



SAN DIEGO ZOO GLOBAL

May 21, 2018

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Acting Assistant Director
International Affairs Program
U.S. Fish and Wildlife Service
Suite 2w079
5275 Leesburg Pike
Falls Church, VA 22041

RCVD MAY 29 2018

Dear Eric,

Thank you for recently taking the time to meet with Michael Mace regarding the current giant panda situation at San Diego Zoo, especially the need to send the older giant panda male back to China before his heart disease progresses further.

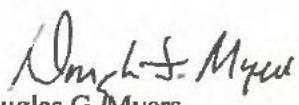
With this situation in mind, on behalf of the Zoological Society of San Diego, San Diego Zoo (ZSSD), I am submitting a re-export permit application for the re-export of one male giant panda from San Diego Zoo to China. This panda, name Gao Gao Studbook # 415, was imported by San Diego Zoo from China on 01/15/2003 as authorized by U.S. permit 02US053884/9. Copies of all authorization documents, Chinese and U.S., are provided in the accompanying permit application.

We certainly appreciate the Fish and Wildlife Service's willingness to give this permit application high priority attention. We also recognize that this application does not yet include a copy of a Chinese CITES import permit or official notice from the Chinese CITES authority that one will be issued. Both our CWCA colleagues and we are working to resolve this as quickly as possible. When we receive appropriate Chinese CITES documentation, we will immediately forward it to USFWS.

Enclosed is the permit processing fee required as well as a pre-paid Federal Express envelope for delivery of the permit when the process has been completed.

Thank you for your attention and assistance.

Sincerely,


Douglas G. Myers
President and CEO
Zoological Society of San Diego

ZOOLOGICAL SOCIETY OF SAN DIEGO
Post Office Box 120551, San Diego, CA 92112-0551 USA Telephone (619) 231-1515



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Department of Interior
U.S. Fish and Wildlife Service
Federal Fish and Wildlife Permit Application Form

RCVD MAY 29 2018

LB

Type of Activity

U.S. Fish and Wildlife Service
Division of Management Authority
Branch of Permits, MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

**EXPORT/RE-EXPORT/IMPORT/INTERSTATE AND FOREIGN
COMMERCE/TAKE OF ANIMALS (LIVE/ SAMPLES/PARTS/PRODUCTS)
under the Convention on International Trade in Endangered Species
(CITES) and/or the U.S. Endangered Species Act (ESA)**

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details. Instructions on how to make your application complete and help avoid unnecessary delays are attached.

Section A: Complete if applying as an individual

1.a. Last Name		1.b. First Name	1.c. Middle Name/Initial	1.d. Suffix
2. Date of Birth (mm/dd/yyyy)	3. Telephone Number	3.a. Alternate Telephone Number	4. E-mail address	

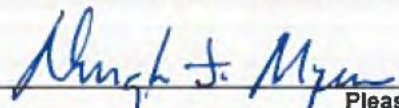
Section B: Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution Zoological Society of San Diego		1.b. Doing business as (DBA) San Diego Zoo		
2. Tax identification no. 95-1648219		3. Description of business, agency, Tribe, or institution Public zoo - conservation, research, education & recreation		
4.a. Principal officer Last name Myers	4.b. Principal officer First Name Douglas	4.c. Principal officer Middle name/Initial G	4.d. Suffix	
5. Principal officer title President and Chief Executive Officer		6. Primary contact name Carmi G. Penny		
7.a. Business telephone number 619.557.3982	7.b. Alternate telephone number	7.c. Business fax number 619.232.4117	7.d. Business e-mail address cpenny@sandiegozoo.org	

Section C: All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes) 2920 Zoo Drive				
1.b. City San Diego	1.c. State California	1.d. Zip code/Postal code 92101	1.e. County/Province San Diego	1.f. Country U.S.A.
2.a. Mailing address (include if different than physical address; include name of contact person if applicable) same as above				
2.b. City	2.c. State	2.d. Zip code/Postal code	2.e. County/Province	2.f. Country

Section D: All applicants MUST complete

1. Attach the nonrefundable application processing fee in the form of a check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of \$100. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee - attach documentation of fee exempt status as outlined in instructions [50 CFR 13.11(d)].
2. Certification: I hereby certify that I have read and am familiar with the regulations contained in Title 50 Part 13 of the Code of Federal Regulations and the other applicable parts in subchapter B of Chapter I of Title 50, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001.
Signature of applicant/Principal Officer for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy) <div style="text-align: center;">  <div style="position: absolute; right: 0; top: 0;">21 MAY 2018</div> </div>

Please continue to next page

E. EXPORT/RE-EXPORT/IMPORT/INTERSTATE AND FOREIGN COMMERCE/TAKE OF ANIMALS (Live/samples/parts/products) (CITES and/or ESA)

Allow at least 90 days for the application to be processed. Applications for endangered species permits must be published in the Federal Register for a 30-day public comment period.

Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use separate sheets of paper. On all attachments or separate sheets you submit, indicate the application question number you are addressing. If you are applying for multiple specimens, be sure to indicate which specimen you are addressing in each response.

NOTE: The import of live southern white rhinoceros from South Africa and Swaziland must meet specific CITES criteria for an import permit to be issued. If you are requesting authorization for the import of these species, please ensure that you respond to question 14 below.

Electronic submission of inventories, photographs, and receipts: Some applications contain extensive inventories and/or a large number of photographs or receipts. You may provide electronic versions of the documents. Such a submission will assist the processing of your application since it may reduce data entry by the U.S. Fish and Wildlife Service. If you wish to provide information electronically, once you have received an application number via the e-mailed acknowledgment letter, e-mail your information to Permits@fws.gov. Be sure to include the application number provided in the acknowledgment e-mail that will be sent to you when we receive your application.

☐ I will be submitting documents electronically.

1. Name and address where you wish the permit to be mailed, if different from page 1. If you would like expedited shipping, please enclose a self-addressed, pre-paid, computer-generated, courier service airway bill. If unspecified, all documents will be mailed via regular mail through the U.S. Postal Service.
 - Same as on page 1
A pre-paid Federal Express envelope is enclosed for return mail purposes.
2. Who should we contact if we have questions about the application (name, phone number, and e-mail)?
 - Carmi G. Penny, Director of Collections Husbandry Science
619.557.3982 cpenny@sandiegozoo.org
3. Have you or any of the owners of the business (if applying as a business, corporation, or institution), been assessed a civil penalty or convicted of any criminal provision of any statute or regulation relating to the activity for which the application is filed; been convicted, or entered a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act; forfeited collateral; OR are currently under charges for any violation of the laws mentioned above?

☒ No ☐ Yes

If you answered "Yes" to Question 3, provide: a) the individual's name; b) date of charge; c) charge(s); d) location of incident; e) court, and f) action taken for each violation. Please be aware that a "Yes" response does not automatically disqualify you from getting a permit.

4. What activity are you requesting authorization to carry out (Indicate appropriate activities):

<input type="checkbox"/> EXPORT	<input checked="" type="checkbox"/> RE-EXPORT	<input type="checkbox"/> IMPORT	<input type="checkbox"/> TAKE (e.g., cull, lethal harvest)
<input type="checkbox"/> INTERSTATE COMMERCE	<input type="checkbox"/> FOREIGN COMMERCE		

Note: Interstate Commerce permits authorize the sale of endangered and threatened species across State lines, but only for activities that will contribute to enhancing the propagation or survival of that species. Interstate commerce activities with wildlife require the buyer to obtain a permit prior to the sale or offer for sale.

5. For **EACH** animal/specimen involved in the proposed activity provide:

a. Scientific name (genus, species, and, if applicable, subspecies)	b. Common name	c. Birth/ Hatch Date (mm/dd/yyyy) (approximate of actual unknown)	d. Wild or captive- born	e. Quantity	f. Gender (male or female, if known), if	g. Permanent markings, if alive (e.g., tattoo, ID #, microchip #, scars)	h. Type of sample or product (e.g., blood, tissue, DNA)
EXAMPLE: <i>Pan troglodytes</i>	Chimpanzee						
<i>Alluopoda melanoleuca</i>	Giant Panda	circa 1990	Wild	1	male	San Diego ID 503007 Species 360 GAN 25213461 Sib # 415 Microchip: 00-0622-872C	Live Animal
Species 360 specimen report is provided in Addendum 1							

6. The current location of the specimen(s) (address and country):

Name: San Diego Zoo
Address: 2920 Zoo Drive
City: San Diego
State/Province: California
County, Postal Code: San Diego, U.S.A. 92101

7. Recipient/Sender:

- If export, provide name and address of the recipient in the foreign country.
- If re-export, provide the name and address of the recipient in the foreign country.
- If import, provide name and address of the exporter in the foreign country.
- If interstate or foreign commerce, provide name and address of the proposed seller/supplier.

Name: China Conservation and Research Center for the Giant Panda Dujiangyan Base
Address: Qin Cheng Shan Shiqiao Village
City: Dujiangyan City
State/Province: Sichuan
County, Postal Code: Peoples' Republic of China 611830

SOURCE OF SPECIMEN (answer question 8 or 9 for **EACH** animal/specimen involved, as appropriate).

8. For captive-bred animals or animal(s) from which the specimen(s) are/were obtained, provide a signed and dated statement from the breeder that includes the following:

Not Applicable

- a. Scientific name (genus, species, and, if applicable, subspecies) and common name;
- b. Name and address of the facility where the animal was bred and born;
- c. Birth/hatch date (mm/dd/yyyy), and, if applicable, identification information;
- d. Location (name of facility, address, city, State, postal code) of parental stock;
- e. A statement that the animal was bred at the above facility;
- f. Documentation demonstrating the history of transactions (e.g., chain of custody or ownership of the animal).

9. For **EACH** animal/specimen taken from the wild, provide the following:

- a. Scientific name (genus, species, and, if applicable, subspecies) and common name;

Please refer to Addendum 2
for all answers and discussions for
Question 9

- b. Specific location of where, when, and by whom (name and address) the specimen was removed from the wild;
- c. Purpose of removal and length or approximate length of time held in captivity. Discuss issues such as the method of collection, was the collection done as part of a larger study, were animals returned to the wild after sampling, and did any mortalities or injuries occur due to collection or holding;
- d. If and how any remuneration, either financial or in-kind, was provided for taking or capturing animals or for the collection of samples.
- e. Your efforts to use captive specimens (e.g., captive-born, captive-held), or parts thereof, in lieu of taking animals from the wild.
- f. Copies of your foreign or domestic collecting permit, license, contract or agreement;
- g. Documentation showing that the specimen(s) was/were legally obtained by the applicant; and
- h. Copies of any applicable State, Tribal, Federal, or Foreign government permits or licenses that authorized the removal of this animal from the wild.

JUSTIFICATION FOR REQUESTED ACTIVITY.

10. Provide a detailed statement justifying the proposed activity, particularly the following:

Please refer to Addendum 3
for answers to questions
10 and 11.

- a. Describe the purpose of your proposed activity. For example, if the purpose is scientific research, attach a copy of your research proposal outlining the purpose, objectives, methods (e.g., specific information on survey/collection methods, sampling regime, equipment to be used), and whether similar work has already been done or is currently being done. If the purpose includes conservation education, provide copies of educational materials (e.g., handouts, text of signage or public presentations), and include the purpose and objectives of the proposed activity. If the purpose is for propagation for conservation purposes (including culling as part of herd management), provide a description of how the species will be propagated and the disposition of progeny, as well as long-term goals of the breeding program, how the breeding program is managed to maintain genetic vitality, and information on any cooperative breeding programs or agreements that are/will be established, including any future plans for re-introduction.
 - b. Description of the technical expertise of each person (please also include CV or resume), as it relates to the proposed activities. If the proposed activity involves live animals, include the experience of each animal caretaker working with the species.
 - c. Copies of contracts, agreements or other documents that identify persons involved and dates of activities for which authorization is being requested.
11. A statement on how the activities will enhance or benefit the wild population (e.g., in-situ and ex-situ projects).

12. If live specimens are to be held in captivity as part of the proposed activity:

- Please refer to Addendum 4 for question 12 discussion and answers
- a. Provide a detailed description (e.g., size, construction materials, protection from the elements) and photographs or diagrams (no blueprints, please) clearly depicting the existing facilities where the wildlife will be maintained. If the specimens will be housed at multiple facilities, either immediately or within the next year, provide a full description of each facility. If you are unsure of which facilities may be receiving specimens (e.g., final decisions on placement have not been made), please indicate likely candidates and the mechanism that will be used to determine recipient facilities;
 - b. A statement of the specific technical experience of CV or resume available to the recipient(s) for maintaining and propagating live specimens of the same or similar species;
 - c. The number of years each species has been maintained at the facility;
 - d. The number of births by year for each species for the last 5 years; and
 - e. Mortalities at the facility with these or similar species in the last 5 years, causes of such mortalities, and steps taken to avoid or decrease such mortalities.

IMPORTS, EXPORTS, OR RE-EXPORTS.

Please refer to Addendum 5 for answers for question 13.

