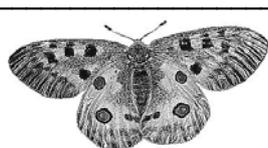


CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA



Twenty-fifth meeting of the Animals Committee  
Geneva (Switzerland), 18-22 July 2011

Periodic review of animal species included in the CITES Appendices

Periodic review of Felidae

REVIEW OF LYNX SPECIES UNDER THE PERIODIC REVIEW OF SPECIES  
INCLUDED IN THE CITES APPENDICES  
[RESOLUTION CONF. 11.1 (REV. COP15), RESOLUTION CONF. 14.8,  
AND DECISION 13.93 (REV. COP15)]

This document has been submitted by the United States of America\*.

INTRODUCTION

At the thirteenth meeting of the Conference of the Parties (Bangkok, October 2004), the United States of America had submitted a proposal (CoP13 Prop. 5) to remove *Lynx rufus* (bobcat) from Appendix II. At CoP13, the United States consulted with other Parties on the proposal. Some Parties, especially the Member States of the European Community, expressed concerns about potential problems with control of trade in other *Lynx* spp. due to their similarity of appearance to *Lynx rufus*. Mexico also expressed the need to further evaluate the status of *Lynx rufus* within its borders. However, many Parties expressed support for a review of the listing of the Felidae because they believed that the listing of some species in the family does not accurately reflect their current biological and trade status. They also agreed that the listings of species due to look-alike concerns should be reviewed to determine if current identification techniques, trade controls, and other factors still require them to be listed because the species have been listed without a substantial review since CoP2 in 1977. As such, the United States agreed to withdraw the proposal, but with the concurrence of the Parties on Decision 13.93, which directed the Animals Committee to immediately include the Felidae in the Review of the Appendices.

At the 21st meeting of the Animals Committee (Geneva, May 2005), the United States agreed to lead the review of *Lynx* spp. under the review of the CITES Appendices by the Animals Committee based on the process developed by the working group on the Periodic Review of the Appendices and agreed by the Committee [see document AC21 WG3 Doc. 1 Rev. 1]. The United States has since completed the review of *Lynx* spp. in accordance with this process and has provided updates of this review at the 22nd through 24th meetings of the Animals Committee. As a result of this review, the United States concluded that the inclusion of *L. rufus* in Appendix II for look-alike purposes is no longer warranted and, therefore, submitted proposals at CoP14 and CoP15 to remove *L. rufus* from the Appendices. The rejection of these proposals, however, is a clear indication that the Parties continue to have concerns that *L. rufus* merits listing as per Article II, paragraph 2(b), in accordance with Resolution Conf. 9.24 (Rev. CoP15), Criterion A in Annex 2b. Therefore, the proposal below represents the draft recommendation by the 25th meeting of the Animals Committee. In addition, we believe the same look-alike concerns would apply to the other two Appendix-II lynx species, *L. canadensis* and *L. lynx*, and therefore, we recommend these species remain in Appendix II. Finally, based on the results of the *Lynx* spp. range state survey (see the Annex to this document), we recommend that *L. pardinus* maintain its

\* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

inclusion in Appendix I, because this species continues to meet the biological criteria for inclusion in Appendix I as per Resolution Conf. 9.24 (Rev. CoP15), Annex 1.

DRAFT PROPOSAL TO AMEND THE APPENDICES  
(in accordance with Annex 6 to Resolution Conf. 9.24 (Rev. CoP15), amended)

A. Draft Proposal

It is proposed that *Lynx rufus* (Schreber, 1777) be kept in Appendix II pursuant to Criterion A of Annex 2 b – Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2 (b), of the Convention – of Resolution Conf. 9.24 (Rev. CoP15), according to which:

*Species may be included in Appendix II in accordance with Article II, paragraph 2 (b), if **either one** of the following criteria is met:*

- A. *The specimens of the species in the form in which they are traded resemble specimens of a species included in Appendix II under the provisions of Article II, paragraph 2 (a), or in Appendix I, such that enforcement officers who encounter specimens of CITES-listed species, are unlikely to be able to distinguish between them; or...*

Justification: The CITES Parties are concerned that enforcement officers who encounter specimens of *Lynx* species are unlikely to be able to distinguish between the species.

B. Proponent

The proposal has been written by the United States of America and submitted to the Animals Committee for its consideration.

C. Supporting statement

1. Taxonomy

1.1 Class: Mammalia

1.2 Order: Carnivora

1.3 Family: Felidae

1.4 Species: *Lynx rufus* (Schreber, 1777)

Potential subspecies: *L. r. baileyi*, *L. r. californicus*, *L. r. escuinapae*, *L. r. fasciatus*,  
*L. r. floridanus*, *L. r. gigas*, *L. r. oaxacensis*, *L. r. pallescens*,  
*L. r. peninsularis*, *L. r. rufus*, *L. r. superiorenensis*, *L. r. texensis*, Hall 1981.

1.5 Scientific synonyms: *Felis rufus*, Jones et al. 1975, Tumlison 1987, Nowak 1999

1.6 Common names: English: bobcat, barred bobcat, bay lynx, bob-tailed cat,  
cat o' the mountain, cat lynx, catamount, lynx cat,  
pallid bobcat, red lynx, wildcat  
French: chat sauvage, chat sauvage de la nouvelle cosae,  
loupcervier, lynx roux, pichou, pichu  
Spanish: gato de monte  
(Jackson 1961, Banfield 1987, McCord and Cardoza 1982)

1.7 Code numbers: A-112.007.001.024

2. Overview

*L. rufus* was included in Appendix II of CITES in 1977 along with all species of Felidae that had not already been listed. The listings at this time occurred prior to the adoption of a format for proposals, and there was no clarification of whether *L. rufus* was listed in its own right or for look-alike purposes. At CoP4 (Botswana 1983), it was agreed by the Conference of the Parties that this species' continued listing was solely based

on Article II, paragraph 2(b) to ensure effective control of trade in other felids. Monitoring of wild *L. rufus* populations since 1977 continues to demonstrate that the species is not threatened; harvest and trade are well regulated. According to Nowell and Jackson (1996), *L. rufus* management programs in the United States and Canada are the most advanced management programs for commercial exploitation of feline furbearers. These programs ensure long-term sustainable use of the species and support its conservation.

This proposal is based on an analysis of information resulting from the review of *Lynx* spp. under the review of the CITES Appendices by the Animals Committee, which was led by the United States based on the process agreed by the Animals Committee [document AC21 WG3 Doc. 1 Rev. 1]. This information includes:

1. A survey of all range countries for *Lynx* spp., conducted by the United States during 2005-2006 (see the Annex to this document);
2. A study by TRAFFIC North America (Cooper and Shadbolt 2007), contracted by the United States, analyzing trade in *Lynx* spp., including a compilation of information on illegal trade in these species and an assessment of the potential for trade irregularities that are likely to occur due to the similarity of appearance among these species;
3. An analysis by the United States of CITES trade data for *Lynx* spp. for the years 2002 through 2006 [from the United Nations Environment Programme - World Conservation Monitoring Center (UNEP-WCMC) CITES Trade Database];
4. The outcome of a meeting held in Brussels in October 2008, which was jointly organized and convened by the United States and European Commission for the purpose of discussing the degree of illegal trade in *Lynx* spp. related to *L. rufus* look-alike concerns. Participants included management and law enforcement authorities of range countries of *Lynx* spp.; and
5. The results of a survey conducted by the Scientific Authority of the United States through researchers at Cornell University (2008) and in consultation with Canada and Mexico, for the purpose of estimating the *L. rufus* population size, distribution, and status throughout its range.

The survey by TRAFFIC North America (Cooper and Shadbolt 2007) of North American and European fur industry representatives who deal with *Lynx* spp. suggests that international, European, Asian, and North American markets all seem to prefer both *L. rufus* and Canada lynx (*Lynx canadensis*) over other *Lynx* spp. The survey of range countries, conducted by the United States for the Review of the Appendices by the Animals Committee, as well as the trade data show that trade in Eurasian lynx (*Lynx lynx*) and Iberian lynx (*Lynx pardinus*) is well controlled, especially by range countries. WCMC data show that the level of trade in *L. lynx* and *L. pardinus* is minor relative to the level of trade in *L. rufus* and *L. canadensis*, and based on the *Lynx* spp. range country survey conducted for the Review of the Appendices by the Animals Committee, take from the wild of all *Lynx* spp. is highly regulated. Range country responses to this survey indicate that range countries have implemented adequate domestic legislation as well as regulations, management, and enforcement controls to manage harvest and trade in other *Lynx* spp. In the opinion of industry representatives, distinguishing *L. rufus* parts, pieces and derivatives from those of *Lynx canadensis* is not difficult and can be accomplished with limited experience and/or training (Cooper and Shadbolt 2007). To facilitate species identification, the U.S. Fish and Wildlife Service (USFWS) produced a web-based *Lynx* identification manual designed for use by CITES authorities and other enforcement officials. The manual has been designed as an aide in distinguishing full skins and skins lacking a head and tail of *L. rufus* and other *Lynx* spp.

Trade in *L. rufus* includes bodies, carvings, claws, feet, garments, leather products, live animals, plates, skins, skin pieces, skulls, skeletons, specimens, tails, teeth, and trophies; however, full pelts<sup>1</sup> represent the overwhelming majority of exports and accounted for 92% of the *L. rufus* items in legal trade between 2002 and 2006. Considering only the skin-related items (i.e., garments, leather products, plates, skins, and skin pieces), skins accounted for 95% of the legal trade in these *L. rufus* items. Finally, WCMC data show that the low volume of illegally traded *Lynx* spp. specimens does not suggest a major problem with illegal trade in *Lynx* spp. A survey of *Lynx* spp. range countries did not reveal any incidence of *L. lynx* or *L. pardinus* being illegally trafficked as *L. rufus* (AC24 Doc.10.3).

