

CITES Non-detrimental Finding for Exporting *Macaca* from China

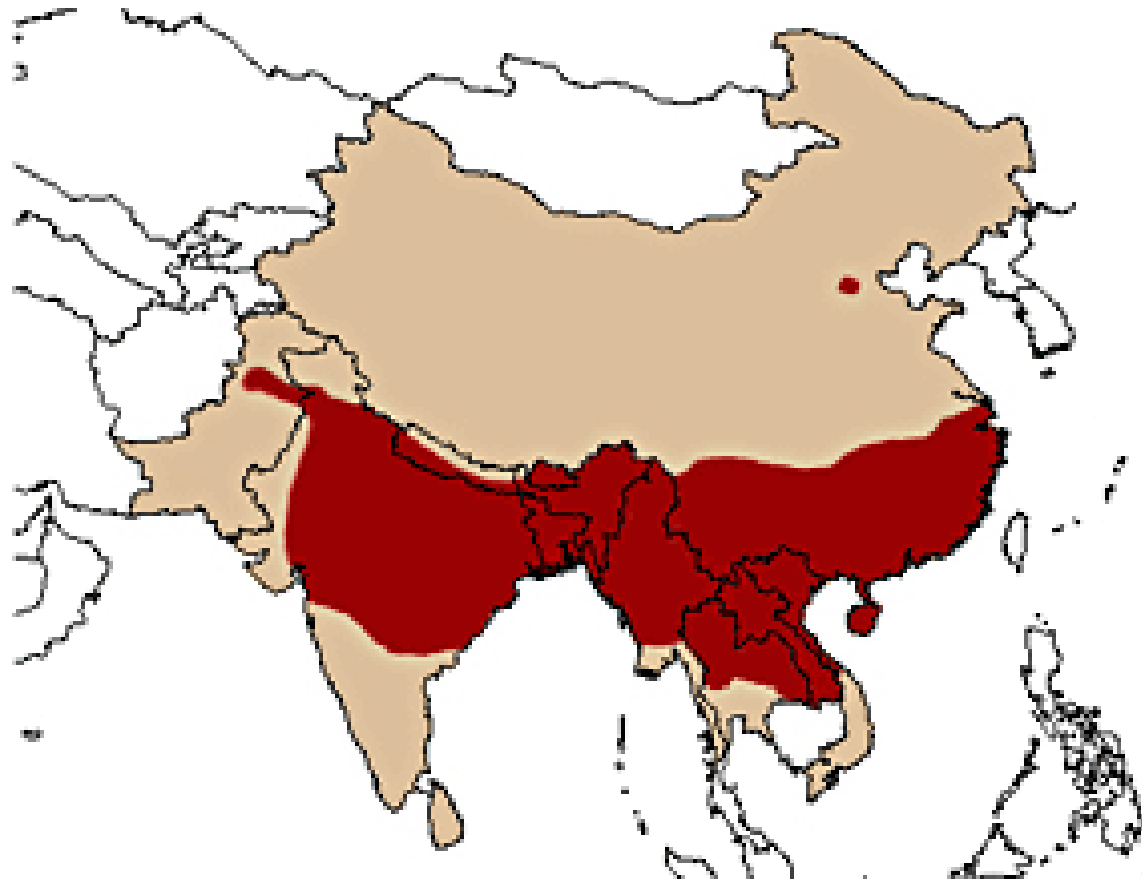
Zhigang Jiang ¹ Zhibin Meng ² Yan Zeng ² Zhongze Wu ³, Zhihua Zhou ³
1 Institute of Zoology, Chinese Academy of Sciences, Beijing China
2 Endangered Species Scientific Commission of the P.R. China
3 The Endangered Species Import and Export Management Office of the P.R. China,