13. For shipment of LIVE specimens, the transport conditions for animals must comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with the International Air Transport Association (IATA) live animal regulations (contact airline for information). As such, describe:
- a. The type, size, and construction of any shipping container; and
 - b. The arrangements for watering or otherwise caring for the wildlife during transport.

14. For import of live southern white rhinoceroses from South Africa and Swaziland, a determination that the importing facility meets the CITES "appropriate and acceptable destination" annotation must be made. Therefore, provide written documentation demonstrating that the proposed activity would promote *in situ* conservation of the species. **Note: For any permit authorizing trade of live rhinoceroses under an "appropriate and acceptable destination" annotation, the rhinoceros horn from these animals may not enter commercial trade and the animal may not be sport hunted.**

Not Applicable

15. For import of LIVE CITES Appendix-I listed marine mammal species, provide a copy of your FWS or NOAA Fisheries permit or authorization.

Not Applicable

16. For import of CITES Appendix-I listed species, provide information to show the import is not for primarily commercial purposes as outlined in Resolution Conf. 5.10.

Not Applicable - this is a re-export of a legally imported specimen not an import

17. For export of CITES Appendix-I listed species, provide a copy of the CITES import permit, or evidence one will be issued by the Management Authority of the country to which you plan to export the specimen(s). In accordance with Article III of the CITES treaty, it is required that import permits are issued before the corresponding export permit.

The Chinese authority has been asked to provide a Chinese CITES import permit. CWCA has provided assurance an import permit will be issued in a timely fashion. When received it will be immediately sent to USFWS for inclusion into this permit application.

18. If the specimen is being re-exported (e.g., exporting a specimen that was previously imported into the United States), provide:

Please refer to Addendum

6 for answers to question 18.

- a. A copy of the canceled CITES export or re-export document issued by the appropriate CITES office in the country from which the wildlife was imported (if applicable); and
- b. A cleared copy of Form 3-177, wildlife Declaration for Import (hard copy or electronic release); OR
- c. If you did not make the original import, provide a copy of the importer's documents outlined above and the invoice or other documentation that shows you acquired the wildlife from the original importer or history of transactions which demonstrate chain of ownership.

All International shipment(s) must be through a designated port. A list of designated ports (where an Inspector is posted) is available. If you wish to use a port not listed, please contact the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2).

The preferred designated port for export will be Los Angeles International Airport. The second choice for port of export will be San Francisco International Airport. Availability of airlines at the time of export will be a final determining factor.

ADDENDUM 1

Question 5; Specimen Identification

Species 360 Specimen Report

Specimen Report

SPECIES 360

Species360 25213461

Local ID: SANDIEGOZ / 503007

GAN

Ailuropoda melanoleuca

Giant Panda

Ailuropoda melanoleuca

Studbooks

Order Carnivora

Family

Ursidae

IUCN Endangered (EN)

CITES I

Start Date 1/Jan/1800

End Date 16/Oct/2017

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Basic Animal Information

No Local Data Differences Found

<u>Sex - Contraception</u>	Male -	<u>Status</u>	Alive
<u>Birthdate - Age</u>	~From 1/Jan/1989 To 1/Jan/1991 - 27Y,9M,15D	<u>Preferred ID</u>	SANDIEGOZ / 503007
<u>Origin</u>	China	<u>Rearing</u>	Undetermined
<u>Birth Type</u>	Wild Born	<u>Hybrid Status</u>	Not Hybrid
<u>Sire</u>	WILD/WILD	<u>Dam</u>	WILD/WILD
<u>Current Collection</u>	Main Institution Animal Collection	<u>Collection Trip</u>	
<u>Clutch / Litter</u>		<u>Enclosure</u>	AX09001 Sun Bear Forest Enclosure Group

Visit History

<u>Date In</u>	<u>Acquisition - Vendor/Local ID</u>	<u>Phy. Own</u>	<u>Reported By</u>	<u>Disposition - Recipient/Local ID</u>	<u>Phy. Own</u>	<u>Date Out</u>
15/Jan/2003	Loan In From Vendor: CWCA/NONE	In	- SANDIEGOZ / 503007		-	-

Identifiers

<u>Reported By</u>	<u>Effective Date</u>	<u>Type</u>	<u>Identifier</u>	<u>Location</u>	<u>Status</u>	<u>Comments</u>
SANDIEGOZ	5/Feb/2003	Transponder	00-0622-672C	Interscapular	Active	Legacy SLocation: Inter Scapula Legacy Comment: TP: (A) TROVAN 000622672C/IS *20030205
SANDIEGOZ	15/Jan/2003	Local ID	503007		Active	
SANDIEGOZ	15/Jan/2003	House Name	GAO GAO		Active	Legacy SLocation: Legacy Comment: HN: (A) GAO GAO *20030115
SANDIEGOZ	15/Jan/2003	Int'l Sdbk#	415		Active	Legacy SLocation: Legacy Comment: INT: (A) 415 *20030115 +ESTIMATED DATE USING THE DATE THE ANIMAL WAS FIRST ACQUIRED.

Sex Information

<u>Reported By</u>	<u>Date</u>	<u>Sex</u>	<u>Comments</u>
SANDIEGOZ	15/Jan/2003	Male	

Parent Info

<u>Reported By</u>	<u>In ZIMS</u>	<u>Parent Info</u>	<u>Type / Probability</u>	<u>Birth Date</u>	<u>Comments</u>
SANDIEGOZ	No	WILD/WILD	Dam/100%		
SANDIEGOZ	No	WILD/WILD	Sire/100%		

Ancestry Information (calculated by Species360 from shared data)

<u>% Pedigree Known</u>	<u>% Pedigree Certain</u>	<u>Taxonomic Inconsistencies</u>	<u>No. Identified Ancestors</u>
100.00%	100.00%	No	0

Rearing Information

<u>Reported By</u>	<u>Start Date</u>	<u>End Date</u>	<u>Rearing</u>	<u>Comments</u>
SANDIEGOZ	15/Jan/2003		Undetermined	

ADDENDUM 2

Question 9; Source of Specimen

9. For EACH animal/specimen taken from the wild, provide the following:

No animals are being removed from the wild for this proposed activity (re-export of a giant panda). This is a return of a giant panda to China from San Diego Zoo.

a. Scientific name (genus, species, and, if applicable, subspecies) and common name;

Scientific name: *Ailuropoda melanoleuca*

Common name: Giant Panda

b. Specific location of where, when, and by whom (name and address) the specimen was removed from the wild;

The giant panda male (Studbook name Gao Gao, Studbook # 415 – please refer to Addendum 1 for the Species 360 specimen report providing all identification information) was wild born circa 1990 in the Baoxing Nature Reserve, Gaojia Shan Medicinal Ground, Baoxing County, Sichuan Province, Peoples' Republic of China. He was discovered, on 03/27/1993 by two men from Yongfu Village about 50 Km from the headquarters of Fengtongzhai Nature Reserve (FNR) and just outside of the Reserve boundary. The giant panda was suffering from dehydration and a fresh wound to the left side of his head.

The specimen was taken, on 04/06/1993 by Baoxing Fengtongzhai Nature Reserve (FNR), Sichuan, China 625703, personnel to the FNR Rescue center as the local panda authority for care, recovery and eventual re-release into the Reserve.

c. Purpose of removal and length or approximate length of time held in captivity. Discuss issues such as the method of collection, was the collection done as part of a larger study, were animals returned to the wild after sampling, and did any mortalities or injuries occur due to collection or holding.

This compromised specimen was discovered by local citizens as previously described and reported to Baoxing Fengtongzhai Nature Reserve, Sichuan, China, 625703 because of serious injury and dehydration that make him unable to survive in the wild. FNR personnel removed the specimen from the wild for rehabilitation efforts, as described in the previous question. Re-release efforts were undertaken on 04/12/1996 after three years at the FNR Rescue Center living in "semi-wild" large enclosures. Within a few weeks of release, it was obvious this return was not successful. He became a pest to local farmers raiding fields and actually entering homes. His removal from the wild was subsequently recorded as final in April/May 1996.

The method of collection, according to Chinese verbal reports, was simple hand retrieval because of the degraded/injured condition of the animal. The removal of this animal from the wild was a rescue not a planned removal for any specific or larger project.

As stated, one effort was made to return this specimen to the wild after rehabilitation but it was unsuccessful. No other giant pandas were removed from the wild because of the rescue of this specific specimen. No mortalities of giant pandas were experienced because of the rescue of this specific specimen and keeping him in captivity because of his inability to survive in the wild.

This male specimen has been in captivity for 25 years as follows; 8 years at Baoxing Nature Reserve, China, 2 years at the China Conservation and Research Center (old Wolong BC) and 15 years at San

Diego Zoo, San Diego, CA (since 01/15/2003). Excerpts from the 2015 International Giant Panda Studbook (excerpt pages 35 and 36) provided in this Addendum attest to these dates.

d. If and how any remuneration, either financial or in-kind, was provided for taking or capturing animals or for the collection of samples.

Not applicable. The giant panda's removal from the wild was on 04/06/1993. The removal was made permanent as described in point c, above. These activities occurred long before San Diego Zoo became involved with giant pandas and ten years before being selected to be sent to San Diego Zoo as a replacement for an older giant panda male imported by San Diego Zoo in 1996. The decision to place this male giant panda (Gao Gao) into the captive breeding and research program outside of China was made by the Chinese authorities including the China Wildlife Conservation Association (CWCA), the Center for Conservation and Research Center for Giant Pandas (CCRCGP) and the Chinese State Forestry Administration (SFA).

At the time that Chinese authorities decided to send this male giant panda to San Diego Zoo as a replacement for an ailing panda, a basic 12 year-long research agreement had been in place between CWCA and San Diego Zoo since 1994/1996. This agreement did specify that San Diego Zoo would contribute \$1,000,000 per year to Chinese conservation initiatives for the giant panda. This agreement (copy provided in this Addendum) was in existence seven years prior to the movement of the male "Gao Gao" to San Diego Zoo and after his rescue from the wild.

e. Your efforts to use captive specimens (e.g., captive-born, captive-held), or parts thereof, in lieu of taking animals from the wild.

Essentially San Diego Zoo did follow a course of avoiding the need to remove any giant pandas from the wild. The wild-caught specimen (Gao Gao) was rescued from the wild by Chinese authorities to preserve his life, 10 years before he was chosen to be sent to San Diego. The Chinese recognized the value of appropriate genetic management of giant pandas in zoos to help infuse under-represented wild genes into the global captive giant panda program for sustainability purposes and subsequently to contribute the wild population in future years.

This giant panda (Gao Gao) had been in captivity for 10 years before being sent to San Diego Zoo.

f. Copies of your foreign or domestic collection permit, license, contract or agreement.

Not applicable. San Diego Zoo was not involved in the rescue/removal of the giant panda specimen Gao Gao from the wild.

g. Documentation showing that the specimen(s) was/were legally obtained by the applicant; and

San Diego Zoo imported the giant panda specimen Gao Gao under authority of Chinese CITES export permit 2002CN/EC0204/AH issued 12/17/2002 and USFWS CITES import permit 02US053884/9 issued 11/13/2002. The specimen entered the United States on 01/15/2003 as indicated by the signed/cleared Declaration for Importation or Exportation of Fish or Wildlife (3-177). Copies of the Chinese and U.S. permits and the 3-177 form are provided in this Addendum.

h. Copies of any applicable State, Tribal, Federal, or Foreign government permits or licenses that authorized the removal of this animal from the wild.

Internal Chinese government documentation regarding the removal of this specimen from the wild in 1993 are not available from the Chinese.

