Appendix I but established quotas for sport-hunted trophies based on the species' health in particular countries.<sup>101</sup> Only the Amur Leopard (*Panthera pardus ssp orientalis*), which occurs in China, Korea and Russia, is now listed by the IUCN as being effected by trade. However other species such as the Snow Leopard and Cloud leopard (which were not covered by this compromise) have not fared as well and are still affected by trade. Whilst there is still a small underground trade in furs, the evidence indicates that at current levels the fur trade is not a serious threat to the viability of spotted cat populations.<sup>102</sup>

Like many of the other Felidae, the Siberian Tiger has also benefited from CITES. The international community has used CITES as a regulation to effectively curb the threat that poaching presents to Siberian tigers.<sup>103</sup> Although the poaching of Siberian tigers has not been completely eradicated, scientists believe that a healthy tiger population can tolerate a moderate amount of hunting.<sup>104</sup> In other words, through CITES the impact that trade has upon the population has been reduced to a sustainable level – which is precisely what the convention is trying to achieve.

100 W.G. Swank and J.G. Teer *Status of the Jaguar* (Unpublished report, National Fish and Wildlife Foundation) (Washington D.C: 1987) at <<http://lynx.uio.no/catfolk/onca-07.htm>>

101 C. Wold "Multilateral environmental agreements and the GATT: Conflict and resolution?" (1996) 26 *Environmental Law* 841-922 at 888.

102 K. Nowell and P. Jackson *Wild Cats: Status Survey and Conservation Action Plan*. See IUCN at <<http://lynx.uio.no/catfolk/public8z.htm>>.

103 K. Cha "Can the Convention on Biological Diversity save the Siberian Tiger?" (2001) 24 *Environ Environmental Law and Policy Journal* 3-28 at 18.

104 *Ibid.*

## Other Mammals

Other examples of CITES successes can be seen in species such as the Golden-Headed Lion Tamarin (*Leontopithecus chrysomelas*). This species was listed in Appendix I in 1975 with an estimated population of 4–500 individuals. The most recent estimate of this species in 2000 was 6000–15 500 individuals.<sup>105</sup> Whilst once again habitat loss is considered to be the primary cause of decline in this species capture for use in zoos, laboratories and the pet trade has significantly contributed to the Golden-Headed Lion Tamarin's decline. Whilst the international trade in this species is still widespread, under CITES the international trade in live tamarins has been reduced.<sup>106</sup>

Whilst still listed as endangered and by no means yet out of trouble the Orang-utan (*Pongo pygmaeus*) can also be considered to be another success of CITES. The orang-utan was once found throughout Indo-China, Malaysia and north to China, though in recent times it has only been known from Sumatra and Borneo. About 100 years ago it was present in most of the rainforest areas on these islands; though, it was never found in large numbers. It has declined drastically since then. The major causes of the orang-utan's decline have been: (a) in the past, capture for the pet and zoo trade, especially the capture of young, which usually involved killing the mother; and (b) habitat loss, especially through permanent conversion to oil palm plantations and for logging. In the 1960s and early 70s the population of Orang-utans' were estimated to be between 4–5000 individuals. In 1998 the population was estimated to be 18 500–20 500 individuals.<sup>107</sup>

Whilst it is still listed as endangered and its numbers continue to decline<sup>108</sup> the Grevy's Zebra (*Equus grevyi*) is another success of CITES. In the 1970s, the species suffered a significant decline due to poaching to obtain the zebra's attractive hide for fashion. Poaching of Grevy's zebra is no longer a threat, due to the protection of CITES. Nowadays the loss of grazing habitat and access to water, due to competition with increasing herds of domestic livestock, are now the primary threats to the Grevy's zebra. Additional threats from reduced river flow, due to irrigation and uncontrolled tourism in reserves, which causes disturbance and destruction of vegetation are also jeopardising the species' chance of survival. Whilst it matters little to the zebra as to which threat is ultimately responsible for its downfall, the removal of trade as a threat gives conservation and management programs a greater chance of success.