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<sup>1</sup> We use the term "full pelt" to refer to items coded as "skins" in the UNEP-WCMC CITES Trade Database, because in the database other items representing parts and pieces of pelts are coded separately.

Despite the information summarized above, the CITES Parties rejected U.S. proposals at CoP 14 and CoP15 to remove *L. rufus* from the Appendices due to continuing concerns that specimens of *L. rufus* in trade may be confused with specimens of other *Lynx* species.

### 3. Species Characteristics

#### 3.1 Distribution

*L. rufus* is the most widely distributed native felid in North America, ranging from as far north as central British Columbia (55°N) and south to Oaxaca, Mexico (17°N). Currently, with the exception of Delaware, *L. rufus* can be found in all the contiguous United States; however, its distribution is restricted in Illinois, Indiana, Iowa, Michigan, Missouri, and Ohio (Woolf and Hubert 1998). Historically *L. rufus* was found in all 48 states in the United States (Young 1958). *L. rufus* range in North America is approximately 8,708,888 km<sup>2</sup> including 6,186,819 km<sup>2</sup> (71% of range) in the United States, 1,702,545 km<sup>2</sup> (20% of range) in Mexico, and 819,524 km<sup>2</sup> (9% of range) in Canada (Roberts and Crimmins 2010).

#### 3.2 Habitat

*L. rufus* are found in a wide variety of habitats, from bottomland forests in Alabama, United States, to arid deserts in Mexico, and from northern boreal forests in Canada to the humid tropical regions of Florida, United States. They generally prefer rough, rocky country interspersed with dense cover (Pollack 1951, Erickson 1955, Young 1958, Zezulak and Schwab 1979, Karpowitz 1981, Golden 1982). McCord (1974) snow-tracked *L. rufus* in Massachusetts and found that roads, cliffs, spruce plantations, and hemlock-hardwoods were used most in relation to their abundance. *L. rufus* in Missouri preferred bluffs, brushy fields, and second-growth oak habitats (Hamilton 1982). In Wisconsin, lowland coniferous forests were consistently selected by both sexes during all seasons, although there were sex-related and seasonal differences in selection of other habitats (Lovallo and Anderson 1996). In Mexico, *L. rufus* is found in dry scrub, coniferous forests, mixed forests of pine and oak, and tropical deciduous forests (27 April 2004 letter to K. Stansell, Assistant Director, International Affairs, USFWS from H. Benítez Díaz, Director of Outreach and International Affairs, National Commission for the Understanding and Use of Biodiversity, Mexico).

Although prey abundance is considered the most important factor in the selection of habitat types, protection from severe weather, availability of resting and den sites, dense cover for hunting and escape, and freedom from disturbance are also important factors in determining *L. rufus* habitat use (Pollack 1951, Erickson 1955, Bailey 1974).

#### 3.3 Biological characteristics

*L. rufus* is polygamous, seasonally polyestrous, and may experience up to three estrous cycles from March through June if not impregnated during ovulation (Pollack 1950, Crowe 1975a, Stys and Leopold 1993, Crowe 1975b). The majority of *L. rufus* breeding occurs during February and March but varies with latitude, longitude, altitude, climate, photoperiod, and prey availability (McCord and Cardoza 1982). The gestation period in *L. rufus* ranges from 63 to 70 days (Anderson and Lovallo 2003). Estimates of average litter sizes range from 1.7 to 3.6 kittens per litter, with a mean of 2.7 (Anderson 1987). Sex ratios of *L. rufus* kittens are normally 1:1. *L. rufus* generally produces a single litter per year, but females are capable of producing a second litter if the initial litter is lost after parturition (Winegarner and Winegarner 1982, Beeler 1985, Stys and Leopold 1993). Survival rates of kittens are generally lower than that of adults and may be highly variable; estimates of annual survival range from 18 to 71% (Crowe 1975b). Kitten survival rates are directly related to prey abundance (Knick 1990). Adult survival rates range from 56 to 67%. Most causes of mortality are human related; legal harvest and vehicle-caused mortalities are most common. Research on *L. rufus* indicates little impact on population size until harvest exceeded 20% of the population (Knick 1990).

#### 3.4 Morphological characteristics

The pelage of *L. rufus* varies from shades of buff and brown, spotted, and lined with dark brown and black. The crown is streaked with black, and the backs of the ears are heavily marked with black (Guggisberg 1975, Nowak 1999). The under-parts of the body are white with black spots (McCord and Cardoza 1982). The short tail has a black tip, but only on the upper side. Adult *L. rufus* weights vary considerably throughout their range. As in other *Lynx* spp., *L. rufus* has a ruff of fur extending from the

ears to the jowls. The ears may or may not be tufted (Nowak 1999). Adult males average 9.6 (6.4-18.3) kg, and adult females weigh 6.8 (4.1-15.3) kg (Banfield 1987). Total length (in mm) of males and females, respectively, is 869 (475-1,252) and 786 (610-1,092) (McCord and Cardoza 1982). *L. rufus* skulls can be identified by the presence of both a narrow presphenoid bone (<6 mm) and a confluence of the hypoglossal foramen with the posterior lacerate foramen. As in a number of other short faced cat species, *L. rufus* is missing the second upper premolars, giving them 28 teeth instead of 30 typical of other members of Felidae (Ewer 1973). *L. rufus* has four functional toes on the front and hind feet (McCord and Cardoza 1982).

### 3.5 Role of the species in its ecosystem

*L. rufus* is one of several carnivores within the complex predator communities of North America. Because *L. rufus* occupies a wide variety of habitats, its role as a forest and farmland predator is varied. *L. rufus* is ecologically similar to *L. canadensis* particularly in terms of prey selection, and their ranges are rarely sympatric. Where *L. rufus* and *L. canadensis* ranges overlap, *L. rufus* typically out-compete *L. canadensis* unless excessive snow depth provides *L. canadensis* with a foraging advantage (Parker et al. 1983).

## 4. Status and trends

### 4.1 Habitat trends

During the last century, the range of *L. rufus* has expanded into northern Minnesota (United States), southern Ontario (Canada), and Manitoba (Canada) as lumbering, fire, and farming has opened the dense, unbroken coniferous forests of these areas (Rollings 1945). Although increases in urban development may limit *L. rufus* density in some areas, recent studies have documented increases in its density in suburban and developed areas of the eastern and mid-western United States (Woolf and Neilson 2001).

### 4.2 Population size

The current estimated *L. rufus* population in the United States is 1,419,333 to 2,638,738 (Roberts and Crimmins 2010). In 1981, using similar methodology it was estimated there were 725,000 to 1,017,000 (USFWS 1982). The U.S. *L. rufus* population has clearly grown considerably since that time. This population growth is likely a response to many factors including changing agricultural practices, range expansion, and habitat improvement programs (Woolf and Hubert 1998, Lovallo 2001). Numerous states within the United States independently estimate *L. rufus* populations by using a variety of methods, such as computer population models and life table analyses (Anderson and Lovallo 2003, Roberts and Crimmins 2010).

The status of *L. rufus* in Canada is considered secure (i.e., relatively widespread or abundant) (CWS 2009). In the recent survey of the status of *L. rufus* in North America (Roberts and Crimmins 2010) none of the Canadian provinces reported that *L. rufus* were currently in decline.

Anecdotal reports suggest that *L. rufus* is relatively abundant in many areas of Mexico and can be found in developed areas (27 April 2004 letter from H. Benítez Díaz). A population assessment has recently been conducted to more precisely determine the status of Mexican populations of *L. rufus*. Estimates of population density in various localities monitored in Mexico during the project ranging from 0.05 to 0.53 /km<sup>2</sup> and are within the range of results reported in the United States, 0.09 - 1.53 /km<sup>2</sup> (AC24, Inf Doc 10).

The current status of the *L. rufus* population and distribution in North America appears to be healthy and significantly greater than the early 1980's (Roberts and Crimmins 2010).

### 4.3 Population structure

*L. rufus* population sex ratios are directly related to levels of harvest. Harvest records indicate that in exploited populations males are taken more frequently in the younger age cohorts, whereas females constitute a larger percentage of the older cohorts (Crowe and Strickland 1975, Fritts and Sealander 1978, Brand and Keith 1979, Parker and Smith 1983). The proportion of young animals (< 2 years old) in a population is closely related to the intensity of harvest. Unexploited populations are largely composed of older individuals, whereas younger animals dominate exploited populations. This may

result from increased reproduction and higher adult mortality. *L. rufus* is essentially solitary with direct social interactions being brief and infrequent. Exceptions include females with kittens and adult males and females during the breeding season (Bailey 1974, Rolley 1983).

Home ranges of *L. rufus* in the northern latitudes are considerably larger than those from the south, probably due to lower prey populations, increased thermal demands, and larger body size in the north. Average male home ranges are generally two to three times larger than those of females, although some studies have reported size differences as large as four to five times (Hall and Newsom 1976, Major 1983, Witmer and DeCalesta 1986).

#### 4.4 Population trends

As of 1996, populations in the United States were considered stable in 22 States and increasing in 20 States, with no States reporting overall declines (Woolf and Hubert 1998). As of 2001, several mid-western and eastern States continued to report population increases (Woolf and Neilson 2001). In follow-up studies in 2008, five States reported the population trend as unknown, and one State, Florida, reported its *L. rufus* population to be declining, a decline attributed to loss of habitat (Figure 1.) (Roberts and Crimmins 2010). Geographic expansion of *L. rufus* range and notable increases in *L. rufus* density suggest that population size has likely increased in the past decade (Woolf and Hubert 1998, Lovallo 2001, Roberts and Crimmins 2010).