2015 International Studbook For Giant Pandas

Pages 35 – 36

The 2015 International Studbook
For
Giant Panda
(*Ailuropoda melanoleuca*)

大熊猫谱系



Photo by Wei Rongping 魏荣平摄影

谢钟
中国动物园协会
北京三里河路 13 号
C 座 6009 室

Xie Zhong
Chinese Association of Zoological Gardens
C-6009, 13 Sanlihe Ave.
Beijing 100037, P. R. China

Section 1

第一部分

Full Listing

Ordered by Studbook number

谱系表

按谱系号排列全部个体

GIANT PANDA Studbook
(Ailuropoda melanoleuca)

Page 35

Stud#	Sex	Birth Date	Sire	Dam	Location	Date	LocalID	Event	Birth Origin	Country	Name
					BEIJING	18 Sep 2013		Transfer		CHINA	
					YAAN BC	20 Apr 2014		Loan to		CHINA	
					BEIJING	21 May 2015		Transfer		CHINA	
404	F	20 Nov 1993	329	230	WOLONG BC	20 Nov 1993		Birth	Captive Born	CHINA	YUEYUE
					YAAN BC	8 Dec 2004		Transfer		CHINA	
					GUILIN	18 Dec 2005		Loan to		CHINA	
405	M	17 Jul 1994	231	253	CHONGQING	17 Jul 1994		Birth	Captive Born	CHINA	CHONGCHONG
					SHANGHAI	~ Feb 1995		Transfer		CHINA	
						5 Nov 1997		Death			
406	?	25 Aug 1994	218	296	CHONGQING	25 Aug 1994		Birth	Captive Born	CHINA	
						25 Aug 1994		Death			
407	F	31 Aug 1994	298	312	CHENPANDA	31 Aug 1994		Birth	Captive Born	CHINA	SHULAN
					LANZHOU	25 Apr 1996		Transfer		CHINA	
					CHENPANDA	7 Jan 1999		Loan to		CHINA	
					YAAN BC	18 Feb 2014		Transfer		CHINA	
408	F	31 Aug 1994	298	312	CHENPANDA	31 Aug 1994		Birth	Captive Born	CHINA	MEIMEI
					WAKAYAMA	7 Jul 2000		Loan to		JAPAN	
						15 Oct 2008		Death			
409	M	11 Sep 1994	343	297	CHENPANDA	11 Sep 1994		Birth	Captive Born	CHINA	QUANMEI
						~ Jul 1997		Death			
410	M	11 Sep 1994	343	297	CHENPANDA	11 Sep 1994		Birth	Captive Born	CHINA	
						13 Sep 1994		Death			
411	F	25 Sep 1994	323	320	BEIJING	25 Sep 1994		Birth	Captive Born	CHINA	JING XUE
						29 Jan 2000		Death			
412	?	25 Sep 1994	323	320	BEIJING	25 Sep 1994		Birth	Captive Born	CHINA	
						28 Sep 1994		Death			
413	M	5 Oct 1994	308	230	WOLONG BC	5 Oct 1994		Birth	Captive Born	CHINA	DIDI
					NANJING	23 Sep 2000		Loan to		CHINA	
					WOLONG BC	23 Nov 2000		Transfer		CHINA	
					YAAN BC	20 May 2005		Transfer		CHINA	
					YUNNAN W	23 Aug 2007		Loan to		CHINA	
					YAAN BC	17 Sep 2009		Transfer		CHINA	
					JILIN 2	28 Apr 2010		Loan to		CHINA	
					YAAN BC	20 Oct 2010		Transfer		CHINA	
					JIAMUSI	29 Apr 2011		Loan to		CHINA	
					YAAN BC	8 Oct 2011		Transfer		CHINA	
					YUZHOU	20 Jan 2012		Loan to		CHINA	
					YAAN BC	23 Aug 2012		Transfer		CHINA	
					LINYI BG	26 Sep 2012		Loan to		CHINA	
					DJYGP BC	26 May 2015		Transfer		CHINA	
					ANYANG	27 Sep 2015		Loan to		CHINA	
414	F	~ 1990	WILD	WILD	BAOXING	1 Mar 1993	NONE	Capture	Wild Born	CHINA	LONGGU
					BAOXINGNR	1 Mar 1993		Transfer		CHINA	
					WOLONG BC	3 Apr 1995	20#	Loan to		CHINA	
					JINAN	24 Sep 2007		Loan to		CHINA	
						23 Jul 2010		Death			
415	M	~1992 +/-2yr	WILD	WILD	BAOXING	8 Apr 1993	NONE	Capture	Wild Born	CHINA	GAOBAO

GIANT PANDA Studbook
(Ailuropoda melanoleuca)

Page 36

Stud#	Sex	Birth Date	Sire	Dam	Location	Date	Local ID	Event	Birth Origin	Country	Name
					BAOXINGNR	6 Apr 1993		Transfer		CHINA	
					WOLONG BC	25 Dec 2001		Transfer		CHINA	
					SANDIEGOZ	15 Jan 2003	503007	Loan to		U.S.A.	
416	F	~ 1993	WILD	WILD	BAOXING	28 Dec 1993	NONE	Capture	Wild Born	CHINA	QIAOYUAN
					BAOXINGNR	28 Dec 1993		Transfer		CHINA	
					YAAN BC	29 Sep 2003		Transfer		CHINA	
					QINGDAO W	3 Apr 2004		Loan to		CHINA	
					YAAN BC	26 Mar 2010		Transfer		CHINA	
					DJYGP BC	2 Sep 2014		Transfer		CHINA	
417	M	~1977 +/-5yr	WILD	WILD	CHANGQING	28 Sep 1993	NONE	Capture	Wild Born	CHINA	MINGMING
					LOUGUANTA	12 Oct 1993		Transfer		CHINA	
					SHANTOU	1 Jan 1995		Loan to		CHINA	
					LOUGUANTA	1 Feb 1995		Transfer		CHINA	
						14 Jul 2003		Death			
418	F	~ 1988	WILD	WILD	TAIBAI	12 Oct 1993	NONE	Capture	Wild Born	CHINA	BAIXUE
					LOUGUANTA	17 Oct 1993		Transfer		CHINA	
					SUZHOU	16 Sep 1994		Loan to		CHINA	
					WOLONG BC	15 Mar 1995		Loan to		CHINA	
					WOLONG	29 May 2001		Release		CHINA	
					WOLONG BC	19 Nov 2005	NONE	Capture		CHINA	
					YAAN BC	20 Sep 2007		Transfer		CHINA	
					WOLONG BC	18 Feb 2008		Transfer		CHINA	
					YAAN BC	4 Mar 2008		Transfer		CHINA	
					EMEI EP	24 Jan 2013		Loan to		CHINA	
					DJYGP BC	5 Aug 2013		Transfer		CHINA	
						27 Jun 2015		Death			
419	M	~ 1977	WILD	WILD	CHANGQING	12 Oct 1993	NONE	Capture	Wild Born	CHINA	SHUNSHUN
					LOUGUANTA	26 Oct 1993		Transfer		CHINA	
						30 Nov 1993		Death			
420	?	~ Aug 1980	WILD	WILD	CHANGQING	11 Dec 1994	NONE	Capture	Wild Born	CHINA	HUAAN
					CHANGQ NR	11 Dec 1994		Transfer		CHINA	
					CHANGQING	16 May 1995		Release		CHINA	
421	F	5 Sep 1995	323	245	BEIJING	5 Sep 1995		Birth	Captive Born	CHINA	NU NU
					WOLONG BC	18 Jun 2006		Loan to		CHINA	
					BEIJING	9 Jul 2006		Transfer		CHINA	
						22 Jul 2008		Death			
422	F	5 Sep 1995	323	245	BEIJING	5 Sep 1995		Birth	Captive Born	CHINA	SHANSHAN
						8 Jan 1996		Death			
423	?	12 Aug 1995	218	296	CHONGQING	12 Aug 1995		Birth	Captive Born	CHINA	
						12 Aug 1995		Death			
424	M	25 Aug 1995	231	253	CHONGQING	25 Aug 1995		Birth	Captive Born	CHINA	LINGLING
					WOLONG BC	25 Dec 2002		Transfer		CHINA	
					YAAN BC	21 Jul 2008		Transfer		CHINA	
					CHONGQING	26 Sep 2012		Transfer		CHINA	
425	F	21 Aug 1995	298	314	CHENPANDA	21 Aug 1995		Birth	Captive Born	CHINA	JIAO ZI
426	?	21 Aug 1995	298	314	CHENPANDA	21 Aug 1995		Birth	Captive Born	CHINA	
						22 Aug 1995		Death			

Export/Import Documents:

Male Giant Panda Studbook # 415 "Gao Gao"

Chinese Export Permit 2002CN/EC0204/AH

U.S. Import Permit 02US053884/9

U.S. Declaration for Import 01/15/2003



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

濒危野生动植物种国际贸易公约

PERMIT/CERTIFICATE FOR IMPORT/EXPORT & REEXPORT

允许进出口证明书

☒ EXPORT 出口

☐ RE-EXPORT 再出口

☐ IMPORT 进口

☐ OTHER 其它

1. PERMIT/CERTIFICATE No. 证号

2002CN/EC0204/AH

2. Valid Until 有效期至

JUN.12, 2003

3. Importer (Name, Address and Country) 进口者 (名称, 地址和国家)
THE ZOOLOGICAL SOCIETY OF SAN DIEGO

P.O. BOX 120551, SAN DIEGO, CA 92112-0551, U.S.A.

4. Exporter (Name, Address and Country) 出口者 (名称, 地址和国家)
CHINA CONSERVATION AND RESEARCH CENTER FOR THE
GIANT PANDA
WOLONG NATURE RESERVE, WENCHUAN
COUNTY, SICHUAN PROVINCE 623006, P.R. CHINA

3a. Import Port 进口口岸 US LOSANGELES

4a. Export Port 出口口岸 CN SHANGHAI

5. HS Code and Special Conditions 海关协调制度编码及特殊条件
31061990 10. Information of the Giant Panda specified in this
permit: "Gao Gao"; Male; Studbook No. 415; Born 1990. 本证所列
大熊猫基本信息: 呼名"高高"; 雄性; 国际谱系号415; 生于约
1990年。

For live animals, this permit or certificate is only valid if the transport conditions
conform to the Guidelines for Transport of Live Animals or, in case of air
transport, to the IATA Live Animals Regulations. This permit/certificate is only
valid for ONE entry/exit. 对于活体动物, 只有当运输条件符合《活体动物运输
指南》或空运条件符合 IATA《活动物运输规则》要求的情况下, 本证明书方为
有效。本证书仅限一次性使用。

5a. Purpose of Transaction

贸易目的

S

5b. Security Stamp No.

安全印花号

NONE

6. Name, Address, National Seal of Management Authority

管理机构名称, 地址, 国家印记



The Endangered Species
Import and Export Management Office
of the People's Republic of China

Add: 18 Hepingli Dongjie, Beijing 100714

The People's Republic of China

Tel: 86-10-84239001, 84239008

Fax: 86-10-64214180, 64299515

中华人民共和国濒危物种进出口管理办公室

地址: 中华人民共和国

北京市东城区和平里东街18号

邮政编码: 100714

电话: 86-10-84239001, 84239008

传真: 86-10-64214180, 64299515

7	7a	7b	7c	7d	7e	7f
No.	Species (Chinese & Scientific Name) 种名 (中文名, 学名)	Appendix 附录	Source 来源	Description 标本类型	Quantity or Weight / Unit 数量或净重/单位	Origin of Country 原产地
A	大熊猫 <i>Ailuropoda melanoleuca</i> *****LAST ITEM*****	I	W	活体 Live LAST RE-EXPORT: IMPORT: US 02-11-13 02US053884/9	*1.Hd *****	CN

8. THIS PERMIT/CERTIFICATE IS ISSUED BY

发证机关

Hepingli, Beijing

DEC.17, 2002

Signature 签字



Place 地点

Date 日期

Signature 签字

Security Stamp and Official Seal 安全印花及公章

9. For Customs Official Use Only

海关备注

9a. Bill of Lading/Airway-bill Number

提单/空运单号

Block 栏目	Quantity/Unit 数量/单位
A	
B	



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

IMPORT PERMIT

1. Original Permit/Certificate No.
02US053884/9

2. Valid until
05/12/2003

3. Permittee (name and address, country)

ZOOLOGICAL SOCIETY OF SAN DIEGO
SAN DIEGO ZOO
2910 ZOO DRIVE
SAN DIEGO, CA 92101
U.S.A.

4. Consignee (name and address, country)

CHINA CONSERVATION AND RES. CENTER FOR THE GIANT PANDA
WOLONG NATURE RESERVE, WENCHUAN COUNTY
SICHUAN PROVINCE 623006
PEOPLE'S REPUBLIC OF CHINA

5. Special Conditions

MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS

U.S. ENDANGERED SPECIES (50 CFR 17.22)

THIS REPLACES AND AMENDS 02US053884/9 ISSUED 11/5/02

5a. Purpose of Transaction

S

5b. Security No.

014360

6. U.S. Management Authority

DIVISION OF MANAGEMENT AUTHORITY
U.S. FISH AND WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR
WASHINGTON, D.C. 20240
UNITED STATES OF AMERICA

11/13/2002

Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific Name (genus and species) of Animal or Plant

A. Common Name
GIANT PANDA

Scientific Name
Ailuropoda
Melanoleuca

9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)

9. IMPORT: 1.0; WILD BORN CIRCA 1990, STUDBOOK# 415, "GAO GAO".

10. Appendix No. and Source

10. 1. W

11. Quantity (including units)

NO.

12. Country of Origin

CHINA

B. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

NO.

12. Country of Origin

C. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

NO.

12. Country of Origin

D. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

NO.

12. Country of Origin

E. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

NO.

12. Country of Origin

Specimen(s) will not be used for primarily commercial purposes. The recipient has suitable facilities to house and care for the specimen(s).