Main *Macaca* species for exporting

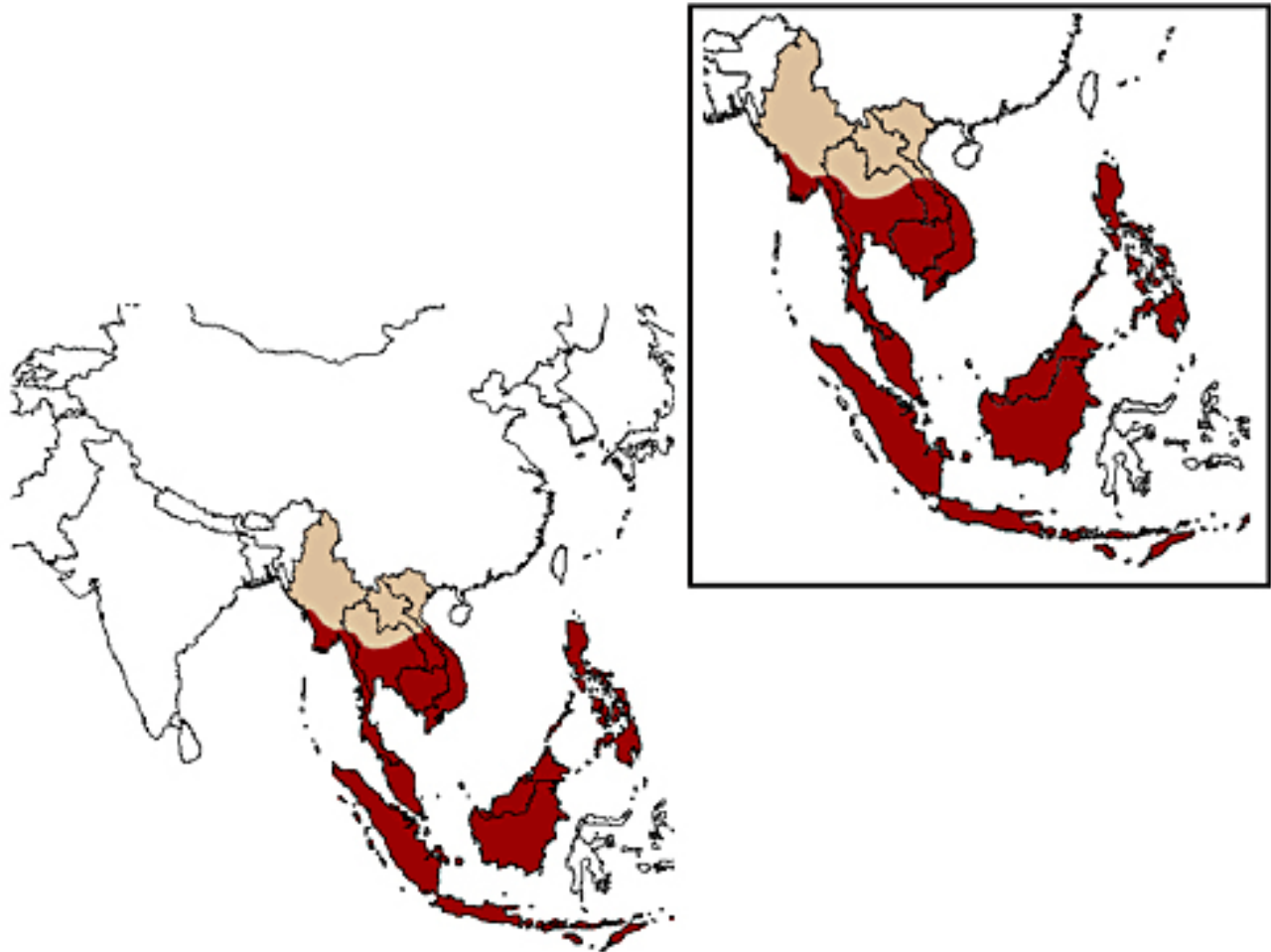
- *Macaca mulatta*
- *Macaca fascicularis*