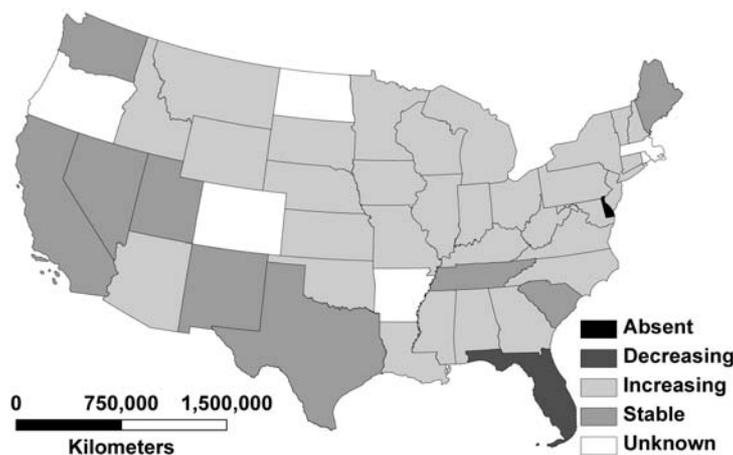


Figure 1. Population trends in *L. rufus* populations in the United States

Population trends in Canadian range provinces are reported as stable or increasing (Roberts and Crimmins 2010). Cyclic fluctuations related to prey abundance have been observed (Canadian Wildlife Service (CWS) 2009).

Current studies in Mexico reveal that *L. rufus* are widespread with moderate densities (AC24 Inf Doc 10), but historical data are not sufficient to assess how Mexico's populations have changed over time.

#### 4.5 Geographic trends

Periodic national surveys of *L. rufus* abundance and distribution suggest continued geographic expansion of its populations throughout their range in the United States, particularly in mid-western and several mid-Atlantic States (Hon 1990, Woolf and Neilson 2001, Roberts and Crimmins 2010). Most notably, *L. rufus* populations have expanded their ranges in Illinois (Bluett et al. 2001, Woolf and Hubert 1998), Missouri (Erickson et al. 1981), Nebraska (Landholt and Genoways 2000), and Pennsylvania (Lovallo 2001), as well as Indiana, Michigan, and Ohio (Woolf and Hubert 1998).

### 5. Threats

Although some localized populations of *L. rufus* in the United States have likely declined due to urbanization, only the state of Florida reports a state-wide decline. There are no widespread threats to U.S. *L. rufus* populations, which is in part due to the species' ability to exploit a wide variety of habitats.

There are no widespread acute threats to Canadian *L. rufus* populations. Some possible threats include decline in prey populations, loss of habitat, habitat alteration, and climate change (CWS 2009).

Some regions in Mexico have undergone drastic changes in vegetation that have affected the conservation status of several species. However, *L. rufus* is still present in regions with strong influence by human activities such as localized areas near Mexico City. Mexico reported that data obtained in their recent *L. rufus* population studies do not support a conclusion that the species faces extinction risk and are therefore not considered necessary for inclusion in the list of Species at Risk in Mexico (AC 24 Inf Doc 10).

*L. rufus* is considered Least Concern in the IUCN Red List of Threatened Species (Kelly et. al 2008).

## 6. Utilization and trade

### 6.1 National utilization

*L. rufus* is legally harvested in 39 states of the United States, where harvest levels have varied due to changes in pelt value and fur harvest intensity for other species. In Canada, *L. rufus* is legally harvested in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, and Nova Scotia, with the majority of harvest occurring in Nova Scotia (65%-70%), followed by New Brunswick (20%) and British Columbia (10%) (CWS 2009). While the purpose of the harvest in Canada is almost exclusively for the collection of pelts for the fur trade, there is a small amount of trade in other *L. rufus* parts (taxidermy mounts, meat, teeth, tails, etc.) (CWS 2009). In Mexico, *L. rufus* is primarily harvested as game, and exports are restricted to trophies (June 16, 2006, email response from Mexico to the Animals' Committee survey). *L. rufus* skins from Mexico and other subtropical climates are generally considered by the industry to be of low value and are not commercially in demand. Between 2005-2009 a total of 26 *L. rufus* were exported from Mexico, primarily as hunting trophies to the United States (AC24 Inf Doc 10).

### 6.2 Legal trade

From 2002 through 2006, approximately 380,158 *Lynx* spp. items<sup>2</sup> (bodies, live animals, parts, pieces, or derivatives) were legally traded according to export data provided in the UNEP-WCMC CITES Trade Database. Of these items, 282,613 (74%) were *L. rufus*; 94,770 (25%) were *L. canadensis*; 1,893 (0.5%) were *L. lynx*, and 538 (<0.5%) were *L. pardinus*; and 344 (<0.5%) were recorded as *Lynx* spp. Of the 380,158 legally traded items, 337,547 (89%) were skins. Of these skins, 259,553 (77%) were *L. rufus*; 77,388 (23%) were *L. canadensis*; 448 (<0.5%) were *L. lynx*; 157 (<0.5%) were recorded as *Lynx* spp.; and 1 (<0.5%) was *L. pardinus*. According to the same data from 2002 through 2006, 41 exporting or re-exporting countries legally exported *L. rufus* items. The range countries United States and Canada exported or re-exported the highest numbers of legal *L. rufus* items, accounting for 91% of the legal *L. rufus* items recorded. The United States exported or re-exported 172,954 (61%) of the items, and Canada exported or re-exported 84,745 (30%) of the items. The remaining 24,914 (9%) items were exported or re-exported by other countries, including the range country Mexico. However, from 2002 through 2006, Mexico only exported or re-exported 12 (<0.05%) *L. rufus* items.

### 6.3 Parts and derivatives in trade

Trade in *L. rufus* items include bodies, carvings, claws, feet, garments, leather products, plates, skins, skin pieces, skulls, skeletons, specimens, tails, teeth, and trophies; however, skins are the most common and accounted for 92% of the *L. rufus* items in legal trade from 2002 through 2006. Considering only the skin-related items (i.e., garments, leather products, plates, skins, and skin pieces), skins accounted for 95% of these items. According to TRAFFIC North America, from 2000 through 2004, skins comprised 96% of the *L. rufus* items legally exported from the United States during that time (E. Cooper, email pers. comm. 25 March 2008). Most *L. rufus* pelts exported from North America are handled through a small number of major fur distributors in Canada and the United States. The vast majority of furs are exported as pelts used for the production of fur garments. Spotted belly fur from *L. rufus* is generally used as a trim item on garments. From 2002 through 2006, the primary importers of *L. rufus* items were Canada, Italy, Greece, the United States, the United Kingdom, and Poland, accounting for 84% of *L. rufus* items that were reported exported during that

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<sup>2</sup> Data for skin pieces reported in kilogram (kg) units were converted to number (no.) units based on the average weight of pelts for that species, as per the methods described in Cooper and Shadbolt 2007.

time. Of the 280,749 *L. rufus* items exported during that time period, Canada imported 86,256 (31%) items, Italy imported 59,757 (21%) items, Greece imported 39,094 (14%) items, the United States imported 29,115 items (10%), the United Kingdom imported 11,675 (4%) items, and Poland imported 10,689 (4%) items.

#### 6.4 Illegal trade

Due to the relatively small data-set of illegal trade figures provided by the UNEP-WCMC CITES Trade Database between 2002 and 2006, we present summary data from TRAFFIC North America's analysis of illegal trade spanning the years 1980 through 2004 (Cooper and Shadbolt 2007). Following a summary of this analysis, we provide a summary of data reported for the years 2005 and 2006, as provided by the UNEP-WCMC CITES Trade Database.

Between 1980 and 2004, a total of 3,568 *Lynx* spp. items (parts, pieces or derivatives) were seized as illegal, based on the UNEP-WCMC CITES Trade Database (Cooper and Shadbolt 2007). This is an average of only 143 items per year, and represents only 0.2% of the total (legal and illegal) trade during this time period. Of the 3,568 *Lynx* spp. seized, 3,119 (87%) were parts, pieces, or derivatives of *L. rufus*; 223 (6%) were *L. canadensis*; 210 (6%) were *L. lynx*; 15 (<1%) were recorded as *Lynx* spp.; and 1 (<0.1%) was *L. pardinus*.

Of the 3,568 *Lynx* spp. items seized as illegal, 3,039 (85%) were skins, 205 (6%) were teeth, 93 (3%) were garments, 72 (2%) were fur plates, and the other 159 (4%) seized items were tails, bodies, skin pieces, trophies, skulls, skin/leather items, claws, feet, and unknown items. Of the 3,039 *Lynx* spp. seized skins, 2,818 (93%) were *L. rufus*, 135 (4%) were *L. lynx*, 80 (3%) *L. canadensis*; and 6 (<1%) were recorded as *Lynx* spp.

Illegal *Lynx* spp. items were recorded for 20 importing countries. Of the 3,568 *Lynx* spp. items seized, 37% were imported into the United States, 20% into Poland, 19% into Switzerland, 10% into Denmark, 6% into Germany, 3% into Canada, and the remaining 5% of the items were imported into Russia, Italy, Finland, United Kingdom, Hong Kong, Mexico, Australia, Austria, Portugal, Spain, Chinese Taipei, Japan, New Zealand, United Arab Emirates, and an unknown country. Illegal *Lynx* spp. items were recorded for 25 exporting/re-exporting countries. Of the 3,568 *Lynx* spp. items seized, 39% were exported/re-exported from the United States, 20% from Germany, 14% from the United Kingdom, 7% from Mexico, 6% from Japan, 4% from Canada, and the remaining 11% were exported from unknown countries, the former USSR, Greece, India, Russia, Italy, France, Hong Kong, Brazil, China, Armenia, Pakistan, South Africa, Afghanistan, Denmark, Israel, Kuwait, Netherlands Antilles, Nigeria, and Poland. Again, the majority (87%) of these items were *L. rufus*.