105 2000 IUCN Red List of Threatened Species. IUCN Species Survival Commission at <<http://www.redlist.org/>>.

106 Ibid.

107 Ibid.

108 Estimates indicate that in 1993 only 5000 wild specimens were in existence, down from an estimated 15000 in the 1960s. 2000 IUCN Red List of Threatened Species at <<http://www.redlist.org/>>

## The Papuan Experience

Further successes of CITES can be seen in the Crocodile and Butterfly trades in Papua New Guinea. During the last 40 years most of the world's remaining 21 or so species of crocodiles have undergone such rapid depletion that most of them are now listed as threatened or endangered. In the face of continuing worldwide demand for crocodilian leather products the prospect for many species survival in the wild is tenuous at best.<sup>109</sup> Currently, all species of crocodile are listed in Appendix I or II of CITES.

From the mid 1950s through to the early 1970s Papua New Guinea's (PNG's) population of crocodiles was severely depleted, largely due to the result of trade. The trade in both fresh and salt-water crocodiles peaked in 1965-66 when PNG exported US\$1 million dollars worth of skins. However, after 1966 exports plummeted as crocodiles disappeared from accessible areas. By 1967 crocodile populations were depleted by in 1968, even with increased hunting, the yield dropped by half. By 1969 the salt-water crocodile was rare throughout most of its range within the country. By 1971-72 the total value of exports of both species of crocodile had been reduced to US\$198 000.<sup>110</sup>

Nowadays, with the help of CITES PNG enjoys a sustainable crocodile industry. Combined harvest levels of eggs, hatchlings and wild skins have fluctuated around 5000 per year since 1990. The Papua New Guinean management system, involving a combination of wild cropping, egg and hatchling harvest and ranching, with the support of international regulation appears to be maintaining the crocodile population.<sup>111</sup>

Like the crocodiles, PNG's butterflies have also come under pressure from collectors, commercial hunters and traders. By the mid 1960s butterfly collecting and commercial harvesting, which had been going on since the turn of the century, had reached such levels as to threaten the existence of several of the most exotic species.<sup>112</sup>

In 1975 the government implemented a number of controls aimed at protecting the most vulnerable species. Included amongst these were regulations that forbade

109 Advisory Commission on Technology Innovation, National Research Council, *Managing Tropical Animal Resources: Crocodiles as a Resource for the Tropics* (1983). Cited in: J.H. Goldstein "Economic Incentives for Environmental Protection: The Prospects for Using Market Incentives to Conserve Biological Diversity" (1991) 21 *Environmental Law* 985-1015 at 1000.

110 J.H. Goldstein "Economic Incentives for Environmental Protection: The Prospects for Using Market Incentives to Conserve Biological Diversity" (1991) 21 *Environmental Law* 985-1015 at 1000.

111 J.P. Ross (ed) *Crocodiles. Status Survey and Conservation Action Plan* [Online] (IUCN/SSC Crocodile Specialist Group. IUCN) (2<sup>nd</sup> edn, Gland, Switzerland and Cambridge, UK: 1998) at viii + 167: See at <<http://www.flmnh.ufl.edu/natsci/herpetology/act-plan/plan1998a.htm>> (6 July 1998).

the export of live specimens. At the same time several of the more vulnerable species were listed in CITES. For example the Queen Alexandra's Birdwing (*Ornithoptera alexandrae*) was listed in Appendix II in 1977 and upgraded to Appendix I in 1987. This gave international support to the conservation measures that the Papua New Guinea government was trying to implement.

Nearly US\$400000 worth of PNG insects are now legally exported every year to collectors, naturalists, scientists and artists around the world. Whilst most of these insects are wild collected, the birdwing butterflies must be captive bred if they are to be exported.<sup>113</sup> With the introduction of butterfly farms to facilitate this, PNG has been able to establish a sustainable butterfly industry. This has in turn led to other conservation benefits, as the communities who produce the butterflies need to maintain the forests which harbour a multitude of biodiversity.