Distribution of *Macaca mulatta*



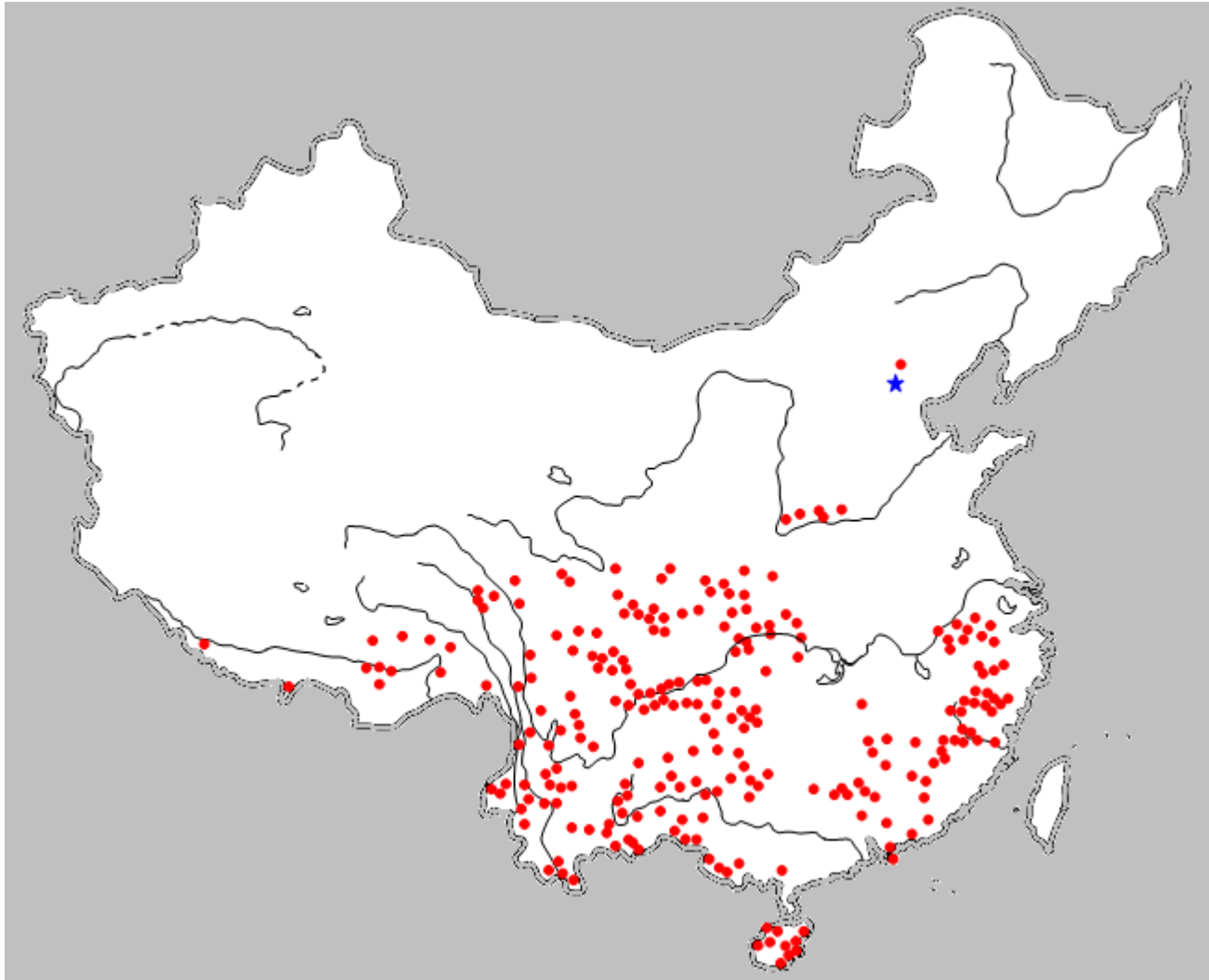


Distribution of *Macaca fascicularis*



<http://pin.primate.wisc.edu>

Distribution of *Macaca mulatta* in China





Conservation status: *M. mulatta*

1.1.1. Global conservation status (according to IUCN Red List):

___ Critically endangered

___ Near Threatened

___ Endangered

___ Least concern

___ Vulnerable

___ Data deficient



Conservation status: *M. fascicularis*

1.1.1. Global conservation status (IUCN Red List: LR/nt ver 2.3 (1994)):

___ Critically endangered

___ Endangered

___ Vulnerable

___ Near Threatened

Least concern

___ Data deficient



National conservation status for the case study country

- Rhesus monkey is a Class II State Key Protected Wild Animal Species. Wild rhesus monkeys and their habitats are protected nationwide.
- Total number of nature reserves in China reached 1,551 by the end of 2002, the area of those nature reserves summed up to 1,414,866 km², which accounted for 14.7% of the land territory of China. Most of the natural habitats of rhesus monkeys are now protected by nature reserves or national forest parks in China.
- *Macaca fascicularis* as CITES Appendix species is granted the status of Class II State Key Protected Wild Animal Species.