In the years 2005 and 2006, based on export data from the UNEP-WCMC CITES Trade Database, 193 *Lynx* spp. items (bodies, live animals, parts, pieces, or derivatives) were reported to be seized as illegal<sup>3</sup>. Of these items, 179 (93%) were skins. All of the 179 skins were of *L. rufus* exported from the United States. Four of these skins were exported to Canada, and 175 skins were exported to Hong Kong.

#### 6.5 Impacts to look-alikes

In response to a recommendation made in the Felidae working group and adopted by the 23rd Animals Committee, a meeting was organized for the management, customs, and law enforcement authorities of the *Lynx* spp. range countries to discuss possible problems of illegal trade of those species. Case studies of illegal trade in *L. lynx* and *L. pardinus* were also discussed. The primary impetus for this meeting as directed by the 23rd Animals Committee was to address the look-alike issue with *Lynx* and to discern if the concerns about *L. lynx* and *L. pardinus* potentially entering in trade as *L. rufus* are actual or hypothetical.

Discussions revealed that in most cases the illegal poaching of *L. lynx* and *L. pardinus* is related to predator control to protect livestock and game animals. No documented incidents were reported of *L. lynx* or *L. pardinus* being entered into trade as *L. rufus* (AC24 Doc. 10.3).

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<sup>3</sup> Consistent with the methodology provided in TRAFFIC North America 2006, we excluded source code "I" (illegal) data that had corresponding purpose codes "E" (educational) and "S" (scientific).

Several European Union (EU) countries indicated concerns that a simple delisting could allow *L. lynx* to enter trade more easily if there is no document trail for *L. rufus* entering international trade. One possible option that received significant discussion involved down-listing *L. rufus* to CITES Appendix III and having the EU maintain it on their Annex B. This combined approach would allow for the retention of CITES documentation for shipments of *L. rufus* leaving the United States and other exporting countries and entering EU Member States. The paperwork received on the EU side would not change.

## 6.6 Actual or potential trade impacts

The small volume of illegally traded *Lynx* spp. items does not suggest a major problem with illegal trade in *Lynx* spp. (Cooper and Shadbolt 2007).

Canada is confident that current regulatory and management practices guard against potential threats from trade demand and that *L. rufus* and *L. canadensis* in Canada are not adversely impacted by trade.

Neither domestic nor international trade constitutes a threat to populations of *L. rufus*.

## 7. Legal instruments

### 7.1 National

*L. rufus* hunting and trade is regulated domestically throughout its range (Nowell and Jackson 1996). In the United States, *L. rufus* is currently classified as game or furbearer species and subsequently harvested through regulation in 39 States. The species is further protected by continuous closed hunting seasons in nine States (Woolf and Hubert 1998).

Harvest of *L. rufus* in Mexico is regulated by the General Law of Wildlife and the General Law of Ecological Balance and Environmental Protection. Both establish that prior to harvesting *L. rufus*, it must be demonstrated that harvest rates are less than the natural renewal rate of the wild population affected (June 16, 2006, email response from Mexico to the Animals' Committee survey). In Mexico, harvesting on *Lynx rufus* has been approved only for game hunting purposes through Units for Management and Conservation of Wildlife (UMA). The same legislation established measures for controlling problematic individuals, and specimens are generally captured and relocated for recovery, research or environmental education purposes; to date, no lethal control of specimens has been allowed (7 October 2009 letter from Alejandra Garcia Naranjo, CITES Coordinator, CONABIO, Mexico, to Rosemarie Gnam, Chief, USFWS Division of Scientific Authority).

In Canada, *L. rufus* is classified as a furbearer species and is managed regionally by the provinces and territories. The species is harvested in seven of eight range provinces under provincial regulation. Harvest is prohibited in Quebec (CWS 2009). Like all vertebrates in Canada, felid species are legally protected through various provincial and territorial wildlife acts. Under these acts, certain uses of wildlife are allowed under specific regulations and only with the provision of licenses or permits. Generally, without such a license, the catch, possession, trade, disturbance, or destruction of wildlife is prohibited. Jurisdictions require mandatory trapper education and mandatory reporting of all take (intended or incidental) as a condition of licensing (CWS 2009).

### 7.2 International

*L. rufus* is listed in CITES Appendix II for look-alike reasons.

## 8. Species management

### 8.1 Management measures

In the United States, the 39 States that allow harvest of *L. rufus* have implemented measures to control harvest intensity through regulations that dictate season length, methods of take, bag limits, and/or mandatory reporting. Additionally, many States use individual permits (9 States) or statewide harvest quotas (4 States) to limit the annual harvest (Woolf and Hubert 1998). States periodically review species harvest programs to account for new findings and current advice from experts in their region. Trade in skins or other specimens from captive-bred animals is not common, but where legal,

is monitored by State authorities. Sustainable harvest rates are most often determined by using population models or life table analyses based on population demographic data collected annually from harvested samples. Managers generally consider 20% to be the maximum sustainable annual harvest rate for *L. rufus*, and age structure analyses, such as adult-to-yearling ratios, have been developed to estimate changes in harvest rates over time (Knick 1990).

In Canada, harvest control measures are similar. The species may be harvested only during a small part of the year in all jurisdictions. The harvest season ranges from as early as 1 November to the end of February, or up to four months of the year. Quotas are in place in British Columbia, New Brunswick, and Nova Scotia, and are set based on harvest statistics and prey abundance surveys (CWS 2009).

In general, the harvest rate in Mexico is about 1 specimen per 4,000 hectares. The specific harvest rate is determined according population surveys using olfactory attractors (June 16, 2006, email response from Mexico to the Animals' Committee survey).

## 8.2 Population monitoring

Although population size is difficult to estimate for *L. rufus* due to their cryptic and primarily nocturnal behavior, numerous indices have been employed by U.S. State and Canadian provincial furbearer managers to determine range, occupancy of habitats, and geographic and numeric trends in *L. rufus* populations. Examples of such data include, but are not limited to, scent-station surveys, winter track counts, geographically referenced harvest data, collection of vehicle-caused mortalities, hunter and trapper questionnaires, biologists' opinions, hunter sighting surveys, and incidental captures by trappers (Anderson and Lovallo 2003). Other population parameters are estimated through the collection of age and reproductive data from hunter and trapper harvested animals.

In addition, in Canada evaluations of prey abundance are conducted (CWS 2009). In all Canadian jurisdictions, there is a system of zoning (through management regions), with each monitored and regulated according to local conditions). Nova Scotia and New Brunswick require carcass submission for collection of biological data to monitor such indices as condition, productivity, and age structure in the populations (Jan. 30, 2006, letter from the Canadian Wildlife Service to the USFWS).

In Mexico, populations are monitored using scent station surveys. Recently a population assessment has been conducted to determine the status of Mexican *L. rufus* populations using tracking with automatic cameras, combined with statistical methods for capture-recapture analysis. This technique considers a combination of distinct characters in the fur to differentiate between individuals captured in the photographs (R. Medellin, AC24 Inf Doc 10).

The majority of jurisdictions in North America that reported monitoring methods utilized multiple methods, including harvest data analysis, hunter surveys, scent/sign stations, public sightings, population models, snow track surveys, incidental harvest, and vehicle collision analysis. Of 45 jurisdictions reporting, 25 utilized more than one method. About 73% of the jurisdictions that reported use harvest data analysis for monitoring (Roberts and Crimmins 2010).

## 8.3 Control measures

### 8.3.1 International

*L. rufus* was included in Appendix II of CITES in 1977 along with all species of Felidae that had not already been listed. In response to a proposal submitted at CoP4 by the United States and Canada to remove *L. rufus* from CITES, the parties agreed to include the species under Appendix II due to its similarity of appearance to other felids listed under the Appendices (as per Article II, paragraph 2(b) of CITES).

### 8.3.2 Domestic

According to Nowell and Jackson (1996), *L. rufus* management programs in the United States and Canada are the most advanced management programs for commercial exploitation of feline furbearers. The management programs ensure long-term sustainable use of the species and support its conservation. Agencies with jurisdictional authority employ qualified and specialized wildlife biologists to provide management and harvest recommendations for *L. rufus* in their respective regions. In the United States, scientists,

agency personnel, and the public review management recommendations prior to being adopted. State and Federal agency wildlife law enforcement personnel are trained to identify *L. rufus* and are well-versed in State and Federal laws regarding the harvest, transport, and sale of *L. rufus* and its parts.

Canada has employed a system of mandatory provincial/territorial export permitting in all jurisdictions which facilitates tracking of movement of wildlife (or parts, such as pelts) between jurisdictions within Canada, thereby assuring and corroborating reliability of numbers from harvest reporting within the jurisdictions. As the exports are primarily whole pelts, identification of species is relatively simple and accurate. Any look-alike concerns in the trade of *L. rufus* are thus not likely to arise in Canada at the whole pelt level. Canadian protections for *L. rufus* under provincial/territorial wildlife acts would remain in place if *L. rufus* were de-listed from CITES, as they are not dependent on listing in the CITES Appendices. Thus continued listing in the Appendices is not needed to safeguard Canadian populations of this species (CWS 2009).

In Mexico, *L. rufus* exports are restricted to trophies (June 16, 2006, email response from Mexico to the Animals' Committee survey). Between 2005-2009 an average of 5 *L. rufus* per year were exported from Mexico, primarily as hunting trophies to the United States (AC24 Inf. Doc. 10).

#### 8.4 Captive breeding and artificial propagation

In the United States, some States allow and regulate captive rearing and propagation of *L. rufus* for commercial purposes. However, current international trade of pelts is dominated by wild fur harvests from North American countries.

#### 8.5 Habitat conservation

Because *L. rufus* thrives in a wide variety of habitats throughout their range, State, Federal, and private lands containing these habitats are able to sustain the current distribution.