**DECLARATION FOR IMPORTATION
OR EXPORTATION OF
FISH OR WILDLIFE**

Please Type or Print Legibly

1. Date of Import/Export: (mm/dd/yyyy)
01/15/2003

2. I/E License Number:
02US060416/9

3. Indicate One:
☒ Import ☐ Export

4. Port of Clearance:
LOS ANGELES C A

5. Purpose Code:
Z

6. Customs Entry Number:
[REDACTED]

7. Name of Carrier:
AIR CHINA (CA)

8. Air Waybill or Bill of Lading Number:
Master: **[REDACTED]**
House:

9. Transportation Code:
A

License State

10. Bonded Location for Inspection:
AIR FRANCE WAREHOUSE

11. Number of Carbons Containing Wildlife:
ONE

12. Package Markings Containing Wildlife:

13. (indicate one) (complete name / address / phone number)
☒ U.S. Importer of Record
☐ U.S. Exporter SAN DIEGO ZOO
 POB 120551
 SAN DIEGO, CA 92112
 (619) 231-1515

14a. Foreign Supplier / Receiver:
(complete name / address / phone number)
CHINA CONSERVATION AND RESEARCH CENTER FOR
THE GIANT PANDA. WOLONG NATURE RESERVE
WENCHUAN COUNTY, SICHUAN PROVINCE 623006
PEOPLE'S REPUBLIC OF CHINA

15. Customs Broker, Shipping Agent or Freight Forwarder:

Species Code (Official Use)	16a. Scientific Name	17a. Foreign CITES Permit Number	18a. Description Code	19a. Quantity / Unit	20. Country of Origin of Animal
	16b. Common Name	17b. U.S. CITES Permit Number	18b. Source	19b. Total Monetary Value	
	Ailuropoda Melanoleuca	2002CN/EC0204/AH	LIV	1.0	CHINA
	GIANT PANDA	02US053884/9	W	\$12,077.30	

Knowingly making a false statement in a Declaration for Importation or Exportation of Fish or Wildlife may subject the declarant to the penalty provided by 16 U.S.C. 1001 and 16 U.S.C. 3372 (d)

21. I certify under penalty of perjury that the information furnished is true and correct.

Signature

Jan. 15/03
Date

Action/Comments:

FOR OFFICIAL USE ONLY

TIREN SUND
Type or Print Name

Wildlife Inspected:
None / Partial

**First Agreement for Cooperative Research and Breeding
of Giant Pandas
1994/1996 – 2008**

**AGREEMENT
FOR
COOPERATIVE RESEARCH AND BREEDING OF GIANT PANDAS**

This agreement is made and entered on May 14, 1994 by the China Wildlife Conservation Association ("Chinese Authorities") and the Zoological Society of San Diego (the "Society").

The parties to this Agreement desire to promote the conservation and public awareness of the giant panda by means of a research and breeding program undertaken by the Society. This program (the "Conservation and Breeding Program") shall be conducted under and within guidelines consistent with those established by the United States Government under the Endangered Species Act, and as a signatory to the Convention on International Trade in Endangered Species (CITES), the People's Republic of China, also a signatory to CITES as well as those guidelines presented by both the People's Republic of China, Ministry of Forestry National Conservation Management Plan for the Giant Panda and Its Habitat and the American Association of Zoological Parks and Aquariums Giant Panda Conservation Memorandum of Understanding.

To enable undertaking of the Conservation and Breeding Program, the Chinese Authorities have agreed to loan the Society two healthy breeding-aged pandas (one male and one female). The Society has agreed to accept such pandas on the terms and under the conditions set forth in this document.

The Chinese Authorities have full legal right, power and authority, as provided by and consistent with Chinese law, to execute and deliver this Agreement and to carry out the transactions contemplated in this document.

In accordance with this, both parties agree to the following terms:

ARTICLE I
Loan of Pandas

1.1. Joint Conservation and Breeding Research Program Term. At the initial delivery date (as defined in Section 1.2), the Chinese Authorities shall deliver to the Society, and the Society shall accept a pair of Pandas currently kept in captivity identified as: Male "Shi Shi"; studbook number # 381 and Female "BaiYun": studbook number # 371 (the "Pandas") for a loan term of twelve (12) years; provided, however, that such term may be renegotiated during the month of October of the third, sixth and ninth full calendar years following the Society's receipt and acceptance of the Pandas. This renegotiation may include the termination of this Agreement by either party due to reasonable cause.

1.2. Initial Delivery Date. The transfer of the Pandas contemplated by this Agreement shall occur on or about [_____, 1994] and at the Chinese port of embarkation as shall be mutually agreed to by the parties; provided, however, that the Agreement shall not become effective and Initial Delivery Date shall not occur until both the Society and the Chinese Authorities have obtained all necessary legal documents and approvals from their governments which are required to undertake the transactions contemplated in this Agreement.

1.3. Ownership. Ownership of the Pandas and any of their offspring born during the term of this agreement shall belong exclusively to the Chinese Authorities. Offspring of the Pandas may be allowed, at the election of the Chinese Authorities, to (a) participate in the Society's Conservation and Breeding Program, (b) be relocated to another zoo, or (c) returned to China, at the discretion of the Chinese Authorities.

If the Chinese Authorities elect to allow offspring to participate in the Society's Conservation and Breeding Program, the offspring shall be subject to all the terms and conditions of this Agreement.

ARTICLE II Consideration

2.1. Consideration for Pandas. During the term of this Agreement, the Society shall transfer to the Chinese Authorities a total of One Million United States Dollars (\$1,000,000) per year as consideration for the loan of the Pandas. This amount will be payable in quarterly installments of Two Hundred Fifty Thousand United States Dollars (\$250,000) each, which will be payable every three (3) months. Upon any termination of this Agreement, and subsequent return of the Pandas to China at Society expense, the Society shall have no further obligation to make payments of any kind to the Chinese Authorities.

2.2. Consideration for Offspring. In the event that the Pandas give birth to offspring during the term of the Agreement, the Society shall pay to the Chinese Authorities an additional amount which shall not exceed Six Hundred Thousand United States Dollars (\$600,000) per offspring and be conditioned upon the survivability of the offspring as set forth below:

- 2.2.1. One Hundred Thousand United States Dollars (\$100,000) per offspring after thirty (30) days of survivability; and
- 2.2.2. An additional One Hundred Thousand United States Dollars (\$100,000) per offspring after sixty (60) days of survivability; and
- 2.2.3. An additional One Hundred Thousand United States Dollars (\$100,000) per offspring after ninety (90) days of survivability; and
- 2.2.4. An additional One Hundred Thousand United States Dollars (\$100,000) per offspring after one hundred twenty (120) days of survivability; and
- 2.2.5. An additional One Hundred Thousand United States Dollars (\$100,000) per offspring after one hundred fifty (150) days of survivability; and
- 2.2.6. An additional One Hundred Thousand United States Dollars (\$100,000) per offspring after one hundred eighty (180) days of survivability.

2.3. Additional Consideration. The Society shall provide the Chinese Authorities with certain administrative equipment, scientific support, training, or study projects, which shall be mutually agreed upon by the Society and the Chinese Authorities. Value of this additional consideration shall be Two Hundred Thousand United States Dollars (\$200,000) per year.

If conditions permit, provision of further financial considerations for approved giant panda conservation projects by the Society is not precluded by the terms of this Agreement.

2.4. Condition of Consideration. Regardless of anything in this document to the contrary, any and all payments by the Society to the Chinese Authorities shall be utilized to fund giant panda conservation projects. The use of these funds must strictly follow "The Utilization and Management of Funds generated for China's National Conservation Project Plan for the Giant Panda and Its Habitat" established by the Ministry of Forestry, People's Republic of China.

2.5. Verification of Use of Funds. At the end of the year after receiving the first full annual payment from the Society, the Chinese Authorities shall submit, annually, a report to the Society concerning the utilization of funds. If necessary, the Society shall have the right, by sending Society staff members, to conduct the following:

- 2.5.1. The visual inspection of approved conservation projects utilizing the funds received from the Society;
- 2.5.2. The review of all relevant documents and information concerning the utilization of funds received from the Society;
- 2.5.3. Any report which may be required by the United States Fish and Wildlife Service pursuant to the terms and conditions of the applicable permit.

2.6. Society Termination of Agreement. In the event that any payment, or part of the payment, made by the Society to the Chinese Authorities, is not utilized in accordance with the terms established, the Society shall have the right to withhold any and all additional consideration and terminate this Agreement.

2.7. Chinese Authority Termination of Agreement. The Society shall make all payments to the Chinese Authorities on time; otherwise, the Chinese Authorities shall have the right to terminate this Agreement.

ARTICLE III
Rights and Obligations

3.1. The Society's Obligations. In addition to the obligations otherwise mentioned in this Agreement, the Society shall:

- 3.1.1. Take all reasonable steps to obtain all consents, approvals, permits that are required for the transfer of the Pandas or that are required for the consummation of the transaction contemplated in this Agreement.
- 3.1.2. Be solely responsible for all costs and expenses associated with the transportation of the Pandas to and from the Chinese point of embarkation to the United States of America.
- 3.1.3. Obtain and maintain in force, during the entire term of this Agreement, a comprehensive insurance policy, in an amount of One Million United States Dollars (\$1,000,000) for each Panda. The insurance required shall name the Chinese Authorities as sole beneficiaries.
- 3.1.4. Use the Panda only for those purposes contemplated by the Conservation and Breeding Program and not primarily for commercial purpose as defined by the Convention On International Trade in Endangered Species.
- 3.1.5. Provide the services of two conservation and breeding specialists to the Chinese Authorities to assist with and participate in conservation and breeding programs undertaken in China at times and under arrangements that are mutually agreeable to the parties. The conservation and breeding specialists shall remain in China for a period of time not to exceed approximately six weeks for any one trip. The Chinese Authorities shall be solely responsible for all expenses associated with travel within China, meals and lodging for these specialists.
- 3.1.6. Be solely responsible for all reasonable travel expenses associated with the attendance of five (5) Chinese personnel

representing the Chinese Authorities at the ceremonies commemorating (a) the initiation of the Conservation and Breeding Program for the Pandas at the San Diego Zoo and (b) the successful completion of the Conservation and Breeding Program for the Pandas. The duration of the visits shall be seven (7) to ten (10) days.

- 3.1.7. Provide the Chinese Authorities with copies of all research results related to the Pandas and obtained during the course of the Conservation and Breeding Program. Such data shall be published in the names of both parties.

3.2. The Chinese Authorities' Obligations. In addition to the obligations otherwise mentioned in this Agreement, the Chinese Authorities shall:

- 3.2.1. Provide the Society with all necessary background information on the Pandas, as may be requested by the Society.
- 3.2.2. Take all reasonable steps to obtain all consents, approvals, permits that are required for the transfer of the Pandas or that are required for the consummation of the transactions contemplated in this Agreement.
- 3.2.3. Undertake a feasibility study to determine the adequacy of the facilities of the San Diego Zoo to meet the needs of the Pandas and the purposes set forth in the Conservation and Breeding Program. The feasibility study shall be conducted in a period of five (5) days. The Society shall be solely responsible for all reasonable travel, lodging and meal expenses incurred by the three (3) person Chinese delegation undertaking the study.
- 3.2.4. Provide the services of two Chinese giant panda experts to the Society to assist with the breeding and birthing of the Pandas, rearing of their offspring and such other matters as may be required to successfully undertake the Conservation and Breeding Program. The Chinese experts will provide their services at the San Diego Zoo for a period not to exceed one year for each

expert's visit and the Society will be solely responsible for all reasonable expenses associated with their travel, lodging, meals and general care.

- 3.2.5. If during the term of this Agreement, any one of the Pandas should die, the Chinese Authorities shall replace the Panda with another panda acceptable to the Conservation and Breeding Program. In the event of such death, the Society shall arrange for the performance of a postmortem exam at which one or both of the Chinese panda experts (as defined in Section 3.2.4.) shall be present. If the Chinese panda experts are not available for unforeseen circumstances, the Society shall notify the Chinese Authorities of the panda's death and of the experts' unavailability. After receiving a fax of notification from the Society, the Chinese Authorities shall respond within four (4) hours. After which, in the absence of a Chinese authority response, the Society shall proceed with the postmortem exam. The carcass of the deceased panda will be handled according to the Chinese Authorities discretion. It will be the Society's sole expense to return the carcass to China if requested by the Chinese Authorities. All information gained from the postmortem exam shall be provided to both the Chinese Authorities and the Society.

- 3.2.6. The utilization of the Pandas, as well as eggs and sperm, on any other conservation program outside the San Diego Zoo must be mutually agreed between all parties involved, and approval must be obtained from the Chinese Authorities prior to any movements taking place.

ARTICLE IV General Provisions

4.1. Amendments and Waiver. No amendment, waiver or consent with respect to any provision of the Agreement shall in any event be effective, unless the same shall be in writing and signed by the parties, and then such amendment, waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

4.2. Counterpart. This Agreement, written in both Chinese and English, may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

4.3. Entire Transaction. This Agreement and the documents referred to in the document contain the entire understanding among the parties with respect to the transactions contemplated. This Agreement supersedes all other agreements, understandings and undertakings among the parties on this subject matter.

Each of the parties has caused this Agreement to be executed on its behalf by a duly authorized officer all as of the date first written above. This Agreement becomes effective after approval is granted by both the Chinese and United States Governments and respective export and import permits have been issued and are in possession of the Agreement signatory parties.