Main threats to *M. Malatta* within the case study country

- Habitat Loss/Degradation (human induced)
- Invasive alien species (directly affecting the species)
- Harvesting [hunting/gathering]
- Accidental mortality (e.g. Bycatch)
- Persecution (e.g. Pest control)
- Pollution (affecting habitat and/or species)
- Other _____
- Unknown



Main threats to *M. fascicularis* within the case study country

No Threats

Habitat Loss/Degradation (human induced)

Invasive alien species (directly affecting the species)

Harvesting [hunting/gathering]

Accidental mortality (e.g. Bycatch)

Persecution (e.g. Pest control)

Pollution (affecting habitat and/or species)

Other _____

Unknown



Captive breeding of *M. malatta*

- Before 1980s, rhesus monkey populations decreased due to the habitats loss and hunting;
- During that period, founders of breeding populations of primates in the country were mostly taken from the wild;
- Since 1988, since the Wild Animal Protection Law of the People's Republic of China went into effect, rhesus monkey has gained gradually strengthening management in its natural habitats.



Captive breeding of *M. malatta*

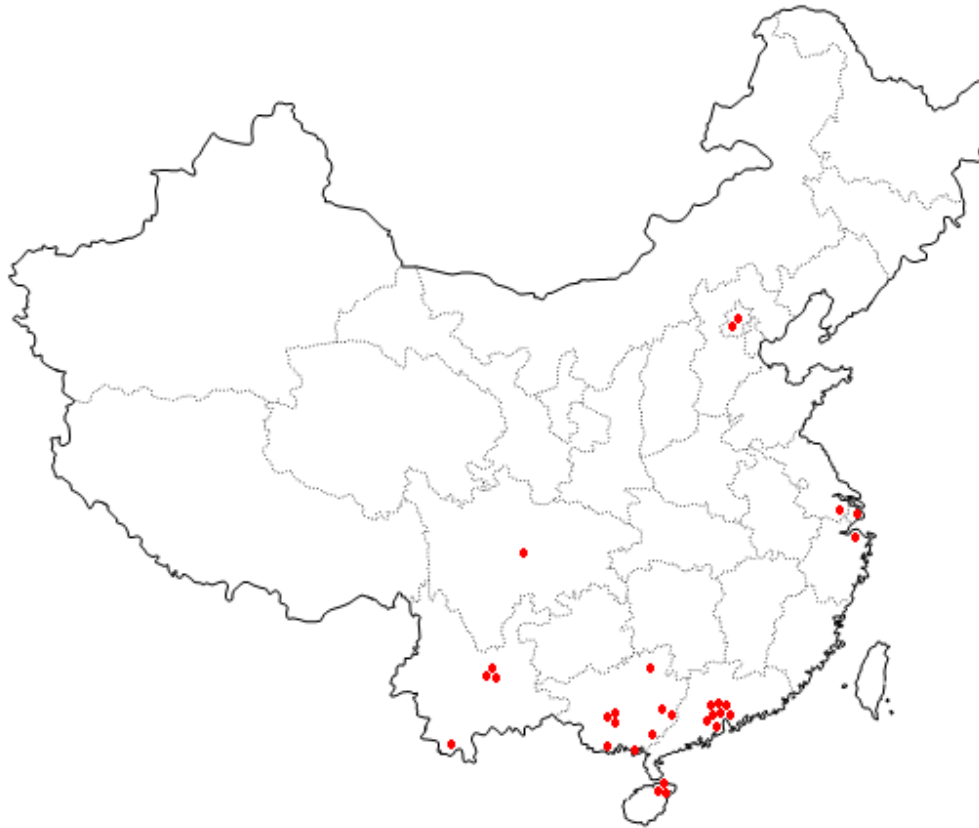
- Captive breeding of rhesus monkey as experimental animals was started in early 1980s in China.
- Wei (1998) reported there were about 20,000 *Macaca mulatta* in 15 primate breeding centres in China in 1998.
- Now, more than 40,000 rhesus monkeys are kept in breeding facilities in China. Of them there are 2,000 breeding males, 15,000 breeding females, and about 10,000 juveniles were born in those breeding centres.