### Bringing into Line

As has already been mentioned, the implementation and compliance with the treaty is lacking in many areas. In an effort to combat this CITES has played an active role in identifying countries that flout the rules of endangered species trade and encouraging the use of enforcement measures against such countries.<sup>114</sup> This role in which CITES and its Parties have played is a real success of the treaty. Enforcement measures such as trade suspensions and other incentives have succeeded in spurring the United Arab Emirates, the Russian Federation, Fiji, Vietnam and other governments to move towards more effective and sustainable management systems for a number of endangered species.<sup>115</sup> For example, when Thailand ratified CITES in 1983, it did not have national implementing legislation in place to control the illegal trade in endangered species, by 1989 this situation had not changed. As a result in April 1991, based on the foregoing information, the CITES Standing Committee recommended that the Parties to the Convention prohibit trade with Thailand in fauna and flora species listed in the Convention. Consequently, Thailand incurred CITES-imposed sanctions in 1991-92 and lost significant trade in orchids and crocodile hides.<sup>116</sup> This consequently had additional flow on effects. As a result of the trade ban the Thai government enacted the *Wild Animals Reservation*

112 Advisory Commission on Technology Innovation, National Research Council *Managing Tropical Animal Resources: Butterfly Farming in Papua New Guinea* (1983). Cited in J.H. Goldstein "Economic Incentives for environmental Protection: The Prospects for Using Market Incentives to Conserve Biological Diversity" (1991) 21 *Environmental Law* 985-1015 at 1009.

113 See <<http://www.aa6g.org/Butterflies/pngletter.html>>

114 D.P. Blank "Target-Based Environmental Trade Measures: A Proposal For the New WTO Committee on Trade and Environment" (1996) 15 *Stanford Environmental Law Journal* 61-129 at 69.

115 CITES Press Release 15Mar2002.

and Protection Act (B.E. 2535) in 1992, which gave it the legal authority to implement, CITES. In order to avoid any future sanctions like those that it faced under CITES the Thai government also took significant steps to prepare the country for ratification of the CBD, the Basel Convention and the Ramsar Convention.<sup>117</sup>

CITES imposed trade suspensions were again successfully used in 1993. Following a March 1993 request for information on the control of illegal trade in rhinoceros and tiger parts, the Standing Committee unanimously adopted a decision in September 1993 stating that the “measures taken by the People’s Republic of China and the competent authorities in Taipei are not adequate to sufficiently control illegal trade in rhinoceros horn and tiger parts ... Parties should consider implementing stricter domestic measures up to and including prohibition [of] trade [in] wildlife species” against China and Taiwan.<sup>118</sup> In April 1994, the United States imposed a limited set of restrictions on wildlife imports from Taiwan. In 1994 those restrictions were increased when the US President decided to follow the recommendation of the CITES Standing Committee. Taiwanese officials have estimated that the United States ban on products such as jewellery made from coral and seas shells, and leather goods made from the skins of snakes, lizards and crocodiles cost the island up to US\$10 million a year in lost revenue.<sup>119</sup> Whilst this is the only time that trade bans have successfully been used to ensue that a non-Party complies with the convention the threat has also been used by the USA against Singapore, Mexico and Japan to ensure compliance.

Despite these successes the implementation of trade sanctions is rare. More often just the threat of a sanction is enough to encourage a country to act. A recent example of this was seen in 2002 when sanctions were recommended against Vietnam. Notification to the Parties No. 2002/004 informed Parties that pursuant to Decision 11.16,<sup>120</sup> the Conference of the Parties (COP) recommended that, from that date all Parties should refuse any import from and export or re-export to Vietnam of CITES specimens.<sup>121</sup> As a result of this threat, Vietnam enacted Government Decree No. 11/2002/ND-CP on the Management of Export, Import

116 D.L. Tookey “Southeast Asian Environmentalism at its Crossroads: Learning Lessons from Thailand’s Eclectic Approach to Environmental Law and Policy” (1999) 11 *Georgetown International Environmental Law Review* 307-363 at 326.