THE CHINA WILDLIFE CONSERVATION ASSOCIATION

By: [Signature]

Date: 1994. 5. 14

THE ZOOLOGICAL SOCIETY OF SAN DIEGO

By: [Signature]

Date: 5-14-94

大熊貓合作研究，繁殖協議

中國野生動物保護協會（以下簡稱中方）與美國聖地亞哥動物園協會（以下簡稱美方）就合作開展大熊貓研究及繁殖事宜在1994年5月14日達成本協議。

為增進中美兩國人民的友誼，增強人類保護大熊貓的意識，雙方同意由美方承擔開展該大熊貓研究及繁殖計劃。這計劃（以下稱為“保護及繁殖計劃”）必須一致符合美國政府按照瀕危物種法及身為瀕危野生動植物國際貿易公約締約國的兩國政府，及中國保護大熊貓及其棲息地工程和美洲動物園協會的保護大熊貓約定備忘錄等準則進行。

為了“保護及繁殖計劃”能夠進行，中方同意提供兩只健康，在繁殖年齡階段的大熊貓（一雄一雌）赴美方，供雙方合作開展大熊貓的研究及展出。按照本協議定下的條件，美方同意接受該兩只大熊貓。

根據中國的法律，中方有權執行本協議及落實本文件計劃中的各項事務。

為此，中美雙方達成下列各條款：

第一條 大熊貓借展

1.1. 保護及繁殖合作研究條件：在最初交付日期（本條第1.2.款定下的日期），中方將交付經美方同意接收的一對現在正圈養的大熊貓（大熊貓名字：石石，雄性，譜系號碼：381；大熊貓名字：白雲，雌性，譜系號碼：371）。合作研究時間為十二年。雙方並同意在十二年中的第三年，第六年及第九年的十月份為合作研究重新談判時間。這種談判，包括基于合理原因，終止本協議的執行。

1.2. 最初交付日期：大熊貓將在1994年 月（最初交付日期）左右在適當的中方港口出口赴美方開展合作研究及繁殖。大熊貓的交付必須在中美雙方各自取得本國政府批准並取得合法進出口允許證明文件才後能進行。

1.3. 所有權：大熊貓及在美期間繁殖的後代，所有權歸中方。根據中方的選擇，繁殖的後代可以（1）參加美方的“保護及繁殖計劃”，或（2）重新安置到其他動物園，或（3）返回中國。

如果中方選擇繁育後代留在美國參加美方的“保護及繁殖計劃”，繁育後代都受本協議所有條件支配。

第二條 報酬

2.1. 大熊貓的報酬：在本協議的期限中，美方每年將提供中方100萬美元(US\$1,000,000)的大熊貓報酬費。這100萬美元(US\$1,000,000)分四期支付，每三個月美方付給中方25萬美元(US\$250,000)。如果協議受到終止，大熊貓已返回中國，美方將再沒有支付中方任何費用的義務。

2.2. 繁育後代的報酬：大熊貓在美期間如果繁育後代，每產一只幼仔，美方根據幼仔成活期限，每滿30天向中方另外增付10萬美元(US\$100,000)，總數不超過60萬美元(US\$600,000)。幼仔成活期限如下：

- 2.2.1. 幼仔成活30天後支付10萬美元(US\$100,000)；及
- 2.2.2. 幼仔成活60天後增付10萬美元(US\$100,000)；及
- 2.2.3. 幼仔成活90天後增付10萬美元(US\$100,000)；及
- 2.2.4. 幼仔成活120天後增付10萬美元(US\$100,000)；及
- 2.2.5. 幼仔成活150天後增付10萬美元(US\$100,000)；及
- 2.2.6. 幼仔成活180天後增付10萬美元(US\$100,000)。

2.3. 附加報酬：美方將向中方提供中美雙方同意的部分儀器設備，科研支持，訓練培養或學習計劃（集稱技術援助）。這些技術援助費用每年將為20萬美元(US\$200,000)。

此外，如有條件，美方有可能在財政或技術援助上再加以資助批准進行的大熊貓保護工程項目。除了財政援助中方必須遵守本條第2.4.款的“資金準則”來應用，這種美方協助不受本協議條款的限制。

2.4. 報酬條件：所有美方支付的報酬費，中方將應用于大熊貓保護計劃並嚴格遵照經中華人民共和國林業部批准的“~~中國保護大熊貓及其棲息地資金募集和使用管理辦法~~”來使用管理。

2.5. 核對資金的使用：中方將在美方支付資金後第二年，向美方通報資金的使用情況，並每年通報一次。美方認為有必要的時候，隨時可派員到中國核對以下項目：

2.5.1. 視察與支付資金有關的工程計劃的執行；

2.5.2. 查閱所有與支付資金有關的文件及資料；

~~2.5.3.~~ 按美國漁業及野生動物管理局發出允許証中陳述的條件，提交該局要求的報告。

~~2.6.~~ 美方終止協議：如果美方支付中方的資金不能按照“資金準則”規定來使用，美方有權不予支付任何報酬費用並終止本協議。

~~2.7.~~ 中方終止協議：美方將如期支付所有報酬費，否則，中方有權終止本協議。

第三條 權利和義務

3.1. 美方的義務：美方的義務，除了在本協議其它情況下提及，將包括：

3.1.1. 美方盡快辦理好美國政府允許大熊貓進口的許可証。

3.1.2. 美方負責所有大熊貓中美來回的運輸費及有關費用。

3.1.3. 美方按每只大熊貓100萬美元的金額為大熊貓在往返運輸途中及在美期間進行保險，中方為保險受益者。

3.1.4. 大熊貓赴美的意圖是開展“保護及繁殖計劃”，並不是一瀕危野生動植物國際貿易公約中所指的以商業為根本目的。

3.1.5. 美方將提供兩名保護及繁殖專家協助及參加中方的保護及繁殖計劃，時間及安排必須雙方同意。中方將承擔美方專家在中國的食宿，交通等費用。美方專家在華停留時間每次大約六個星期左右。

- 3.1.6. 美方將邀請中方五人代表團參加大熊貓“保護及繁殖計劃”美國聖地亞哥動物園開展的開幕及計劃完滿結束的閉幕儀式。美方承擔代表團的國際路費及在美的食宿交通費用。代表團在美停留時間為7-10天。
- 3.1.7. 美方將提供中方大熊貓在美期間開展的“保護及繁殖計劃”的所有研究結果。研究成果應為共有，如有需要，並將共同發表研究結果。

3.2. 中方的義務：中方的義務，除了在本協議其它情況下提及，將包括：

- 3.2.1. 中方將提供美方所有有關大熊貓背景等資料。
- 3.2.2. 中方將盡快辦理好中國政府允許大熊貓出口的許可証。
- 3.2.3. 中方將派出三人小組赴美國聖地亞哥動物園進行為期五天的大熊貓保護及繁殖計劃場地可行性考察。美方承擔其國際旅費及在美的食宿交通費用。
- 3.2.4. 中方將派出兩名大熊貓專家赴聖地亞哥動物園協助繁殖及飼養大熊貓，育幼及其它保護及繁殖計劃所需要的工作。每12個月輪換一次。美方將承擔專家的旅費及在美期間的食宿交通等費用。
- 3.2.5. 合作期間，如大熊貓意外死亡，中方同意向美方提供適合研究的代替大熊貓。此外，中美雙方專家（中方專家最少一名在場—按本條第3.2.4.款）應及時進行解剖研究。如果因某種情況下，中方專家不在，美方將即時傳真或致電中方。如中方在收到傳真後四小時內未能答復，美方可以獨自進行解剖研究。死體解剖後按中方意見處理。如運回中國，美方承擔尸體運輸費用。解剖研究結果為雙方共同所有。
- 3.2.6. 大熊貓及其精液，卵用于聖地亞哥動物園外的大熊貓保護計劃必須得到參與的有關方面一致的同意及中方的批准才能進行。

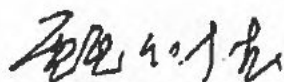
第四條 綜合規條

4.1. 修正及棄權：關於本協議條款規定，如因特殊情況及意向而需要作任何修正，棄權或承諾均必須得到雙方同意及書面簽署才能生效。

4.2. 副本：本協議以中，英文寫成，兩種文本具有同等法律效力。中美雙方可按需要各持兩份或以上的副本。所有副本將認同為正本，並構成為一相同的文件。

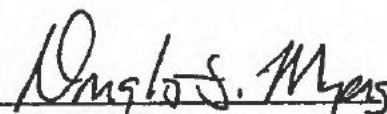
4.3. 整體處理：中美雙方均清楚明瞭本協議及有關的一切文件。本協議正式生效後，以往中美雙方有關大熊貓繁殖借展及合作研究的計劃和協議全部作廢。

為了執行1994年5月14日達成的協議條款，中美雙方全權代表在本協議上簽字，以資證明。本協議文本，經中美兩國政府批准，並獲得允許進出口證明書之日起，正式生效。



中國野生動物保護協會

日期： 1994.5.14



美國聖地亞哥動物園協會，

日期： 5-14-94

IMPELEMENTATION PROTOCOL
TO CLARIFY
THE AGREEMENT FOR COOPERATIVE RESEARCH & BREEDING OF GIANT PANDAS

This protocol is an interpretive document to be used as guideline and for clarification of intent in implementing the Agreement for Cooperative Research and Breeding of Giant Pandas of May 14, 1994 between the China Wildlife Conservation Association and the Zoological Society of San Diego. Its purpose is to strengthen and clarify the substance and authorities in China and the United States in approving, respectively, the export and the import of giant pandas to the ZSSD.

This protocol results from the fact that the agreement is now more than two years old and that the passage of time and further review by related authorities has raised additional questions that are in need of clarification.

GENERAL GUIDANCE

1. Each Party agrees to implement the Agreement and conduct all matters consistent with the law of their country and CITES.
2. To enable the undertaking of the Cooperative Research and Breeding Program, the Chinese Authorities have agreed to loan the Society two healthy breeding-aged giant pandas (one male and the other female) for the two sides to carry out research on giant pandas jointly. It is also agreed that these giant pandas could be put on public display under conditions that will not interfere with research and breeding.
3. The Parties shall coordinate all efforts to ensure the success of this Cooperation Agreement.

AGREEMENT CLARIFICATION

1. The title of Article I will be referred hereafter as "Cooperative Research of Giant Pandas."

1.3. Ownership:

It is understood that all the Giant Pandas shall be returned to China within 20 days of completion or termination of this cooperative agreement.

It is understood that the Chinese authorities select option "C" of the original agreement as the offspring of the giant panda shall be returned to China when they reach the age of three years old.

2. The term of "Consideration" in ARTICLE II will be substituted by the term "Donation" in the Chinese language.

2.1. In further clarifying this section, it is now understood that quarterly payments will be remitted to an account designated by the Chinese authorities on the 10th day of the first month in each quarter.

- 2.4. The Society and the Chinese authorities understand that over the course of this agreement,

project priorities may change because of the nature of conservation and habitat/species preservation needs. The Society agrees to support the Chinese efforts in directing funds to address evolving needs to insure the success of the overall giant panda conservation program. Flexibility to address changing conservation needs exists under the terms and conditions of the US import permit, subjects to the approval of the PRC MOF.

2.5.3. In the first clause of the GENERAL GUIDANCE, above, this provision outlines a responsibility of the Society pursuant to the specific terms and conditions of the import permit.

2.6. & 2.7. It is understood that at the end of the 3rd, 6th, and 9th years when renegotiation of the term of this agreement is called for, additional provisions may be added to further define the basis of the termination of the agreement.

3. The title of ARTICLE III will remain as it is, subjected to the following points of clarification:

3.1.3. The Society concurs with the desire of the Chinese authorities that the insurance for each panda, including offspring, shall be purchased from a Chinese insurance company mutually agreed to by both parties. If the Society is found to be negligent in the death of the giant panda(s), the insurance company will only pay part of the indemnity or not pay at all, it is the Society's responsibility to pay the remaining part or the full amount of the indemnity. The amount of indemnity paid should remit to an account designated by the Chinese authorities at the completion of the determination of the negligent.

3.1.5. Both parties agree that the Society's experts can conduct research studies in China twice a year.

3.1.7. In carrying out 3.1.7, the Society will provide an annual report summarizing research activities associated with the purposes of the agreement, including a brief description of each project, a copy of protocols developed and methodologies used, a summary of data collected with a discussion of results and copies of published papers resulting from the research. The report should also describe the transfer of research protocols or methodologies to the Chinese and their use in China in the wild or in captivity.

3.2.4. The Society will be responsible for the Chinese experts' reasonable expenses associated with their travel, food and lodging, misc. expenses and general care. The Chinese experts will be required to take a pre-employment physical in order to receive the Society's medical insurance coverage. The Chinese experts will rotate every six months.

3.2.5. Both parties understand that there could be limitations of the availability of replacing animals should death(s) occur under this agreement, and the limitation is the replacement of animals to two animals over the duration of the agreement. It is further understood that the Chinese will supply the Society with appropriate phone numbers for 24-hour emergency contacts.

3.2.6. Provision for the transfer of pandas to other location(s), consistent with the research needs of the Agreement and the terms and conditions of the US import permit is possible provided that approval is obtained from all parties concerned. The Society will make their best efforts to implement this provision where it can benefit the panda research program and the desire of the Chinese and US officials.

This protocol is signed in Beijing on July 31, 1996. It is written in both Chinese and English, and both contexts are being equally authentic.