Captive breeding of *M. fascicularis*

- Late 1980s, the international demands for primate as laboratory animals increased.
- Around 1990, for breeding *Macaca fascicularis*, four primate breeding companies were established. The founder animals mostly came from the crab-eating macaques kept at those local wildlife rescue centers with the breeding stocks supplemented from primate breeding centers in Southeast Asia.
- In August 2008, there are 40 primate breeding companies in the country, which keep about 170,000 crab-eating macaques mainly for the export and to meet the growth of demand for experiment animals worldwide.

Macaca breeding centers



Macaca breeding centres



Crab-eating Macaques





Crab-eating Macaques



Rhesus monkey *Macaca malatta* Z. Jiang



General elements of the management plan

- The Wild Fauna and Flora Conservation Department (WFFCD) of SFA administrates the breeding permits, transportation permits, labeling, buying and selling of all terrestrial wild animals, including primates;
- WFFCD is also responsible for implication of the annual primate export quota system in the country. National CITES scientific and management authorities actively involved in the process;
- National CITES management authority is responsible for issuing permits for import and export.



Purpose of the management plan in place

- Purpose of the management for rhesus monkey in the country is to maintain its ecological function and evolutionary potential in natural ecosystems while maintaining a healthy breeding stock for sustainable trade to the international laboratory primate market.
- Purpose of the management for crab-eating macaque in the country is to maintain a healthy breeding stock for sustainable trade to the international laboratory primate market.



Restoration or alleviation measures

- Besides the general conservation measures, since 2003, harvest of wild animals, including rhesus monkey, have been suspended, except for the purposes of scientific research and education with permits of the national wildlife management authority.



Setting up a breeding company

- Under strict control within the frames of CITES and China national wildlife protection law. Each primate breeding company should apply for a breeding license before its operation.



Administration Permission Law

- **Applicant**

↓
Provincial Wildlife Management

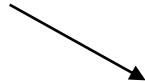
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Wildlife Management, SFA

↓
Expert Panel Meeting

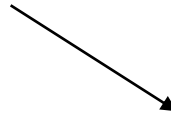


Administration Permission Law

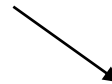
Expert Panel Meeting



Wildlife Management, SFA



Decision of “Yes” or “No”



■ **Applicant**



Methods used to monitor harvest

The monitoring system has several parts:

- Annual review of export quota and its modulation;
- Issuing export permits;
- Checking the permits by custom officers;
- Monitoring data base maintained by the national CITES authorities;
- Reporting trade to the CITES Secretariat by the national CITES management authority.



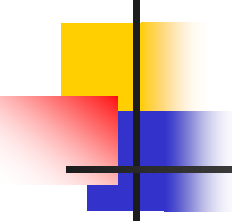
Confidence in the use of monitoring

Monitoring of the trade of rhesus monkey and crab-eating macaque in country is conducted by scientists and wildlife professionals. Experts are actively participate in the process of issuing breeding permits, setting up import and export quota, inspection of primate breeding companies. We have confidence in the use of monitoring system of *Macaca* breeding because rhesus monkey and crab-eating macaque in trade are kept in captivity and under man's care.



Legal framework and law enforcement

- China ratifies CITES (1982);
- National Wild Animal Protect Law of P. R. China (1988);
- The Checklist of Key Protected Wild Animal Species and Plants in PRC (1989);
- Official Notification No.124 of SFA, for management of experimental monkeys (2004);
- The Regulations of the People's Republic of China on Administration of Import and Export of Endangered Wild Animals and Plants (2005).



Type of use (origin) and destinations (purposes)

- According to the CITES Trade database maintained by WCMC and UNEP (2000-2008): the importing purpose of *Macaca mulatta* from China, 23,429 rhesus monkeys were labeled with code “T”, 6669 were labeled with code “S”, 4589 were labeled with code “M”, 226 were labeled with “B” and only 35 exported rhesus monkeys were not given any importing purpose. Predominately, the exported rhesus monkeys from China were used for scientific and medical research purposes.