117 Mingsarn Kaosa-Ard & Sunil S. Pedneker *Environmental Strategy for Thailand* (1996). Cited in D.L. Tookey “Southeast Asian Environmentalism at its Crossroads: Learning Lessons from Thailand’s Eclectic Approach to Environmental Law and Policy” (1999) 11 *Georgetown International Environmental Law Review* 307-363 at 326.

118 D.P. Blank “Target-Based Environmental Trade Measures: A Proposal For the New WTO Committee on Trade and Environment” (1996) 15 *Stanford Environmental Law Journal* 61-129 at 70.

119 J.R. Berger “Unilateral Trade Measures to Conserve the World’s Living Resources: An Environmental Breakthrough For the GATT In the WTO Sea Turtle Case” (1999) 24 *Columbia Journal of Environmental Law* 355-412 at 397.

and Transit of Wild Animals and Plants.<sup>122</sup> The effectiveness of this new law, and the government's ability and willingness to enforce it are yet to be seen. In addition, two other countries that were also named in the recommendation (Fiji and Yemen) have also begun to draft appropriate legislation in response to the sanctions recommended by the Secretariat.<sup>123</sup> This improved legislation should ultimately improve these countries compliance with the Convention and therefore assist in the conservation of biodiversity.

### **A Mixed Bag**

Unfortunately the impact of CITES on many species is not as clear-cut as a success or a failure. Often under the Convention species have suffered considerable declines followed by long, slow recoveries. The rhinoceros is a good example of this. The fate of the rhinoceros under CITES is viewed by many commentators as a failure of the treaty.<sup>124</sup> From 1970 to 1993 it has been estimated that Africa's Black Rhinoceros population decreased from 65000 to fewer than 3000 individuals despite the trade in the horns and other body parts of all species of rhino being prohibited since 1977. According to one official the CITES ban "hasn't made any difference to what is happening in the field". However, the story of the rhinoceros under CITES is also one of success. Under the Convention, populations of the White Rhinoceros have managed to recover from near extinction with the global population now standing

120 Decision 11.16 states "All Parties should, from 31 October 2001, if so advised by the Standing Committee, refuse any import of specimens of CITES-listed species from, and any export or re-export of such specimens to, the Parties listed in Decision 11.15, if, in spite of the assistance, the Parties concerned do not adopt the legislation required under the text of the Convention."

Decision 11.15 states "In paragraph 18 of document Doc. 11.21.1, the Secretariat brought to the attention of the Conference of the Parties that four Parties whose legislation was analysed during Phase 3 of the National Legislation Project, namely Fiji, Turkey, Vietnam and Yemen, have high volumes of international trade in specimens of CITES-listed species and their national legislation is believed generally not to meet the requirements for implementation of CITES (Category 3). These Parties: a) before 31 October 2001 should adopt adequate legislation to implement the Convention; b) may request technical assistance from the Secretariat in order to prepare such legislation. The Parties that require assistance shall receive the guidelines for the preparation of legislation, training for the CITES authorities and others responsible for the formulation of measures requiring legislation, as well as any technical support specified in their requests relevant to the development of national legislation; and c) should report to the Secretariat any progress made in this regard no later than 30 April 2001."