There are no specific natural protected areas designed for *L. rufus* in Mexico, however, several protected areas, that are located along this species' distribution range, protect *L. rufus* and its habitat. These protected areas cover up to 5,427,928 hectares (ha) as follows:

- 4,292,237ha of Biosphere Reserves (El Vizcaíno, Sierra La Laguna, Mapimí, Sierra de Manantlán, Tehuacán-Cuicatlán, El Pinacate y Gran Desierto de Altar),
- 426,064ha of National Parks (San Pedro Mártir, Cumbres del Ajusco, Desierto de los Leones, Iztaccihuatl-Popocatepetl, Nevado de Toluca, Lagunas de Zempoala, Cumbres de Monterrey, Cofre de Perote, Pico de Orizaba), and
- 709,627ha of Protection Areas of Fauna and Flora (Cañón de Santa Elena, Maderas del Carmen, Corredor Biológico Chichinautzin, Sierra de Ajos Bavispe).

#### 8.6 Safeguards

A survey of North American and European fur industry representatives that deal with *Lynx* spp. suggests that international, European, and Asian markets all seem to prefer both *L. rufus* and *L. canadensis*. Further, in the opinion of industry representatives, distinguishing *L. rufus* parts, pieces, and derivatives from those of *Lynx canadensis* is not difficult and can be accomplished with limited experience and/or training. To facilitate species identification, the USFWS has produced a web-based *Lynx* identification manual designed for use by CITES authorities and other enforcement officials. The manual has been designed as an aide in distinguishing full skins and skins lacking a head and tail of *L. rufus* and *Lynx* spp..

Fur industry representatives report that if *L. rufus* were delisted, market demand might increase or remain the same, but likely would not decrease (Cooper and Shadbolt 2007). Also, as stated previously, the harvest of *L. rufus* is carefully managed on a sustainable basis in the United States and Canada.

The ready availability of legally acquired *L. rufus* in the market is a safeguard to the illegal take and trade of other *Lynx* spp. Also, range countries have implemented adequate domestic legislation and regulations, management, and enforcement controls to manage harvest and trade in other *Lynx* spp.

#### 9. Information on similar species

Several species have been identified as similar in appearance to *L. rufus*, including the *L. canadensis*, *L. pardinus*, and *L. lynx*. Characteristics of the pelage and skull can be used to clearly distinguish *L. rufus* from other members of the genus *Lynx*. For example, *L. canadensis* can be distinguished visually from *L. rufus* by their large furry pads, slightly shorter tail, longer black ear tufts, and black margins along the ear (>2.5 cm), as well as a less defined spotting on the coat. While the tail of *L. rufus* is banded on the upper surface only, the tail of the other *Lynx* spp. ends in a black tip that completely encircles the tail (Guggisberg 1975, Nowak 1999, Lariviere and Walton 1997). The upper body of *L. rufus* is generally yellowish or reddish brown, whereas the pelage of the *L. canadensis* is generally grayer, and the belly, legs, and feet are grayish to buff white and often speckled with brownish black spots, particularly on the inside of the legs (McCord and Cardoza 1982). Although the USFWS Division of Scientific Authority's consultation with the USFWS National Fish and Wildlife Forensics Laboratory has revealed that some pieces of *L. rufus* skins cannot be distinguished from the other *Lynx* spp., according to data provided by the UNEP-WCMC Trade database, between 2002 and 2006, the majority of trade (89%) in *Lynx* spp. items consists of skins. Since skins are almost always auctioned as dry skins (not tanned yet) with fur out and are almost always complete, including the ears and tail (M. Lovallo, pers. comm. email to M. Cogliano 29 December 2006), the skins should not present a look-alike problem because *L. rufus* can be reliably distinguished from other *Lynx* spp. by the ears and tail, as described above. It is highly unlikely that pieces of *L. lynx* or *L. pardinus* could enter illegal trade in quantities significant enough to impact populations.

*L. rufus* skulls can be identified by the presence of both a narrow presphenoid bone (<6 mm) and a confluence of the hypoglossal foramen with the posterior lacerate foramen. *L. canadensis* skulls have an inflated presphenoid bone and the hypoglossal and posterior lacerate foramina are separated (Jackson 1961). Additionally, Ommundsen (1991) identified three other morphometrics that can be used to distinguish skulls: the number of minor palatine foramina ( $\geq 2$  in *L. rufus*, <2 in *L. canadensis*), the height of the post-orbital process of the jugal (larger than the space in the rim in *L. rufus* and smaller than the space in the rim for *L. canadensis*), and most significantly the angle of the infra-orbital foramen (the long axis is nearly horizontal in *L. rufus* and intersects the nasal bone, whereas it is closer to vertical in the *L. canadensis*). Likewise, in *L. lynx*, the infra-orbital foramen is disposed almost vertically (Novikov 1962). Trade data indicates that trade in *Lynx* spp. skulls is not significant.

To facilitate species identification, the USFWS has produced a web-based *Lynx* identification manual designed for use by CITES authorities and other enforcement officials. The manual has been designed as an aide in distinguishing full skins and skins lacking a head and tail of *L. rufus* and other *Lynx* spp..

#### 10. Consultations

The United States has consulted with the *L. rufus* range countries of Canada and Mexico, and information from these range countries has been incorporated throughout this proposal. The United States has also consulted with the *L. canadensis*, *L. lynx*, and *L. pardinus* range countries. The information from these range countries has been incorporated into this proposal, as appropriate, and the results are summarized in the Annex to this document.

#### 11. Additional remarks

None.

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## LYNX SPP. RANGE COUNTRY SURVEY

### INTRODUCTION

This document presents the results of the *Lynx* spp. range state survey conducted by the United States for the Animals Committee's review of *Lynx* spp. under the review of the CITES Appendices, in accordance with Decision 13.93 (Rev. CoP15). From 2005 through 2006, the United States surveyed all *Lynx* spp. range countries to obtain management, status, and trade information on *Lynx* spp. We provide below the following information related to this survey: 1) a copy of the *Lynx* spp. range state survey questionnaire; 2) a summary of responses received by *Lynx* spp. range states; and 3) a table showing individual range state responses to the survey. Please note that at the time of this survey, Mexico had not yet completed its study of *Lynx rufus* in Mexico; however, this study has now been completed, and the results were reported at the 24<sup>th</sup> meeting of the Animals Committee (AC24 Inf. 10). The current document has not been updated to reflect this recent information, but the new status information on *Lynx rufus* in Mexico is available in the document AC24 Inf. 10.

### I. *Lynx* spp. Range State Survey Questionnaire

Please respond to the following questions:

1. Is the population of *Lynx* [species] in [range country] increasing, decreasing, or stable?
2. Similarly, is the range of this species in your country increasing, decreasing, or stable?
3. Regarding harvest of this species in your country:
  - i) Is harvest allowed?
  - ii) If so, is it regulated?
  - iii) If so, for what purposes?
  - iv) What is the allowed harvest level and how is it determined?
4. Do you allow exports of this species? If so, what types of specimens may be exported?
5. Is illegal trade in this species documented or perceived to be a significant problem?
6. Are there other identified threats to the species?
7. Is this species being adversely impacted by trade, or is it likely to become so without continued listing in the Appendices?

### II. *Lynx* spp. Range State Survey Summary of Results, May 29, 2007

Surveys were mailed on November 17, 2005, to all *Lynx* species range countries (n = 50). Of these, 44 responded (88% response rate). Response rates of countries per species were as follows: bobcat (*Lynx rufus*) 100%; Canada lynx (*Lynx canadensis*) 100%; Iberian lynx (*Lynx pardinus*) 100%; and Eurasian lynx (*Lynx lynx*) 87%.

#### **Bobcat (*Lynx rufus*)**

Responses from Canada, Mexico, and USA.

The population is stable to increasing in both Canada and USA and unknown in Mexico. The range is stable in Canada, increasing in USA, and unknown in Mexico. Harvest is allowed and regulated in all 3 countries. Harvest is regulated for pelts and other parts (to a lesser extent) in Canada, pelts in USA, and game hunting in Mexico. Canada's government determines the allowable harvest using harvest statistics; harvest is managed regionally. Harvest in the USA is managed by the states and can be up to 20% of the population; allowable harvest is determined using population models and demographic analyses. Mexico allows a harvest of 1 specimen per 4,000 hectares, determined by scent station surveys to estimate population size. All 3 countries allow exports. Illegal trade in this species is either not documented or not perceived to be a significant problem in any of the 3 countries. No significant threats have been identified in Canada or Mexico, but the USA has identified habitat loss as a potential significant threat. In both Canada and USA, this species is not being adversely impacted by trade and is not likely to become so without continued listing in the Appendices; Mexico

has no data to respond at this time; however, Dr. Rodrigo A. Medellín, Instituto de Ecología, Universidad Autónoma de México, is undertaking a study of bobcats in Mexico and results are expected at the end of 2007.

### **Canada Lynx (*Lynx canadensis*)**

Responses from Canada and USA.