Harvesting regime

- Almost all rhesus monkeys for exporting were harvested from captive-bred troops. Age of the export macaques are of the range of 2-5 years old. Some customers may have special requirement, such as for using as model of diabetics study, experimenters may want to buy aged macaques.



Harvesting regime

- Of those exported *Macaca mulatta*, 2066 were labeled with code “W” whereas 1591 were labeled with “U”. We checked the trade records maintained by The Endangered Species Import and Export Management Office of the P.R. China, all traded *Macaca mulatta* from China were from captive bred herds in primate breeding centers.
- According to the China CITES trade database, only in the year of 2002, 9 wild source rhesus monkeys were imported (Trade ID: 2002CN/IC0311/GZ). All exported rhesus monkeys from China during the period from 2000 to 2007 were rhesus monkeys bred in primate captive breeding centres in the country.



Harvesting regime

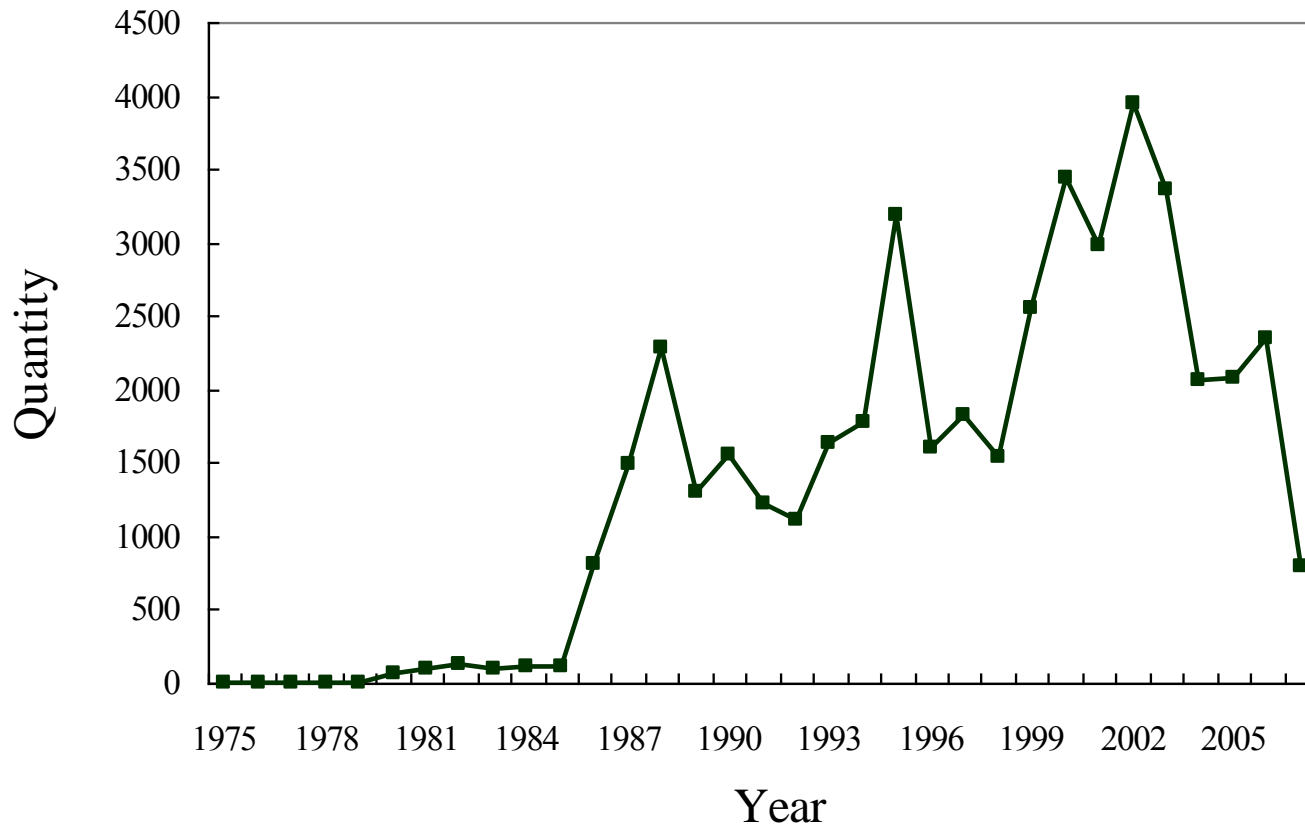
- From 1980 to 2006, 45,494 *Macaca mulatta* were exported from China to Britain, Japan and USA etc. Of those monkeys, 28,389 were labeled with “C”; 2,066 of them marked with code “W”, 3,920 were not labeled with any code. The truth was UNEP-WCMC CITES Trade Database does not contain source information for most reports prior to 1991 (UNEP-WCMC, 2004). Another 3657 *Macaca mulatta* were re-exported from China to above mentioned primate importing countries for the same purposes “S” or “T”.