121 Notification to the Parties No. 2002/016 (11 March 2002).

122 Ibid.

123 Notifications to the Parties No. 2002/003 and 2002/005 (14 January 2002).

124 See C.L. Kriepps "Sustainable use of Endangered Species under CITES: Is it a Sustainable Alternative? (1996) 17 *Pacific Journal of International Law* 461-238 at 462.



at over 8000 individuals,<sup>125</sup> this from an estimated low of 50 to 100 animals in the 1920s. Likewise, Black Rhinoceros populations have also recently begun to recover. Although a number of countries continue to experience declines, these are offset by increases in countries such as South Africa and Namibia. In fact, the rhinoceros population is doing so well in some areas that it is expected that at the next CoP South Africa will request that a limited trade in Rhino horn be reinstigated.

This recovery has in large part been due to the reduction in demand that CITES has been able to effect. During the 1970s, Japan imported up to 800 kilograms of rhino horn per year. After intense international pressure, it joined the CITES in 1980 and urged producers and consumers of rhino horn to utilise substitutes. According to the WWF, the Japanese market for rhino horn collapsed almost immediately, with saiga antelope and water buffalo horn (neither of which are endangered) replacing it in traditional remedies.<sup>126</sup>

After Japan's accession to CITES Yemen subsequently became the largest importer of rhino horn. The demand for rhino horn for dagger handles in North Yemen led to a 20-fold increase in the price of rhino horn, a corresponding rise in poaching levels, and a great reduction of both black and white rhinoceros populations. Between 1970 and 1997 TRAFFIC estimates that over 67 050 kilograms of rhinoceros horn were imported into Yemen. Based upon an average horn weight of three kilos, this volume potentially represents the horns of over 22 300 rhinoceroses.<sup>127</sup> However, as Japan during the 1970s, Yemen was not a party to the Convention during this period. Only in 1997 did Yemen become a party to CITES. Since Yemen's incorporation into CITES and the implementation of domestic legislation, the import of Rhino horn into Yemen has virtually ceased. The removal of two of the world's largest consumers and the corresponding decrease in demand that has resulted as a result of these countries joining CITES, along with the recent increase in rhino numbers must be viewed as a success of the treaty.

Nowadays Asia poses the largest threat to rhino populations with countries such as China, Taiwan and Korea continuing to import rhino products despite legislative prohibitions. The immense significance attached to rhino horn (a survey of medical practitioners in Taiwan showed that 60 per cent stocked rhino horn whilst 27 per cent maintained that it is essential to their work) continues to stimulate trade.<sup>128</sup> This sustained trade continues to undermine the effectiveness of CITES and the

125 CITES Secretariat press release at <[http://www.cites.org/eng/news/cuttings/2002/0211\\_SAfrica\\_rhino.shtml](http://www.cites.org/eng/news/cuttings/2002/0211_SAfrica_rhino.shtml)>

126 See <<http://www.american.edu/TED/RHINO.HTM>>

127 See TRAFFIC at <[http://www.traffic.org/publications/summaries/summary\\_yemen\\_trade.html](http://www.traffic.org/publications/summaries/summary_yemen_trade.html)>

128 World Wide Fund For Nature at <[http://www.panda.org/species/rhino\\_black/threats.cfm](http://www.panda.org/species/rhino_black/threats.cfm)>

viability of the rhino populations, whether it is enough to threaten the existence of the rhinoceros is yet to be seen.

Like the rhino, the endangered snow leopard (*Uncia uncia*) is perhaps an example of both a success and a failure under CITES, though for different reasons. By 1970 the snow leopard had become very rare primarily due to hunting for fur and as a trophy. During the 1920s worldwide trade was in the order of 1000 pelts per year.<sup>129</sup> As a result the snow leopard was added to CITES in 1975. This consequently had the impact of decreasing the trade in snow leopard skins. Subsequently, population estimates indicated that the snow leopard had increased in several parts of its range.<sup>130</sup> However, recent years have seen the snow leopard become a substitute in many areas for the tiger with its bones increasingly being in oriental medicine (with the corresponding decline in availability of tiger bones). This has been a major reason for an increase in the commercial poaching of the leopard. Whether the snow leopard can withstand the pressure imposed by CITES and ultimately becomes a failure or success remains to be seen. What can be said though is that without CITES the Snow Leopard would most likely not be here now!