Population is stable to increasing in Canada. In the contiguous United States, the population status is unknown, but appears to be stable to increasing in some areas. Since 2000, *Lynx canadensis* in the contiguous U.S. has been listed as threatened under the U. S. Endangered Species Act. In Alaska, lynx populations reached their cyclic low point in 2004 and are now stable or increasing. The range is stable in Canada. In the contiguous United States, the range is unknown, but appears to be stable to increasing in some areas. In Alaska, the range is stable to increasing. Harvest is allowed and regulated in Canada and in the USA; however, in the USA harvest of wild specimens is limited to the State of Alaska. Captive-raised lynx in the USA may be harvested where commercial farms exist. In both Canada and USA, the harvest is primarily regulated for pelts and to a lesser extent trade in other parts. In Canada, National and Provincial Governments determine the harvest using harvest statistics of the lynx and its prey, snowshoe hare (*Lepus americanus*), and manages harvest by region. In the USA, *Lynx canadensis* populations in Alaska fluctuate greatly over a 9-11-year period, responding mainly to the abundance of snowshoe hares. The Alaska Department of Fish and Game (ADF&G) and the Board of Game (BOG) use a harvest tracking strategy to allow the dynamic management of lynx based on the ability of populations to support harvest; allowed harvest is increased while a population is growing and is decreased during a population decline. Exports of this species are allowed by both Canada and USA and include pelts, mounts, parts, and garments; however, export of wild lynx (including parts and products) from the contiguous United States is restricted to purposes consistent with the U.S. Endangered Species Act (e.g., scientific, enhancement, zoological exhibition, or educational purposes). Illegal trade is not a significant problem in Canada or the USA. No significant threats were identified by Canada, but some populations have been impacted by land use changes and fragmentation, interspecific competition with bobcat and coyotes, and climate change. The USA stated that the way the lynx is affected varies across its range, and no single activity poses a threat consistently throughout the species' range. In some portions of its range, lynx face few or no threats. The following threats are considered to be low, and especially apply to lynx in various areas of the contiguous United States: 1) lack of a cohesive international strategy to maintain connectivity between habitats in Canada and the United States; 2) effects of timber harvest and thinning and fire suppression; 3) incidental catch by trapping, snaring, or hunting; and 4) high traffic volume on roads that bisect suitable lynx habitat. Both Canada and the United States agree that this species is not being adversely impacted by trade, and Canada reported that it is not likely to become so without continued listing in the Appendices.

### **Iberian Lynx (*Lynx pardinus*)**

Responses from Spain and Portugal.

Both Spain and Portugal report that the population is decreasing. In Spain the range is stable, but in Portugal the range is decreasing. Harvest is not allowed in either Spain or Portugal. Both range states allow export of samples (e.g., urine and feces) for scientific research and conservation purposes. Both Spain and Portugal report that illegal trade in this species is not documented or perceived to be a significant problem. In both range countries, a decline in prey is reported to be a threat to the species. In addition, Portugal identifies habitat degradation and fragmentation to be additional threats, and Spain identifies illegal trapping and vehicle collisions to be threats to the species. Both range countries report that this species is being adversely impacted by trade or is likely to become so without continued listing in the Appendices. Spain and Portugal underscore the importance of monitoring trade in Felidae (Spain)/*Lynx* species (Portugal) to control illegal trade in the species.

### **Eurasian Lynx (*Lynx lynx*)**

Responses from: Albania, Armenia, Austria, Azerbaijan, Belarus, Bulgaria, China, Croatia, Czech Republic, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, India, Islamic Republic of Iran, Italy, Kazakhstan, Latvia, Lithuania, Macedonia, Mongolia, Montenegro, Nepal, Norway, Poland, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Sweden, Switzerland, Turkey, Turkmenistan, Ukraine, and Uzbekistan. Responses not received from: Afghanistan, Democratic People's Republic of Korea, Iraq, Kyrgyzstan, Pakistan, and Tajikistan.

*Lynx lynx* populations are reported as absent in 2 (4%) range countries, Austria and Greece. Of the 37 range countries that reported *Lynx lynx* populations to exist, the populations are decreasing (includes one country that reported "unstable") in 11 (%) countries, stable in 13 (35%) countries, stable/slightly increasing in 5 (14%) countries, increasing in 6 (16%) countries, and unknown/no data in 3 (8%) countries (Note: Serbia is counted as both "increasing" and "decreasing" because one population is "increasing" while another is "decreasing").

Of the 37 range countries that reported *Lynx lynx* populations to exist, the species range is decreasing in 11 (30%) countries, stable in 11 (30%) countries, stable/slightly increasing in 2 (5%) countries, increasing in 9 (24%) countries, unknown/no data in 4 (11%), and no response from 1 (3%) country (Note: Poland is counted as both “increasing” and “decreasing” because the species was reported as increasing in one region while decreasing in a another).

Harvest is not allowed in 22 (56%) range countries that responded to the survey. Eleven (28%) countries reported a lynx harvest and an additional 5 (13%) countries noted that they allow limited hunting with special permission under exceptional circumstances (e.g., when threat to livestock or other species, scientific and educational purposes). One country (3%) that participated in the survey did not respond to this question. All sixteen countries that allow hunting regulate it. The 11 countries with lynx harvests reported the following purposes for the harvest (number of countries that list each reason in parentheses; each country may have listed more than one): Population management or conservation purposes (5); population reduction to reduce depredation/conflicts with livestock or reindeer (3); trophies (2); scientific research (2); public health and safety (2); commercial use (1); and subsistence use (1). The harvest levels and basis of this determination is summarized in the Table below for the 11 countries with lynx harvests.

**Table 1. Range country methodology for determining harvest level of *Lynx lynx***

Country	Harvest Level	How Determined
Estonia	Allowed annual harvest < annual population increase	Population monitoring
Finland	2004-05 = 75 2005-06 = 89	Evaluation by Finnish Game and Fisheries Research Institute
Kazakhstan	Specific number not given	Hunting rules
Latvia	2004-05 quota = 50 2005-06 quota = 70 2006-07 quota = 94	Guidelines of the Species Action Plan
Mongolia	Specific number not given for recent years	Government
Norway	2004-05 harvest = 44 2006 quota = 48	National population monitoring program; hunting is allowed if population size is above population goals for each management region
Romania	2005-06 = 150 2006-07 = 120	Scientific studies
Russian Federation	2004-05 = 74	Population data in Provinces
Slovenia	2005 quota = 1 2006 quota = 0	Government specialist group for large carnivores
Sweden	~ 5 % of estimated population	Population size as determined through national monitoring program and research
Uzbekistan	~ no. in mountain region = 90-112	Not provided

Exports of this species are allowed in 22 (56%) countries that responded to the survey. Fifteen countries (38%) do not allow exports, and 2 (5%) countries that participated in the survey did not response to the question. The following is a list of what could be exported with the number of countries that listed each in parentheses (note: each country may have listed more than one): live specimens/bred in captivity/zoos (8); in compliance with national and CITES regulations (7); scientific/research purposes --samples or live specimens (7); hunting trophies (3); reintroduction (1); live specimens (1); all specimen types (2); *L. l. lynx* only (*L. l. isabellius* prohibited) (1).

Illegal trade in this species is not documented or perceived to be a significant problem in 26 (67%) countries that responded to this survey. Illegal trade is documented or perceived to be a significant problem in 5 (13%) countries. Five (13%) countries stated that it is unknown or that illegal trade is not documented in their country. Three countries (8%) that participated in the survey gave no response to this question.

Other identified threats to this species were listed by 31(79%) of the range countries that participated in the survey. Five (13%) countries stated there were no other identified threats and 3 (8%) countries that participated

in the survey provided no response to this question. The following are the other threats listed (each country may have listed more than one threat; the number of countries that listed each threat is in parentheses): poaching/illegal killing (21); habitat destruction/loss/fragmentation/disturbance (21); decline of prey (9); road traffic/vehicles (7); human impact (3); inbreeding (2); competition with wolf (2); hostile public/lack of public support (2); disease/parasites (2); killed because of livestock predation (2)

Attack by domestic dogs (1); captives might mix with wild (1); lack of coordinated trans-boundary conservation action plan (1); disturbance during breeding season (1).

This species is being adversely impacted by trade or is likely to become so without continued listing in the Appendices according to 20 (51%) of the countries that responded to the survey. Twelve (31%) countries indicated that this species is not being adversely impacted by trade or likely to become adversely impacted if no longer listed in the Appendices. Two (5%) countries had no data to answer the question or listed "unknown" as their answer, and 4 (10%) countries that participated in the survey had no response to this question. One (3%) country responded that capture and trade are prohibited.

III. *Lynx* spp. Range Country Survey Responses – May 29, 2007

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
		Is the population of <i>Lynx</i> sp. increasing, decreasing or stable?	Is the range of this species in your country increasing, decreasing or stable?	Is harvest allowed ?	If so, is it regulated?	If so, for what purposes?	What is the allowed harvest level and how is it determined?	Do you allow exports of this species? If so, what types of specimens may be exported?	Is illegal trade in this species documented or perceived to be a significant problem?	Are there other identified threats to the species?	Is this species being adversely impacted by trade, or is it likely to become so without continued listing in the Appendices?
Canada	<i>Lynx rufus</i>	Stable/ Increasing	Stable	Yes	Yes	Mostly pelts, small trade on other parts (taxidermy mounts, meat, tail, teeth, etc.).	1500-2000 pelts annually; determined by national and provincial governments using harvest statistics and regulated/ managed by management regions.	Yes, mostly pelts; some mounts, parts, and garments.	No	No; possible threats include decline in prey population, loss of habitat and habitat alteration, climate change.	No
Mexico	<i>Lynx rufus</i>	Unknown at this time	Unknown at this time	Yes	It must be demonstrated prior to harvest that the harvest rates are less than the natural renewal rate of the wild population to be affected - general law of wildlife and the general law of ecological balance and environmental protection.	Game hunting - hunting trophies are the main exported product of this species.	Rate is one specimen per 4000 hectares - determined according to surveys made using olfactory attractors and using the number of individuals attracted to calculate population size.	Yes, according to the regulations specified by CITES for the export of specimens from Appendix II listed species.	Between 1998-2003, 36 seizures of illegally caught <i>Lynx rufus</i> specimens were recorded; data are from enforcement actions; no data exists yet for seizures from ports, airports, & borders.	No	Unknown; trade levels since 1980 are significantly lower than those in the USA or Canada. The impact of trade on the species' survival cannot be determined until the results of the ongoing population assessment have been assessed.
United States of America	<i>Lynx rufus</i>	Stable/ Increasing	Increasing	Yes	Yes	Primarily commercial harvest for pelts.	Up to 20 % of population, but varies by State. Population models and demographic analyses are often used to determine harvest level. State	Yes	No	Habitat loss	No