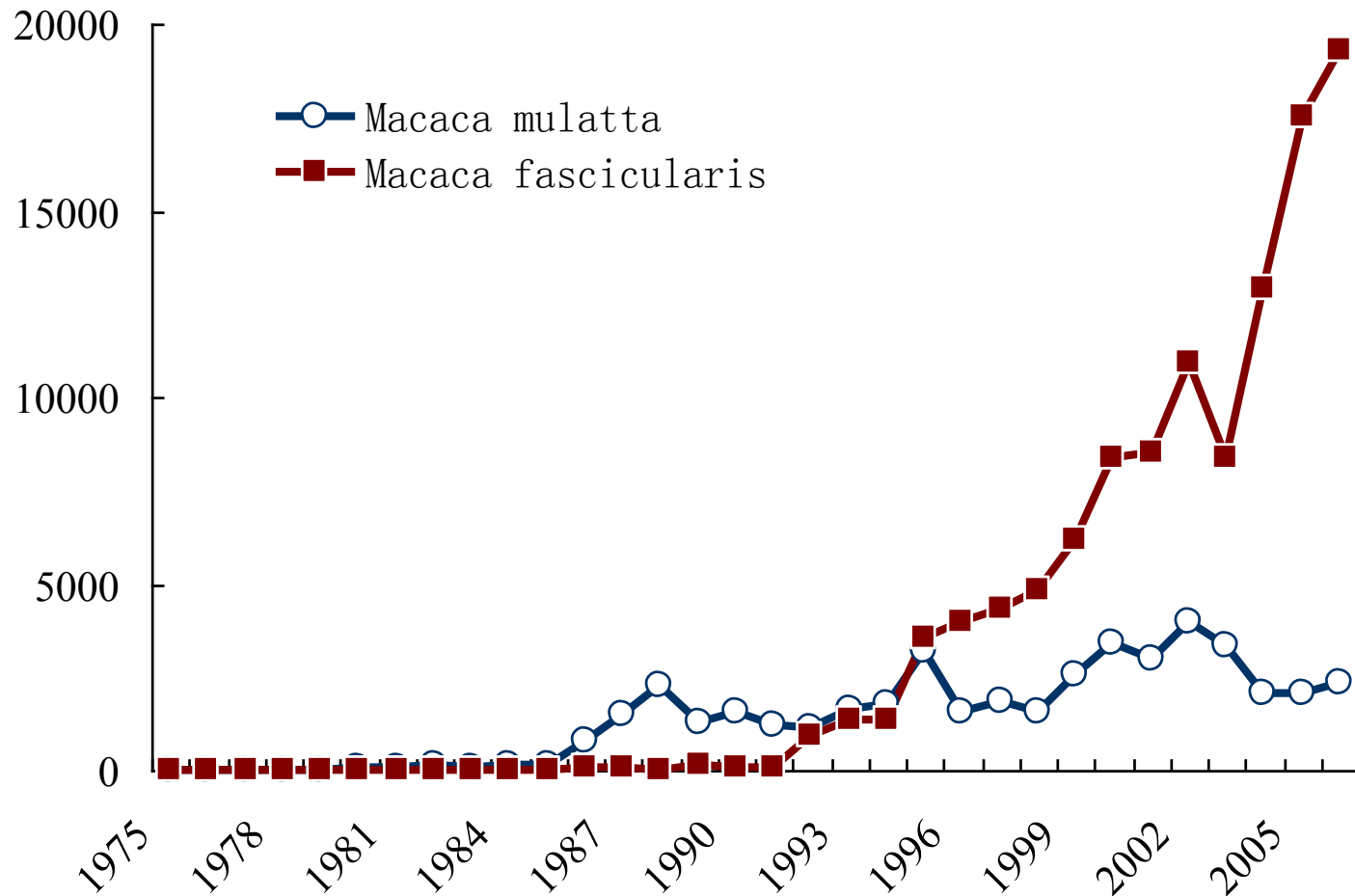
Trade level of *M. fascicularis*

- China exported of 2,580 living crab-eating macaques in 2005, 3,474 in 2006, and 6,190 in 2007. The main destination of the trade was the U.S.A. More than 5,000 units of other derivatives such as serum, plasma, or tissues of crab-eating macaques from medical experiments were exported from 2005 to 2007. Main destinations of those crab-eating macaque derivatives were Japan, U.S.A., Canada and France. Two cases of illegal imports of several hundreds living crab-eating monkeys were reported in 2004 and 2006, respectively.

Macaca mulatta exported from China (UNEP-WCMC CITES Trade data base)



Trades of *M. malatta* and *M. fascicularis*





Illegal trade: *M. malatta*

- Illegal trades of rhesus monkeys were prosecuted by wildlife law enforcement authority in China. For instances, three men were charged by Chongqing municipal forest police for illegal transporting 57 rhesus monkeys in March, 2007. In 2008, the forest police confiscated 991 rhesus monkeys. Ten people were charged for illegal sale and transporting of rhesus monkey. They were sentenced to 2-15 years in prison. However, the news did not specify whether the rhesus monkey were form wild source or breeding centers.



Non-detrimental Finding procedure: *M. malatta*

Criteria/parameters are needed to be considered for NDFs of rhesus monkeys:

- (a) The *Macaca mulatta* is abundant in wild and artificially bred in large scale in the country.
- (b) *Macaca mulatta* breeding companies do not require catching any wild rhesus monkeys for breeding.
- (c) The exporting volume of captive breed *Macaca mulatta* is within the annual natural recruitment of *Macaca mulatta* in breeding centers; within the level of sustainable trade of the population.

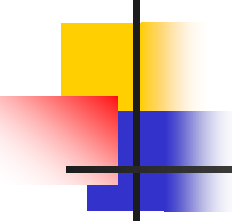


Non-detrimental Finding procedure: *M. fascicularis*