### Pushing the Envelope

CITES has also been used in other, often unconventional ways to protect biodiversity. In two cases, commonly known as Tuna I and Tuna II, the United States used CITES as a justification so that it could impose trade sanctions to protect endangered species of dolphin that were being threatened by fishing. While not claiming that its actions were obligated by CITES, the US did offer treaty justification for its actions by arguing generally that they “were consistent with and directly furthered the objectives” of CITES and other environmental treaties. More specifically, the US argued that the actions were authorised and empowered by CITES. According to the US: “All species of dolphins involved in the fishery of the eastern tropical Pacific were listed in CITES Appendix II. Moreover, while the United States was not obliged under CITES to adopt the measures at issue, CITES specifically provided for these measures in providing for “stricter domestic measures” in order to further the objectives of that agreement. The United States’ measures were stricter domestic measures, as explicitly contemplated under CITES, taken to protect species of dolphins that CITES protects. These measures were in addition to the restrictions on trade in specimens of the dolphins themselves that are required

129 J.L. Fox *A Review of the Status and Ecology of the Snow Leopard (Panthera uncia)* (International Snow Leopard Trust, Seattle: 1989) at <<http://lynx.uio.no/catfolk/uncia-07.htm>>

130 Separate estimates indicate that populations of the snow leopard have increased in Mongolia, Nepal and Pakistan at <<http://www.animalinfo.org/species/carnivor/unciunci.htm>>

under CITES”.<sup>131</sup> Whilst a Global Agreement of Tariffs and Trade (GATT) tribunal eventually declared that this use of CITES was illegal, it did result in changes to fishing practices that have significantly reduced the by-catch of and hence death of dolphins and other species. In fact, evidence indicates that the killing of dolphins in tuna fisheries has now been drastically reduced.<sup>132</sup>

The United States has also used CITES in a similar way to protect Turtles. In April 1990, four conservation groups “petitioned the Departments of Commerce and Interior to certify Japan and Mexico” for impairing sea turtle conservation efforts and diminishing the effectiveness of CITES. Specifically, the petition cited Mexico’s trade in the skins of Olive Ridley Sea Turtles (*Lepidochelys olivacea*) for which the Mexican government allowed a yearly quota of 25 000 of the turtles to be killed. Shortly thereafter Mexico banned the trade.<sup>133</sup> With regard to Japan, the petition protested that nation’s importation of Hawksbill Turtle (*Eretmochelys imbricata*) shell was largely from countries prohibited under CITES from exporting it. On March 20, 1991 the United States “formally censured Japan” for its hawksbill trade. In response to the threat of trade sanctions Japan offered to import five tons of hawksbill shell in 1992 (rather than its usual 20 tons) with imports decreasing to three tons in 1993, one ton in 1994 and then stopping altogether.<sup>134</sup>

## Conclusion

CITES is a wonderful example of what can be achieved by the international community to deal with the loss of biodiversity. Our fauna and flora are a global resource. They have immense importance, not just to the countries in which they occur, but for the entire global community. The substantial increase in CITES membership over the years indicates a significant international movement towards conservation. However, the evolution of CITES has not been a smooth path. Despite being one of the world’s most actioned treaties, CITES has also been one of the world’s most debated and in some cases controversial treaties. Ever since the inception of CITES, Parties and non-Parties have debated the tension between conservation and trade.<sup>135</sup> The need for conservation of species often conflicts with

131 L. Guruswamy “The Promise of the United Nations Convention on the Law of the Sea (UNCLOS): Justice in Trade and Environment Disputes” (1998) 25 *Ecology Law Quarterly* 189-227 at 200.

132 S. Charnovitz “Free Trade, Fair Trade, Green Trade: Defogging the Debate” (1994) 27 *Cornell International Law Journal* 459-525 at 498.