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
							management programs determine harvest levels.				
Canada	<i>Lynx canadensis</i>	Stable/ Increasing	Stable	Yes	Yes	Mostly pelts; very limited trade on other parts (taxidermy mounts, meat, teeth, tails, etc.).	5000-10,000 pelts annually; determined by national and provincial governments using harvest statistics (of <i>L. canadensis</i> and snowshoe hare) and regulated/ managed by management regions.	Yes, mostly pelts; some mounts, parts, and garments.	No	No, some have been impacted by land use changes and fragmentation along with interspecific competition with bobcats and coyotes; climate changes are possible threats.	No, not only are <i>Lynx</i> spp. not currently being adversely impacted by trade, but removal of <i>Lynx</i> spp. from the CITES appendices would not change or negatively impact Canada's current sustainable harvest management practices.
United States of America	<i>Lynx canadensis</i>	In the contiguous USA it is unknown, but appears to be stable to increasing in some areas. In Alaska, stable to increasing.	In the contiguous USA it is unknown, but appears to be stable to increasing in some areas. In Alaska, stable to increasing.	Yes - Alaska only; Captive raised lynx may be harvested where commercial farms exist.	Yes	Commercial	Populations in Alaska fluctuate greatly over a 9-11-year period, responding mainly to the abundance of snowshoe hares ( <i>Lepus americanus</i> ). The Alaska Department of Fish and Game (ADF&G) and the Board of Game (BOG) use a tracking harvest strategy to allow the dynamic management of lynx based on the ability of populations to support harvest. Under this strategy, harvest is increased while a population is growing and is decreased during	Yes. Parts and products from captive raised lynx and from any Alaskan lynx may be exported in accordance with CITES. Wild lynx from the contiguous USA (and their parts and products) may only be exported for purposes consistent with the U.S. Endangered Species Act (e.g., scientific, enhancement, zoological exhibition, or educational purposes).	No	No single activity poses a threat consistently throughout its range; in some portions of its range, it faces few or no threats. The following threats are considered to be low and especially apply to lynx in various areas of the contiguous USA: 1) lack of a cohesive international strategy to maintain connectivity between habitats in Canada and the USA; 2) effects of timber harvest and thinning and fire suppression; 3) incidental catch	No

Range State	Species	Survey Questions										
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7	
							a population decline. Every spring ADF&G biologists analyze data collected over winter during the trapping season to determine the most appropriate lynx seasons for the next winter.				by trapping, snaring, or hunting; and 4) high traffic volume.	
Portugal	<i>Lynx pardinus</i>	Decreasing (almost extinguished)	Decreasing	No	n/a	n/a	n/a	urine/faeces/skin samples for scientific/ conservation purposes.	No	Decline in prey, habitat degradation and fragmentation.	Yes; no problems detected until now, but trade monitoring (keeping <i>Lynx</i> species in Appendix II) is crucial as a precautionary measure to control illegal trade of the species under look-alike species legal trade.	
Spain	<i>Lynx pardinus</i>	Decreasing	Stable	No	n/a	n/a	n/a	Urine and faeces for conservation purposes.	No	Decline in prey, illegal trapping, vehicle collisions.	Yes; no problems have been detected so far in this respect, but trade in all Felidae must be strictly monitored in order to avoid illegal trade with very threatened species by collectors or trophy hunters.	
Albania	<i>Lynx lynx</i>	Decreasing	Decreasing	No	n/a	n/a	n/a	Not allowed	No	Lack of coordination of trans-boundary conservation action plan, habitat loss, forest fragmentation, scarcity of prey, illegal hunting.	Yes, it is not adversely impacted by trade but the country favors keeping the species listed in the Appendices.	
Armenia	<i>Lynx lynx</i>	Decreasing due to worsening of environmental	Decreasing due to logging.	<i>Lynx</i> is considered a game species,	Yes	Conservation of biodiversity.	Hunting quotas of <i>Lynx</i> during the last decades in	Legally this species is not banned from	Insignificant trade could be in internal	Decrease of quantities of hare	Currently trade cannot be considered as a major adverse impact	

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
		conditions, in particular, illegal logging.		although in the last decades it has not been included in the list of permitted species for hunting.			fact are equal to 0 (zero).	being exported since it is not included in the Red Data List of Armenia, and Armenia isn't a Party to CITES; theoretically any specimen or its part could be exported. However, legal cases of export "do not recorded till now" .	market; however, there are no official records.	and roe deer.	to the <i>Lynx</i> in Armenia.
Austria	<i>Lynx lynx</i>	No evidence of reproduction yet; cannot be concluded at the moment that the species has yet returned.	Slight increase (after previous extinction).	No	n/a	n/a	n/a	Not allowed	No, no recent cases known, not perceived to be a problem.	Illegal shooting, trapping, or poisoning; sometimes captive lynx escape and might mix with autochthonous individuals and considering the small population size, this might become a problem.	Yes, any deregulation of trade might become a potential threat for the species due to its small population size.
Azerbaijan	<i>Lynx lynx</i>	Stable	No response	No	n/a	n/a	n/a	No	No response	Deforestation	No response
Belarus	<i>Lynx lynx</i>	Stable or slightly increasing.	Slightly increasing.	No	n/a	n/a	n/a	Yes, if for zoos, bred in captivity, or scientific purposes.	No	Shortage of prey.	No
Bulgaria	<i>Lynx lynx</i>	There are separate specimens along the border with Serbia, but the population is unstable.	No information available.	The harvest is forbidden. The species is protected under the Law on Biological Diversity.	As an exception, with a permit issued by Ministry of Environment and Water.	n/a	There have been no permits issued during the past 70 years.	No	No	Poaching	There can be an adverse impact on the species if not listed in the Appendices.
China	<i>Lynx lynx</i>	Decreasing	Decreasing	No response	Yes	No response	CITES authorities	No response	No response	No response	No response
Croatia	<i>Lynx lynx</i>	Slight Decrease	Slight Decrease	No	n/a	n/a	n/a	Yes, if bred in captivity or scientific purposes.	Yes, some documented attempts and due to small population even	Inbreeding, lack of prey, illegal hunting, habitat fragmentation, road traffic,	Yes, no trade is allowed but feel strongly that keeping the lynx in the Appendices is

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
									minor decreases in number pose a significant problem.	competition with wolf	necessary as a mean of additional protection.
Czech Republic	<i>Lynx lynx</i>	Decreasing	Decreasing	No	n/a	n/a	n/a	Yes, if for zoos, bred in captivity, or scientific purposes.	No	Poaching, habitat fragmentation, disturbance, road traffic, hostile position of the public.	Yes, high rate of illegal shooting has also led to possible risk of illegal trading.
Estonia	<i>Lynx lynx</i>	Stable; slightly increasing at the moment.	Stable	Yes	Yes	Harvest benefits lynx conservation.	Allowed annual harvest is less than annual population increase. Level determined by population monitoring.	Yes, any specimens if the gathering has been legal.	No	No	No
Finland	<i>Lynx lynx</i>	Increasing	Increasing	Yes	Yes	Article 16 derogations of Habitats Directive of European Union.	2004-05 = 75 lynx; 2005-06 = 89; based on the evaluation of Finnish Game and Fisheries Research Institute.	Yes, hunting trophies, live specimens.	Happens very seldom.	No	No
France	<i>Lynx lynx</i>	Population assessments conducted every 3 years. 2007 data not available yet, but according to the estimates population is growing.	Increasing	Yes, upon duly motivated request.	Yes	To prevent important damage to cattle.	A maximum of 1 or 2 specimens per year. Assessment of the supporting arguments, case by case. Since 2004, only 1 specimen in 2006.	No export applications.	Poached specimens not traded.	Due to the increasing population, frequent road accidents concerning yearling individuals dispersing from their natal home ranges. Occasional poaching.	No
Georgia	<i>Lynx lynx</i>	Decreasing	Decreasing	No	n/a	n/a	n/a	No	Illegal trade is not properly documented.	Poaching and habitat destruction	No data/unknown
Germany	<i>Lynx lynx</i>	Increasing slowly.	Increasing over last 20 years.	No, it is treated as a strictly protected species; therefore it is	n/a	n/a	n/a	Yes, only permitted under very exceptional conditions and not for commercial	No, not at the current time.	Habitat fragmentation (especially by motorways);	No, at present, due to the "strictly protected" status of the species, there is no negative impact by trade with

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
				strictly prohibited to take specimens from the wild.				purposes; since 1996, 14 specimens have been granted permits - all being live lynx bred in captivity in reliable zoological gardens.		poaching.	regard to the German population of the species.
Greece	<i>Lynx lynx</i>	No scientific data or evidence of <i>Lynx lynx</i> occurring.	n/a	No - it wouldn't be allowed if the species was found to exist in Greece.	n/a	n/a	n/a	No - not even if the species was found to exist in Greece.	n/a	n/a	n/a
Hungary	<i>Lynx lynx</i>	Stable	Stable	No	n/a	n/a	n/a	Only live captive-bred zoo animals.	Yes	Habitat disturbance (i.e., tourism, feral dogs, forestry activities), illegal killing.	Yes; taking into account that the conservation status is unfavorable and the species may be impacted by trade, the current listing (CITES App. II and EU Annex A) is appropriate.
India	<i>Lynx lynx</i>	No data - unknown at this time.	No survey done but likely decreasing.	No	n/a	n/a	n/a	No	Not documented, but likely to be a significant problem.	Habitat loss and occasional persecution by pastoralists for livestock predation.	Yes; domestic trade is not permitted under the national legislation. Illegal trade may have adverse impacts on already low population density.
Islamic Republic of Iran	<i>Lynx lynx</i>	Decreasing	Decreasing	No	n/a	n/a	n/a	No	No.	Habitat destruction, decrease in prey.	Yes, according to mentioned instance, it appears as though trade is adversely impacting this species.
Italy	<i>Lynx lynx</i>	Stable or locally increasing.	Locally increasing.	No	n/a	n/a	n/a	No	Not monitored; unknown.	Habitat fragmentation, human pressure, poaching.	Not monitored; unknown.
Kazakhstan	<i>Lynx lynx</i>	Stable	Decreasing	Yes	Yes	No response	The Hunting rules	<i>L. l. lynx</i> only. Export of <i>L. l. isabellinus</i> prohibited.	No	No	Yes; for the prevention of removal of <i>L. l. isabellinus</i> (living specimens, skins, and its products) passed off for <i>L. l. lynx</i> , it is