Is the methodology used based on the IUCN checklist for NDFs? ___yes __no

Criteria/parameters are needed to be considered for NDFs of *Macaca fascicularis*:

- (a) Artificially bred in the country ;
- (b) *Do* not require wild caught crab-eating macaques for breeding.
- (c) The exporting volume of captive breed *Macaca fascicularis* is small compared to the captive breed macaque population.



How can be those data analyzed to take decisions on that species use

- (a) Large wild populations and extensive distribution of *Macaca mulatta* increase the viability of rhesus monkeys.
- (a) A large scale artificial propagation of *Macaca mulatta* can meet the demands for medicinal, biological, behavioral and psychological experiments.
- (b) The artificial propagation populations of *Macaca* are self sustainable.



Main sources of data

- The data of *Macaca* in breeding centers or breeding companies were obtained during surveys;
- From the statistic data of the national CITES trade data base;
- Population data of *Macaca malatta* were obtained during field surveys
- Some of the data were cited from the references.



Comparison of *Macaca mulatta* export data

Year	CITES Trade Database	CN Database	Difference
2000	3437	990	2447
2001	2986	3246	-260
2002	3950	5139	-1189
2003	3362	4139	-777
2004	2055	2180	-125
2005	2077	2306	-229
2006	2352	9052	-6700
2007	793	2199	-1406
Sum	21012	29251	-8239



Recommendations

- China already has a large captive population of *Macaca*.
- The increasing number of the captive bred *Macaca* will not pose threats to the wild *Macaca* populations.
- Demand for macaques as laboratory animals in coming years is between 30,000-60,000 macaques per year. Such a demand will be met with the current size of captive bred *Macaca*
- Primate breeding companies in developing countries should be transformed into animal laboratories.



Thank you!