133 K.D. Yaninek “Turtle Excluder Device Regulations: Laws Sea Turtles Can Live With” (1995) 21 *North Carolina Central Law Journal* 256-299 at 287.

134 Ibid.

the perceived need for economic development, especially in those countries where the international trade in wildlife serves as a vital source of income.<sup>136</sup> As a consequence, many Parties remain dissatisfied with the workings of the Convention.<sup>137</sup> Whilst CITES does have many shortcomings and has caused much dissatisfaction, it remains an important component in the conservation of the world's rapidly diminishing biodiversity and at the very least it provides invaluable information available on global trade patterns for numerous threatened species and helps to fix an order of magnitude on market sizes and organisation.<sup>138</sup> However, it is only one tool that can be used. It should be remembered that CITES is not the be-all-and-end-all of conservation strategies and must be viewed for what it is; a limited treaty designed to ensure that the international trade of fauna and flora is not detrimental to the survival of a species.<sup>139</sup>

Despite its limitations, CITES has contributed to the conservation of the world's biodiversity and has proven to be an indispensable tool for controlling international trade in wildlife. This has been achieved not only through its regulations and enforcement mechanisms, but as a vehicle for promoting sustainable use and conservation messages. Species such as the African Elephant, crocodiles and the Lion-tailed Macaque (*Macaca silenus*)<sup>140</sup> all owe their current survival, in part to the protection and attention that CITES has brought. Through its dampening of trade species such as the tiger, elephant and the leopard have in fact managed to recover in numbers since being listed on the Appendices. In addition, the rate of decline of many other species has considerably slowed, giving conservation programs a better chance of success.

There is little doubt that the success of the Convention could not have been achieved without the support of large, economically powerful countries such as the United States and most of Europe who have stated that you cannot import into them unless you agree to be bound by the provisions of this treaty.<sup>141</sup> However, the

135 J.L. Garrison "The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Debate over Sustainable Use" (1994) 12 *Pace Environmental Law Review* 301-393 at 302.

136 *Ibid* at 305.

137 B. Dickson "Land and Resource Management: CITES in Harare: A Review of the Tenth Conference of The Parties (1997)" *Colorado Journal of International Environmental Law and Policy Year Book*. (1997) at 55.

138 K. Nowell and P. Jackson *Wild Cats: Status Survey and Conservation Action Plan* (1996) IUCN. See <<http://lynx.uio.no/catfolk/public8z.htm>>

139 See note 135 at 391.

140 Lion-tailed Macaque was extensively captured for the pet trade, zoos and research, as well as for use in Oriental medicine. Whilst never common estimates indicate that since its listing in Appendix I 1975 specimen numbers have been steady or increasing. Population estimates show that the estimated population size has increase from a low of approximately 400 individuals in 1975 to an estimated 2500 in 2000. See <<http://www.animalinfo.org/species/primate/macasile.htm>>.

141 D. Farve "Third Annual Conference on Animals and the Law" (1998) 15 *Pace Environmental Law Review* 467-482 at 471.

ultimate success of CITES will depend on the willingness of all of the Parties to abide by the provisions of the Convention and to ensure that their citizens also comply with the terms and conditions of the agreement. The simple act of joining CITES is insufficient compared with demonstrating an actual intent to preserve. Without genuine attempts to regulate trade the philosophy behind CITES is nothing more than meaningless words.<sup>142</sup> CITES is perhaps “the most important legal document to promote protection of wildlife to date and perhaps the only treaty which, if properly enforced, could make a significant difference in the conservation of wild flora and fauna.”<sup>143</sup> CITES “is not an entity in itself, and cannot, by itself, do anything. It is the Parties’ implementation of the convention, individually and cooperatively, that determines its effectiveness”.<sup>144</sup> This point was stressed at the ninth CoP in Fort Lauderdale, USA when the Secretariat reiterated the view that “CITES is useless without a collective effort of the Parties to comply.”<sup>145</sup> Inadequate national legislation and insufficient coordination between member States are, among other factors, largely responsible for the failure of CITES to reach its full potential and continue to undermine the effectiveness of the Convention. Effective protection requires a coexistent and complimentary combination of legislative and practical measures.<sup>146</sup> It requires Parties to communicate and work together to stem the illicit trade of wildlife and to use the provisions of the Convention to identify areas of risk. It also requires governments to recognise wildlife crime and biodiversity loss as serious threats and to prioritise these needs appropriately.