Range State	Species	Survey Questions										
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7	
												advisable to enter L.I.lynx into the Appendix II of CITES.
Latvia	<i>Lynx lynx</i>	Increasing	Increasing	Yes	Yes	To win public support for conservation, and for species management and research.	2004-05 quota = 50; 2005-06 quota = 70; 2006-07 quota = 94. Quota is determined by guidelines of the Species Action Plan.	Yes, hunting trophies (wildlife pelts and skulls).	No	Parasites and diseases. Population fragmentation from habitat loss.	No	
Lithuania	<i>Lynx lynx</i>	Stable	Stable	No	n/a	n/a	n/a	Occasional zoo exports. Must comply with EC Regulation 338/97 and CITES.	Not observed.	Poaching and disturbance during breeding season.	Yes, it should be listed in Appendices.	
Macedonia	<i>Lynx lynx</i>	Unknown due to no project/ evidence to support this - but seems to be decreasing.	Seems to be decreasing - but unsure since no project/ evidence to support this.	No	n/a	n/a	n/a	Yes, in accordance with CITES.	Yes, it is the biggest problem; apart of legal punishments envisaged- nobody was punished up to now; some campaign for that purpose would be also necessary - but who will finance it; people want data but how to get data?	Yes, mainly illegal hunting; some occasions of dead animals because of crash with vehicles.	Yes	
Mongolia	<i>Lynx lynx isabellina</i>	Very little data available on population trends for this species in Mongolia.	No data.	Yes	Yes	Trophy and subsistence use.	Determined by Government's decision. Between 1958-1960 an estimated 350 Lynx were removed annually (Stubbe 1965).	Yes, skins can be exported based on the CITES permit for export.	No	Illegal and unsustainable hunting, reduction of prey species, occasional attacks by domestic dogs, some habitat degradation and loss due to clear cutting, logging, and forest fires.	Yes, illegal hunting is a serious threat to this species, so it is desirable not to change the <i>Lynx</i> status as CITES Appendix II.	
Montenegro	<i>Lynx lynx</i>	Unknown; population status is not	Unknown	No	n/a	n/a	n/a	National legislation prohibits export.	Unknown	No response	No response	

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
		monitored.									
Nepal	<i>Lynx lynx</i>	Stable	Increasing	No	n/a	n/a	n/a	Generally, no.	Probably not.	Depredation on livestock sometimes causes retaliatory killings. Disease from sharing habitat with domestic animals.	Yes; although no data on trade is available, but due to its rareness/limited population, trade will definitely adversely impact its population in the country. Therefore, we strongly advise to continue listing in the Appendices.
Norway	<i>Lynx lynx</i>	2004-05: 20-25 % increase in number of family groups. 1996-03: 20-30 % total population decrease. 2003-04: population stable.	Stable	Yes	Yes	Population regulation where domestic animals share management areas with livestock.	Harvest level is dependent on population size determined through national monitoring program & population goals for each management region. Hunting conducted if population size is above regional goal: 2004-05 - 44 lynxes harvested; 2006 quota is 48 lynxes.	Yes, all specimen types.	No	No	No
Poland	<i>Lynx lynx</i>	Stable	Decrease in Northeast Poland, stable in the Carpathian range.	No	n/a	n/a	n/a	No	No	Habitat fragmentation, migratory barriers, poaching.	No; on account of the fact that lynx is a protected species in Poland, its listing in CITES Appendices has no influence on status of the species in our country.
Romania	<i>Lynx lynx</i>	Stable	Stable	Yes	Yes	In the interest of protecting wild fauna and conserving natural habitats; to prevent serious damage; in the interest of public health and public	2005-06 is 150 individuals and was determined by scientific studies; 2006-07 is 120 individuals also determined by scientific studies.	Yes, export is permitted; can be exported just based on the CITES permit for export. Only skin + fur of hunted animals is sometimes	No	Habitat fragmentation; habitat degradation and restraint; human impact.	No

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
						safety; to allow, under strictly supervised conditions, on a selective basis and to a limited extent.		exported (animals hunted by foreign hunters).			
Russian Federation	<i>Lynx lynx</i>	Generally stable.	Stable	Yes	Yes	Commercial and trophy purposes.	74 lynxes harvested in 2004-05 season. Levels determined by lynx population data in Provinces.	Yes	No	Habitat loss through forest destruction, poaching.	Yes; nowadays the level of international trade does not affect the population but taking into account future perspectives, it is desirable not to change the lynx status as CITES Annex II species.
Serbia	<i>Lynx lynx</i>	Carpathian population increasing; Balkan population decreasing.	Stable	Yes - with special permit; hunting on lynx is prohibited without such permit.	Yes	Only allowed for scientific purposes with a special permit.	Determined by Ministry of Science & Environmental Protection.	Only for scientific purposes.	No	Habitat loss, illegal killing.	Yes
Slovakia	<i>Lynx lynx</i>	Stable/slightly increasing.	Stable/slightly increasing mostly southwards (towards Hungarian border) and westwards (toward Czech Republic).	<i>Lynx</i> is all year-round protected species and its hunting is prohibited. Exceptions are granted by Ministry of Enforcement only in reasonable cases (see 3-iii).	Yes	Livestock and game protection, research and educational purposes, repatriation of other species into lynx habitats.	Limited to cases in 3-iii; exception granted by the Ministry of Environment.	Yes, if complies with national legislation and CITES. Recently, hair, skin, tissue samples and teeth. Exports were allowed for research aimed at the preservation or conservation of the species.	No	Habitat fragmentation, poaching, vehicle collisions.	According to hunting legislation, <i>Lynx lynx</i> is a game species, so dead specimens found are the property of hunting association. Practically, trophy (fur, skin, skull) from these dead specimens should be subject to trade. Also specimens kept or bred in captivity should be subject to trade. According to data from CITES Scientific Authority of SR, recently 25 specimens of <i>Lynx</i> are held in captivity. Due to the mentioned reasons, we propose to maintain listing of <i>Lynx lynx</i> in CITES

Range State	Species	Survey Questions									
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7
											Appendix II.
Slovenia	<i>Lynx lynx</i>	Decreasing	Increasing	Yes	Yes	Public health and safety, prevention of livestock depredation, scientific research, wild population management.	2006 quota = 0; 2005 quota = 1, determined by government specialist group for large carnivores.	Yes, tissue samples recently.	No	Lack of prey, habitat loss, inbreeding, lack of public support, vehicular collisions, poaching.	Yes; trade does not pose a threat to the population, however, trade in hunting trophies from neighboring countries is a reason for concern. Precautionary principle should be applied when considering possible exclusion of <i>Lynx lynx</i> from CITES Appendix II.
Spain	<i>Lynx lynx</i>	Doesn't occur naturally in Spain; is only present in zoos.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sweden	<i>Lynx lynx</i>	Stable	Increasing	Yes, by derogation.	Yes	Reduce damage in the reindeer hurdle areas. Outside the reindeer hurdle areas, the harvest is restricted and selective, not affecting the population negatively.	Around 5 % of the estimated population. Harvest level is dependent on population size determined through national monitoring program, taking scientific research into account.	Yes, legally obtained specimens. Live specimens exported only for scientific or conservation purposes.	No.	Poaching.	The species is not being adversely impacted by trade and would not become so if not listed on CITES, because the trade of the species is still regulated by national law.
Switzerland	<i>Lynx lynx</i>	Stable/slightly Increasing.	Stable/slightly increasing.	No, unless threat to livestock or other species.	see 3-i.	see 3-i.	see 3-i.	Yes, zoo specimens or for reintroduction.	No	Poaching and vehicle collisions.	No; since the species is protected and no harvest is allowed, trade does not become a negative factor for the population of <i>Lynx lynx</i> .
Turkey	<i>Lynx lynx</i>	Stable	Stable	No	n/a	n/a	n/a	No, unless exemption in the Convention.	No	No	Yes; the trade of the species doesn't exist in our country. Nevertheless, Lynx lynx furs are imported to our country from your country in order to be processed and

Range State	Species	Survey Questions										
		1	2	3-i	3-ii	3-iii	3-iv	4	5	6	7	
												returned back. It is a correct approach that the species will stay in the convention annex lists and that its trade will be monitored.
Ukraine	<i>Lynx lynx</i>	Slight increase every year since 2001.	Stable	No	n/a	n/a	n/a	Yes, only for non-wild animals (zoo, etc.)	No	Reduction of habitat, increase of recreation impact, decline in prey population, poaching, competition with wolf.	Yes; harvest and trade of wild lynxes in Ukraine will be adverse for its population in our country. The species should continue to be listed in the CITES Appendices.	
Uzbekistan	<i>Lynx lynx isabellinus</i>	Stable	Decreasing	Yes	Only illegal hunting.	For hunting trophies.	Approximate count in mountain part of the country is 90-112 individuals.	No	Yes	Degradation of range place, low fodder base.	<i>Lynx lynx isabellinus</i> into Appendix II of CITES.	
Turkmenistan	<i>Lynx lynx</i>	Low stable	Stable	No	n/a	n/a	n/a	Not allowed	No	Reduction of habitat over of forest fires	Capture and trade are prohibited	