Signed by:

□□□□□

China Wildlife Conservation Association
Representative

Date: 7/31/1996

□Douglas G. Myers □

Zoological Society of San Diego
Representative

Addendum 3:
Justification For Requested Activity
Questions 10 a – c, 11

10. Provide a detailed statement justifying the proposed activity, particularly the following:

a. Describe the purpose of your proposed activity.

The giant panda specimen Studbook # 415 "Gao Gao" is being recalled by the Chinese owners of all the giant pandas at San Diego Zoo in conjunction with the end of the most current Extension Agreement On Cooperative Research and Breeding of Giant Pandas which expires on 1 September 2018. The agreement will not be extended for another term but instead an entirely new agreement will be developed. In essence, the purpose of the proposed activity is to fulfill a legal and binding agreement and to return the giant panda to the owners as directed by agreement and communications.

A copy of the agreement that will be expiring is included as part of this Addendum. Please refer to Article II (page 2 - ownership), Article V (page 4- completion/termination of agreement), as well as the general terminology of the agreement.

The Chinese have issued written instructions for the return of the giant panda specimens and have identified the location to which they shall be send. These documents are also provided in this Addendum.

The re-export of this specimen is essentially a return of an aged animal to retirement in China as is directed by the Chinese government owner. This activity will not substantially contribute to scientific research and does not include any subsequent conservation education, propagation for conservation or contribution to any potential reintroduction program. It is the end of an agreement and return of Chinese property to China. The return of the giant panda to his owners will do no harm to the wild population of giant pandas.

However, there could be some conservation contribution through necropsy exam at such time the specimens dies in China. While at San Diego Zoo the specimen was diagnosed with a progressive heart condition that will, without doubt, lead to his death at some point.

Heart disease in giant pandas has not been previously diagnosed/recognized/documented by the Chinese and subsequent necropsy findings could have an impact on how pandas are managed or how giant pandas are chosen for Chinese re-introduction programs. Pursuit of this course of investigation is entirely up to the Chinese. San Diego Zoo will have minimal, unofficial input, if any, unless asked by the Chinese to participate with their professionals.

Because of the giant panda's heart condition and general, tenuous slow decline in his physical condition, it would be helpful for his re-export to be expedited to avoid his demise in the United States.

USFWS was first advised of the seriousness of the giant panda's condition in the 2016 Giant Panda Annual Report. A copy of the 2016 medical report and subsequent updates are included in this Addendum.

b. Description of the technical expertise of each person (please also include CV or resume), as it relates to the proposed activities. If the proposed activity involves live animals, include the experience of each animal caretaker working with the species.

Chinese Staff At CCRCGP Dujiangyan

All Chinese caretaker staff at CCRCGP Dujiangyan report to the following professionals;

Deputy Director Li Desheng (李德生) has in excess of 24 years experience working with giant pandas and has received over 12 months of training at the San Diego Zoo's Veterinary Services Division. Mr. Li is currently in charge of all the CCRCGP's giant panda international cooperative programs.

Curator Zhang Guiquan (张贵权) has in excess of 28 years experience working with giant pandas and has received 6 months of training at the San Diego Zoo in general husbandry management. Mr. Zhang currently oversees CCRCGP's giant panda husbandry and breeding management.

Curator Wei Rongping (魏荣平) has in excess of 26 years of experience working with giant pandas and has also received 6 months training at the San Diego Zoo in general husbandry management. Mr. Wei also oversees CCRCGP's giant panda husbandry and breeding management.

Veterinarian Wang Chengdong (王承东) has over 19 years of medical experience in taking care of the health of the giant panda. He is currently responsible for managing CCRCGP's veterinary hospital and overall medical and health matters concerning the giant panda.

Individual resume or CVs for caretakers are unavailable.

Chinese Staff for transport of specimen to China

This individual has not yet been identified other than being a qualified CCRCGP veterinarian with giant panda experience.

San Diego Zoo Staff for transport of specimen to China

Meg Sutherland-Smith

San Diego Zoo Director of Veterinary Services

Bachelors of Science, Master's in Biochemistry,

Doctor of Veterinary Medicine

28 years Veterinary experience, with 20 years as the Zoo's primary giant panda veterinarian, including significant panda experience in China

Kathy Hawk

San Diego Zoo Senior Keeper

Bachelors of Science

22 years experience as San Diego Zoo's primary giant panda keeper including experience in China for for training of Chinese giant panda caretaker personnel.

c. Copies of contracts, agreements or other documents that identify persons involved and dates of activities for which authorization is being requested.

Please refer to the two separate sets of directions received from CWCA Department of International Cooperation and CCRCGP provided in this Addendum.

Also included is a copy of the current Extension Agreement On Cooperative Research and Breeding Of The Giant Panda which identifies the agreement's expiration date of 09/01/2018 and forms the basis for the re-export and export of all giant pandas to China.

A specific date for the proposed activity has not been identified since this date is determined by completion of acquisition for all necessary permits. It is acknowledged that the older male Gao Gao Stb #415 needs to be returned to China as soon as possible for health reasons.

11. A statement on how the activities will enhance or benefit the wild population (e.g., in-situ and ex-situ projects).

The giant panda specimens are being returned to their owners at the conclusion of a long-term loan agreement. The Chinese have indicated that the facility to which the pandas will be going is used for quarantine, retirement, acclimation or re-acclimation to Chinese care and maturation of younger animals. The ZSSD involvement with these specific specimens, including enhancement or benefit to the wild population, has been concluded. We are now fulfilling an international agreement for return of Chinese property. We have no say or influence on how the return of these giant pandas to China will enhance or benefit the wild population. This is entirely a Chinese decision. The proposed activity will do no harm to any wild giant panda population. Continued or future involvement in direct enhancement activities of benefit to the wild giant panda population will be determined by future negotiations with Chinese authorities to potentially develop a new program.

Instead of returning all three giant pandas at the San Diego Zoo in one shipment after expiration of the agreement, there are advantages to returning the male Gao Gao Stb # 415, as soon as possible, and, before agreement expiration because of his declining health conditions. The other two giant pandas will be returned at a later date agreed to with the Chinese.

However, there could be some conservation contribution through necropsy exam at such time the specimens dies in China. While at San Diego Zoo the specimen was diagnosed with a progressive heart condition that will, without doubt, lead to his death at some point.

Heart disease in giant pandas has not been previously diagnosed/recognized/documented by the Chinese and subsequent necropsy findings could have an impact on how pandas are managed or how giant pandas are chosen for Chinese re-introduction programs. Pursuit of this course of investigation is entirely up to the Chinese. San Diego Zoo will have minimal, unofficial input, if any, unless asked by the Chinese to participate with their professionals.

Male Giant Panda Gao Gao Studbook # 415 Medical Records



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Executive Director Emeritus

Douglas G. Myers

President/CEO

5 November 2015

Mr. Li Qingwen

Deputy Secretary General

China Wildlife Conservation Association

18 Hepingli East St.

Beijing, P.R. China

Dear Mr. Li,

Greetings from San Diego!

As we approach our winters and we begin to prepare for our respective regional weather changes, I would like to take the time to update you on the medical status of male giant panda Gao Gao.

As we have previously documented and discussed, we do have concerns about this giant panda's health conditions. A recent, 20 October, routine, non-invasive exam, in order to check his health condition, revealed his cardiac disease is advancing and that his general health condition and well-being are slowly but surely deteriorating. Enclosed is a summary report provided by our Zoo Associate Director of Veterinary Medicine. As indicated, we believe, based on experience with cardiac disease in similar animal species, we are approaching a point in Gao Gao's life that a decision must be made regarding his future.

Based on our earlier meeting in 2015, we understood that it is preferred by CWCA to have Gao Gao return to China to live out his retirement there. However, if we wait too much longer, his condition may become such that our veterinarians may become reluctant to issue a health certificate for travel because of the potential impact of travel stress on his general condition. Acquiring an export permit for Gao Gao could also, conceivably, become more difficult from an animal well being perspective.

Gao Gao is currently under very professional medical care and we anticipate no significant additional problems outside of the possibility of cardiac decomposition and sudden death as can occur in any case of advancing cardiac disease. The medications he is receiving will likely minimize these risks. We have also removed him from public view so we can better monitor his condition in the off-exhibit compounds.

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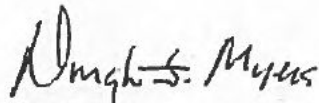
CWCA Letter Gao Gao Nov 2015
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I would like to pursue the opportunity to discuss this matter, as well as the future of the giant panda female Bai Yun, with you at a mutually agreeable time. A related discussion will be the eventual replacement of the aged giant pandas with younger specimens in order for us to successfully enter the second 20 years of our internationally acclaimed collaborative relationship with this Chinese national treasure. With Gao Gao being not being seen by our zoo visitors and with the young male, Xiao Liwu, being sent to China in the near future there will only be one giant panda to be seen by the zoo guests at San Diego Zoo. As we plan for our future collaborative efforts, we do believe this situation does warrant your attention.

I would like to propose, if agreeable to your schedule, that we travel to Beijing to meet with you or others, as appropriate, to discuss and define the future of our cooperative giant panda program. I would like to suggest a meeting at a mutually agreeable time in early 2016 for this purpose. We are available to travel to China between 10 and 14 Jan, 2016. Please let us know if this would be acceptable to you.

I look forward to hearing from you.

Sincerely,



Douglas G. Myers
President/CEO
Zoological Society of San Diego

Cc: Zhang Hemin, Director, Wolong
Li Deshing, Deputy Director, Wolong
Jia Jiansheng, Deputy Director General, SFA Dept. of Wildlife Conservation
FAX # 011-86-10-64219149: Dept. of International Cooperation
Mick Musella, SDZG
Bob Wiese, SDZG
Stacey Johnson, SDZG
Carmi G. Penny, SDZG
Mabel Lam, China Liaison



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Giant Panda, Gao Gao, SB# 415 (大熊猫高高, 雄性, 谱系号: 415)

The following is a summary of male giant panda, Gao Gao's, medical conditions.
下面是雄性大熊猫高高的健康状态总汇。

1. **Clinical History:** Gao Gao is an approximately 25 year old male giant panda. In addition to the information outlined below, Gao Gao has significant dental wear of his molars and premolars and has had portions of his molar teeth fracture. These changes have resulted in a reduced ability to adequately masticate culm bamboo hence he is only offered small pieces of culm.

临床病史: 高高是一只大约25岁的雄性大熊猫。除了下面列出的信息, 大熊猫高高的臼齿和前臼齿有严重的磨损及部分臼齿出现断裂。这些变化导致高高充分咀嚼竹杆的能力下降, 所以我们只提供它小件的茎秆。

2011: A heart murmur was first noted on physical examination at a pre-breeding exam in 2011. A follow-up cardiac ultrasound was done during a dental exam in September of 2011. There were no clinically significant findings at that time.

2011年: 2011年繁殖季节前进行体检时发现高高的心脏有杂音。2011年9月份进行牙齿检查时, 为了跟进心脏情况, 同时做了心脏超声波检查。当时的检查没有发现显著的临床结果。

2013: A recheck cardiac ultrasound was performed during a dental examination in January. At that time mild pulmonic stenosis with post-stenotic dilation of the pulmonary artery was noted. Some mild reflux of blood from the tricuspid valve was also present. Hypertension was considered a possible explanation for the changes seen. No treatment was initiated. However training for blood pressure monitoring was initiated to facilitate increased non-invasive exams.

2013年: 2013年一月份检查牙齿时, 再次对心脏进行超声波检查。当时, 发现高高的肺动脉瓣轻度狭窄, 引起肺动脉扩张。此外, 也发现三尖瓣有

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轻微的血液回流。我们认为引起这种变化的可能性是高血压。我们没有给予药物治疗；但是，开始培训高高在非麻醉情况下进行血压监测。

2014: Gao Gao's next cardiac ultrasound was at the pre-breeding exam in February and findings were similar to his 2013 cardiac exam. However during this exam an enlarged testicle was discovered and a biopsy revealed a type of testicular cancer called a seminoma. He underwent a hemicastration of the right testicle in May of 2014.

2014年：2014年2月份繁殖季节前体检时，再次进行心脏超声检查，结果与2013年的一样。但是，本次检查发现高高其中一个睾丸扩大，活检显示是一种睾丸癌称为精原细胞瘤。2014年5月对高高进行右睾丸切除手术。

Over the course of 2013-2014 blood pressure readings were not definitive for hypertension though normal reference ranges have not been established. Because of this, giant panda, Xiao Liwu, was subsequently trained for blood pressure monitoring. In June of 2014, a repeat cardiac ultrasound was done. Pulmonic stenosis and post-stenotic dilation of the pulmonary artery had not significantly progressed but because of continued suspicion of hypertension, a medication to lower blood pressure (amlodipine) was started. After being on amlodipine for 8 months a definitive change in his blood pressure was not demonstrated and there was no a large difference between Xiao Li Wu's and Gao Gao's blood pressure measurements so his dose was adjusted.