Since the implementation of CITES many other international instruments have entered into force that assist in the conservation of the world’s fauna and flora. Instruments such as the CBD and the WHC have an important role to play in the conservation wildlife. For CITES to effectively conserve biodiversity it needs to work in conjunction with and be coordinated with these treaties. This will not only ensure that trade levels are maintained at a sustainable level, but that the habitats of species are also maintained. In fact, the CITES Strategic Plan 2005 states that “numerous linkages exist between the aims of CITES and those of other multilateral environmental agreements. Cooperation and coordination with species management conventions and agreements are equally important...”.<sup>147</sup> Consequently, CITES is best viewed as a supplement to these other legal measures

142 S. Patel “The Convention On International Trade In Endangered Species: Enforcement and the Last Unicorn” (1995) 18 *Houston Journal of International Law* 157-213 at 185.

143 D.M. Kueck “Using International Political Agreements to Protect Endangered Species: A Proposed Model (1995) 2 *University of Chicago Law School Roundtable* 345-360 at 354.

144 Comment from the CITES Secretariat.

145 See note 142 at 188.

146 A.E. Vulpio “From the Forests of Asia to the Pharmacies of New York City: Searching for a Safe Haven for Rhinos and Tigers” (1999) 11 *Georgetown International Environmental Law Review* 463-490 at 489.

147 See at <<http://www.biodiv.org/convention/partners-websites.asp>>

directed towards species and biodiversity preservation and is not the answer in or of itself, nor was it ever intended to be.<sup>148</sup>

However, despite the efforts of CITES national legislation and the growing numbers protected areas, the scientific community continues to document the loss of biological diversity worldwide<sup>149</sup>. Poachers, illegal loggers and human encroachment continues to destroy habitat, traffickers continue to evade laws, consumers continue to demand wildlife and many governments continue only to pay lip service to environmental issues. Profit margins are high and the risk of getting caught is low, giving animal poachers plenty of room to move. Many of these plants and animals being taken from the wild are now worth more dead than alive and to collectors, often the more endangered a species is, the more valuable it is on the black market. However, due to treaties such as CITES and the subsequent regulation and international cooperation that has followed the vast majority of species losses are no longer due to man's taking in the wild. Instead, the rapid growth of indigenous populations with their concomitant demands for food, fibre, housing, and energy, together with the development of natural resources for export revenues, is eliminating many wild places altogether.<sup>150</sup>

Whilst CITES does not address many of the underlying causes of biodiversity loss, it has alleviated one of the factors that has often meant the difference between survival and extinction for many species. Without CITES and the resultant trade restrictions one must ask, would these species still exist? In many cases, without the provisions provided for in the Convention and the resultant attention that a CITES listing can bring, more of the world's endangered species (and hence biodiversity) would probably have vanished from the earth.

148 J.C. Kunich "Fiddling Around While The Hotspots Burn Out" (2001) 14 *Georgetown International Environmental Law Review* 179-263 at 198.

149 N.A. Robinson "Sustainable Science for a Sustainable Environment: Legal Systems, Decision Making, and the Science of Earth's Systems: Procedural Missing Links" (2001) 27 *Ecology Law Quarterly* 1077-1162 at 1123.

150 J.H. Goldstein "Economic Incentives for Environmental Protection: The Prospects for using Market Incentives to Conserve Biological Diversity" (1991) 21 *Environmental Law* 985-1015.