2013 - 2014年间，由于血压正常参考范围尚未确定，我们没有明确性的高血压读数。因此，我园开始培训大熊猫幼仔“小礼物”进行血压监测。2014年6月，再次对高高做心脏超声检查。肺动脉瓣狭窄及肺动脉的后狭窄扩张没有显著进展；由于持续的怀疑高高有高血压，我们开始提供它一种降血压的药物（amlodipine）

。经过8个月的降血压药物（amlodipine）治疗，高高的血压却没有明显的变化。此外，高高和小礼物之间的血压测量值也没有太大的区别，因此，我们调整了降血压药的剂量。

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Gao Gao Health Report Oct 2015 page 2

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2. **Recent findings:** In 2015 keepers started training Gao Gao for awake cardiac ultrasounds so we could monitor his heart more frequently and avoid multiple examinations under anesthesia. His most recent examination was done awake on the 20th of October. In addition to the previous findings there was enlargement in the right side of his heart and fluid accumulation around the heart and in his chest. Based on these findings furosemide, a diuretic to help eliminate excess fluid around his heart and in his chest was started. Another medication, benazepril, was started to dilate blood vessels and reduce the amount of work done by the heart. Gao Gao has been spending more time sleeping/resting in past couple of weeks. This may be a side effect of his medications or a result of his cardiac disease. He will have a follow-up awake cardiac ultrasound in November.

最近检查结果：2015年动物园饲养员

开始训练高高在清醒状态下进行心脏超声检查。这样，就可以经常监测它的的心脏和避免每次检查都需要进行麻醉。它最近的一次检查（10月20日）就是在清醒状态下进行。除了以往的检查结果，这次发现它右边心脏肿大和心脏及胸部周围积水。基于这一发现，开始给予速尿，利尿的药物（furosemide），帮助消除心脏和胸部多余的液体。此外，还提供扩张血管和支持心脏功能的药物benazepril。过去的几个星期，高高睡觉和休息的时间比较多；这也许是药物的副作用引起或是它的心脏疾病所致。

3. **Assessment:** Gao Gao is a geriatric giant panda with significant dental problems and a history of testicular cancer. Of most significance, he has advancing cardiac disease and is considered to be in right heart failure. Sudden death has been reported in other species with this condition.

评估：高高是一只有严重牙齿问题和睾丸癌病史的老年大熊猫。至为重要的是高高的心脏疾病日趋严重，并被认为是右心脏衰竭。有报道，其他物种有这种病况的会突然猝死。

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4. **Recommendations:** We are hopeful that he will stabilize on his current medications but this does not eliminate the medical concerns of decompensation associated with major stress events complicated by anticipated progressive deterioration from advancing cardiac disease. Based on these findings I am concerned about decompensation and possible sudden death due to cardiac failure potentially associated with travel and/or prolonged or intensive stress and recommend a sharply elevated level of cautious management with this specimen.

建议：我们希望目前的药物治疗能够稳定高高的病情。但这并不排除预期将日趋严重的心脏疾病，及与重大应激事件相关的代偿机能障碍等医学问题。根据这些结果，我很担心由于长途运输及或压力过于密集或延长引起代偿失调和由于心脏衰竭，突然猝死的可能性。我们建议提高审慎管理这个个体的水平。

Respectfully Submitted,

Meg Sutherland-Smith, D.V.M., Dipl.A.C.Z.M.
30 October 2015

报告提供者：Meg Sutherland-Smith, D.V.M., Dipl.A.C.Z.M.

圣地亚哥动物园兽医主任

2015年10月30日

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From: Carmi Penny
To: Van Norman, Tim
Date: 7/15/2016 2:21 PM
Subject: Giant Panda Update: San Diego Zoo
Attachments: Gao Gao July, June, Feb Medical Reports.pdf

Tim,

As you will recall San Diego Zoo maintains three giant pandas including two geriatric specimens.

In reference to the older male, studbook # 415, Name Gao Gao, we believe it is time to advise you of the increasing frequency of medical issues, primarily progressive heart disease, for this male.

Attached are medical exam reports for July, June and Feb 2016. We conducted a very detailed exam of this specimen in February in collaboration with representatives of the China Wildlife Conservation Association and veterinarians from the China Conservation and Research Center for Giant Pandas which confirmed advancement of our earlier diagnosis of heart disease. The exams in June and July were in response to specific issues he was exhibiting. We are able to monitor his blood pressure on a regular basis and it, too, is indicative, we believe, of advancing cardiac difficulties.

It is becoming obvious, even with treatment, that this panda's general health condition is slowly advancing despite the elevated medical and husbandry care he is receiving.

Unless he simply has a massive heart attack, we do not anticipate that his death is imminent. It is, however, inevitable at some point in the reasonably foreseeable future. The Chinese are aware of this and we are in regular communication with them.

I just would like USFWS to be aware of this situation so there are no surprises when the inevitable happens.

When the death does occur we will be conducting a full detailed necropsy at San Diego Zoo. We have the approval of our Chinese colleagues to proceed with the necropsy within eight hours of the animal's death. Full reports, when this does happen, will be made available to all appropriate parties.

The Chinese will be requiring the return of all body parts and samples of the deceased giant panda to China. For this, I believe, the correct permit application form will be 3-200-37. Since there is a process to be followed including, I presume, publication in the Federal Register, is there any way I can prepare for this without actually waiting for the death of the animal? Otherwise we could be looking at a long delay between his death and our ability to body and samples to China. Is there a specific biologist I could discuss this with?

If there are any questions please let me know.

Carmi

Carmi G. Penny
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Giant Panda 2016 Veterinary Report for the United States Fish and Wildlife Services

Preventive medicine & monitoring

Fecal samples are screened for enteric parasites and animals are treated prophylactically with anti-helminthics every six months. Animals are vaccinated for rabies and canine distemper viruses annually. All three giant pandas are trained for awake venipuncture and blood pressure monitoring. Our keeper staff keep detailed logs tracking a variety of behavioral and biological data.

The following is a medical summary for each giant panda on loan to San Diego Zoo Global.

1. Giant panda, Bai Yun 596443, SB 371, DOB 7Sept1991

Bai Yun was examined February 2016 as part of an inspection by a delegation of Chinese colleagues from the China Conservation and Research Center for Giant Pandas and the China Wildlife Conservation Association. A detailed report of that examination follows. Overall Bai Yun had minimal health problems in 2016.

Clinical Problem Summary

Dentition

A chipped right mandibular canine was first evaluated in September 2014. There was no pulp exposure at that time.

Reproductive

Bai Yun did not come into estrus 2014. She underwent artificial insemination in 2015 and experienced a pseudopregnancy.

Renal

Bai Yun experienced an episode of decreased activity and bamboo consumption in October and November. A blood sample revealed a high normal BUN. This value was within ISIS reference ranges but was slightly higher than where her values have been historically. Her urinalysis was normal. Her activity level and bamboo consumption has improved.

Current medications:

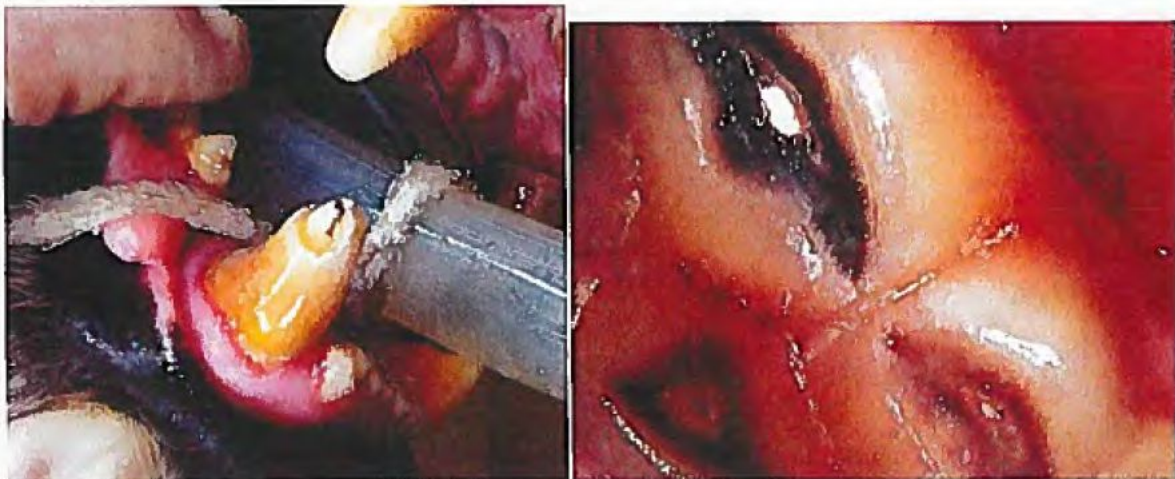
None

Exam 24 February 2016. In attendance were Dr. Tang Chunxiang, Veterinarian/Senior Engineer Wolong, and Mr. Wei Rongping, Deputy Director Wolong.

Anesthesia: Bai Yun was anesthetized with 7.6 mg/kg ketamine and 0.076 mg/kg midazolam via hand injection using an extension set and a needle. After transport to the hospital isoflurane was administered via a face mask. Lidocaine was applied to the larynx to facilitate intubation. An intravenous catheter was placed in her left cephalic vein. She was maintained on isoflurane during the procedure. It is standard procedure to maintain animals at a surgical plan of anesthesia during most procedures for the safety of personnel and the animals. Anesthesia was discontinued after 2.75 hours from initial injection and she was extubated within 5 minutes. She was up and alert within 20 minutes.

Physical examination

Physical examination was unremarkable other than the chipped right mandibular canine and discoloration of her right maxillary 1st molar, occlusal surface (pictures below). There is also generalized dental wear of her caudal molars.



Imaging

Radiographs were taken of her chest, abdomen, and mandibular canines. There was no evidence of tooth root lysis involving the right mandibular canine.

Cardiac ultrasound was performed by Dr. Joao Orvalho, a veterinary cardiologist that consults with the zoo. Abdominal ultrasound was conducted by SDZ veterinarians. No significant abnormalities were noted.

Laboratory

Bai Yun's CBC was normal and her BUN was 23 mg/dL (8.2 $\mu\text{mol/L}$).

Assessment

Bai Yun is an aging panda with no significant disease problems at this time other than her dentition. Her right mandibular canine will likely require a root canal at some time in the future. The discoloration of her right maxillary molar likely represents decay in that tooth and will likely require treatment in the future. Her BUN remains within the ISIS reference range.

Plan

1. Monitor dental problems and treat as needed.
2. Continue to monitor her bloodwork every 4-6 months.

2. Giant panda, Gao Gao, 503007, SB415, DOB estimated 1990

Gao Gao is a geriatric giant panda with several health problems (cardiac, dental, degenerative, & episodes of inappetence). Blood pressure measurements are done two to three times a month and blood is collected every three-four months. In addition to being trained for blood pressure measurements and venipuncture, Gao Gao has been trained to stand for awake cardiac ultrasounds to monitor a cardiac condition, pulmonary stenosis, diagnosed in 2013. He is now also trained for awake abdominal ultrasounds to monitor ascites. Gao Gao continues to have intermittent episodes of lethargy and inappetence some of which are associated with mucoid feces while others are not. He is managed with symptomatic therapy during these episodes. His diet continues to be adjusted to accommodate for significant dental wear.

Gao Gao was examined February 2016 as part of an inspection by a delegation of Chinese colleagues from the China Conservation and Research Center for Giant Pandas and the China Wildlife Conservation Association. A detailed report of that examination follows. Gao Gao was examined under anesthesia again in December 2016 due to acute-onset vomiting and inappetence. A detailed report of that exam also follows.

Clinical Problem Summary

Dentition

Gao Gao has significant dental wear of his molars and premolars and has had portions of his molar teeth fracture. These changes have resulted in a reduced ability to adequately masticate culm bamboo. Because of worn and deteriorating teeth Gao Gao is offered culm that has been cut up by the keepers into ~ 4 cm X 18 cm strips. He does not consume what would be considered normal amounts of bamboo so to supplement his fiber intake he is offered bamboo bread made with a mixture of ground biscuits, ground bamboo leaf, gelatin, and water.

Gao Gao had a period spanning 2-3 weeks in September of decreased activity, increased sleeping, decreased bamboo and bamboo bread consumption, and occasional drooling. His activity level and appetite improved in response to treatment with antibiotics (amoxicillin-clavulanic acid) for three weeks. Based on his response to treatment it is suspected that he has ongoing infection involving his teeth that could be associated with the progressive deterioration of his molar teeth that has been previously documented. Obvious dental infection was not evident at his exam in December.

Musculoskeletal

Gao Gao has progressive bridging spondylosis involving multiple thoracic and lumbar vertebrae.

In an attempt to better address his musculoskeletal issues a treatment plan involving acupuncture is being formulated for Gao Gao by senior veterinarian, Dr. Beth Bicknese, who has been certified in acupuncture through the Medical Acupuncture for Veterinarians program at Colorado State University.

Reproductive

A testicular seminoma was diagnosed in 2014 and a hemicastration was performed.

Cardiac

2011: A heart murmur was first noted on physical examination at a pre-breeding exam in 2011. A follow-up cardiac ultrasound was done during a dental exam in September of 2011. There were no clinically significant findings at that time.

2013: A recheck cardiac ultrasound was performed during a dental examination in January. At that time mild pulmonic stenosis with post-stenotic dilation of the pulmonary artery was noted. Some mild reflux of blood from the tricuspid valve was also present. Hypertension was considered a possible explanation for the changes seen. No treatment was initiated. However training for blood pressure monitoring was initiated to due to suspected hypertension.

2014: Another cardiac ultrasound was done in February and findings were similar to his 2013 cardiac exam. Over the course of 2013-2014 blood pressure readings were not definitive for hypertension though normal reference ranges have not been established. Because of this, giant panda, Xiao Liwu, was subsequently trained for blood pressure monitoring. In June of 2014, a repeat cardiac ultrasound was done. Pulmonic stenosis and post-stenotic dilation of the pulmonary artery had not significantly progressed but because of continued suspicion of hypertension, a medication to lower blood pressure (amlodipine) was started. After being on amlodipine for 8 months a definitive change in his blood pressure was not demonstrated and there was no a large difference between Xiao Li Wu's and Gao Gao's blood pressure measurements so his dose was adjusted.

2015: Keepers trained Gao Gao for awake cardiac ultrasounds so we could monitor his heart more frequently and avoid multiple examinations under anesthesia. In October fluid accumulation around the heart and in his chest was noted in addition to the pulmonic stenosis. At this time Gao Gao was considered to be in right-sided heart failure. Therefore, furosemide, a diuretic to help eliminate excess fluid around his heart and in his chest was started. Another medication, benazepril, was started to dilate blood vessels and reduce the amount of work done by the heart. Follow-up cardiac ultrasounds using behavioral restraint have revealed reduction in the amount of fluid around his heart and in his chest.

2016: Two additional cardiac ultrasounds (awake) have been performed by veterinary cardiologist, Dr. Joao Orvalho, in June & October 2016. Variable amounts of fluid present around his heart and in his chest cavity have been noted but no significant progression of disease based on these ultrasound examinations. Blood pressure monitoring is on-going. Graphic representation of blood pressure measurements are included below. Awake abdominal ultrasounds using behavioral restraint are now being performed to monitor the amount of fluid in his abdomen.

Inappetence:

Gao Gao maintained normal activity and appetite through the breeding season and into May. However in early June Gao Gao experienced an episode of inappetence. His bloodwork and urinalysis were compatible with dehydration. His doses of diuretics were decreased and recheck bloodwork improved. A cardiac ultrasound was performed 14 June. Because subjectively there appeared to be more fluid around his heart and in his chest cavity an additional diuretic (spironolactone) was added and his furosemide dose increased. During late June/early July decreased activity levels, decreased appetite, and weight loss were seen. Blood was also seen in his feces so there was concern he may have a gastrointestinal ulcer. His renal values were higher than his prior baselines. He was started on treatment with omeprazole and sucralfate for a possible ulcer. In addition, the dose of the diuretic, furosemide, was decreased. He returned to his normal baseline until early September when he had another episode of inappetence (see Dentition).

Current medications:

Fortiflora-probiotic for gastrointestinal health-Discontinued during a period in inappetence July 2016 and has not been re-instated.

Calcium carbonate for low calcium values.

Amlodipine

Benazepril
Furosemide
Spironolactone started June 2016
Cosequin started Jan 2017

Exam 23 February 2016. In attendance were Dr. Tang Chunxiang, Veterinarian/Senior Engineer Wolong, Mr. Wei Rongping, Deputy Director Wolong, and Mr. Zhong Yi, Deputy Director CWCA.

Anesthesia: Gao Gao was anesthetized with 7.6 mg/kg ketamine and 0.06 mg/kg midazolam via hand-injection using an extension set and a needle. After transport to the hospital isoflurane was administered via a face mask followed by intubation. An intravenous catheter was placed in his left cephalic vein. He was maintained on isoflurane during the procedure. It is standard procedure to maintain animals at a surgical plan of anesthesia during most procedures for the safety of personnel and the animals. As the percentage of isoflurane was decreased propofol was given intravenously to maintain anesthesia. Anesthesia was discontinued after 2.5 hours from initial injection and he was extubated 15 minutes later. He aroused and then laid back down and slept for another 20 minutes. This anesthetic event was similar to other examinations. Gao Gao was up and eating 3 hours after he left the hospital.

Physical examination

Abnormal physical exam findings include: Grade 3/5 heart murmur ausculted (no change). Additional deterioration of his left mandibular 2nd molar. A chip fragment was removed from the lingual aspect of this tooth (picture below). Continued molar wear was noted.



Imaging

Radiographs were taken of his chest and abdomen. There is evidence of right heart enlargement radiographically. He also has progressive bridging spondylosis involving multiple vertebrae in his spine. Radiographs below illustrate collapsed disc spaces and bridging spondylosis of the vertebrae.

Laboratory

There were no concerns with his CBC or serum chemistry.

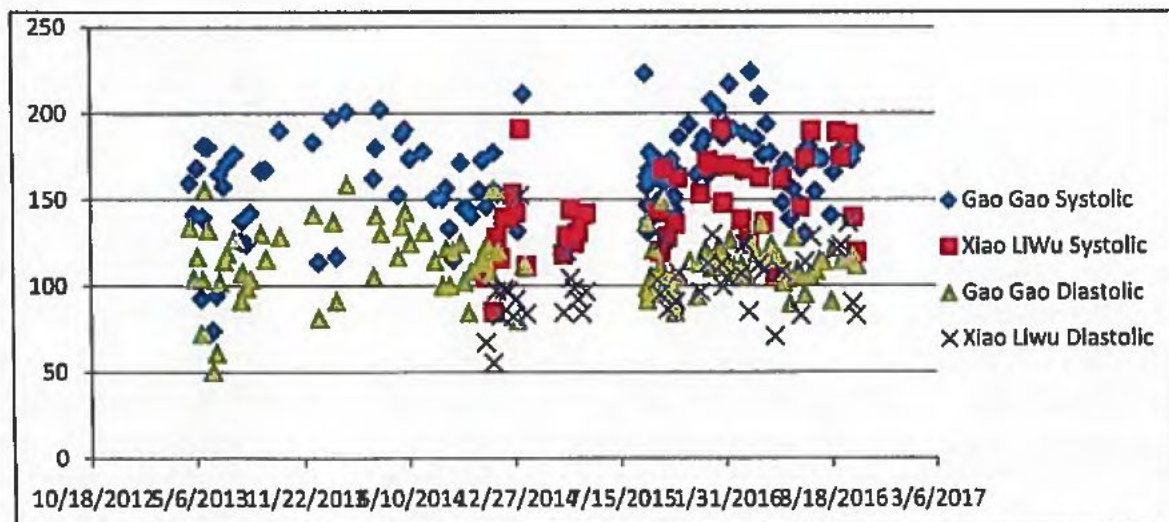
Assessment

1. Continued deterioration of molar teeth.
2. Pulmonic stenosis. It is likely that Gao Gao was born with this condition and it has become clinically significant as he has aged. He is being managed with cardiac medications but this condition is expected to progress.
3. Suspected hypertension being managed with medications.
4. There is no evidence of metastasis from the seminoma previously removed.

Summary

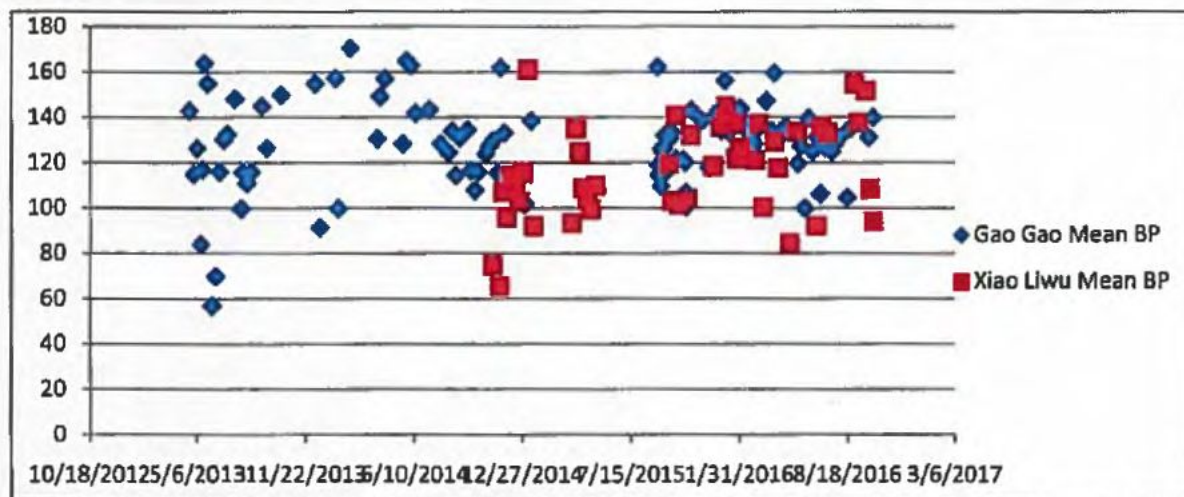
1. Gao Gao is a geriatric panda who requires close monitoring of his cardiac disease. Continued awake cardiac ultrasounds are needed to monitor for progression of cardiac disease and adjustment of medications accordingly. Continued blood pressure monitoring is also needed.
2. He requires continued monitoring of his dentition and may need additional dental treatment of left mandibular 2nd molar as well as specialized food preparation to support effective consumption of food materials and a desirable nutritional status.
3. His mobility is expected to decline over time due to the changes in his spine and with exercise intolerance associated with progressive cardiac disease.
4. Continued medical care will need to be supplemented by management adjustments and changes to mitigate and control environmental stressors in order to not exacerbate additional cardiac complications including sudden heart failure.

Mean Systolic and Diastolic Blood Pressures for Gao Gao and Xiao Liwu



Mean Blood Pressure for Gao Gao and Xiao Liwu

**SAN DIEGO ZOO.
GLOBAL**



0.5 mg/kg midazolam was administered via dart. After transport to the hospital isoflurane was administered via a face mask followed by intubation. An intravenous catheter was placed in his right cephalic vein. Anesthesia was discontinued after 3 hours and 44 minutes from initial injection and he was extubated 30 minutes after end of isoflurane. In addition to intravenous and subcutaneous fluids, antibiotics, low-dose anti-inflammatory, and gastroprotectant medications were administered. Gao Gao was slow to recover from anesthesia but remained stable. Following recovery he defecated twice and was returned to his bedrooms.

Physical examination

On physical examination he had a Grade 2/5 heart murmur and his lungs auscultated within normal limits. On abdominal palpation his gastrointestinal tract was relatively empty and his abdomen was not distended. A firm structure could be palpated in his cranial abdomen which was interpreted to be his stomach full of culm bamboo. On oral exam his right maxillary canine is discolored and likely no longer viable. This tooth has previously had a root canal. There was not additional fracturing of his previously deteriorating molars right mandibular arcade. No other abnormalities were noted.

Imaging

Radiographs: Radiographs were taken of his chest and abdomen. There was a large amount of culm bamboo in his stomach. Because of concern for an obstruction a contrast study was performed. A series of radiographs were performed followed administration of a contrast dye via orogastric tube. After 50 minutes there was evidence that dye was transiting the gastrointestinal tract in a normal fashion. In addition, the presence of dye in the feces passed after recovery was confirmed via radiographs indicated that the contrast dye was moving through the GI tract, ruling out obstruction. Dental radiographs of the right maxillary canine revealed mild tooth root lysis.



SAN DIEGO ZOO.
GLOBAL



Gastroscopy: Gastroscopy was performed prior to the contrast study. Despite there being a large amount of ingesta in the stomach parts of the gastric mucosa could be evaluated. A few small ulcers were observed.



Ultrasound: Abdominal ultrasound revealed no definitive abnormalities. There was no fluid seen in his abdomen. A cardiac ultrasound was not performed.

Laboratory

There were no concerns with his CBC. His blood urea nitrogen was higher than his normal range but within ISIS reference ranges. Recheck sample collected the following week showed blood urea nitrogen returning to normal.

Fecal cytology revealed some possible protozoal organisms which have not previously been seen. Fecal occult blood samples have all been negative at 48 hours post-sample.

Fecal enteric pathogen culture showed 2+ *Citrobacter freundii* and 2+ *Raoultella ornithinolytica*. Neither is suspected to be primary cause or causing disease at this time.

Post-examination Observations

Gao Gao was observed by keepers overnight following his examination. No vomiting or signs of abdominal discomfort were noted. By the morning he was eating bamboo bread

Assessment

1. Lethargy and vomiting.
2. A radiographic contrast study did not confirm an obstruction.
3. Potential causes for the lethargy and vomiting include:
 - a. Gastric distention from overconsumption of bamboo after having not eaten much bamboo over the past several weeks.
 - b. Gastroenteritis of unknown cause (eg. bacterial, parasitic).
 - c. Gastric ulceration. The gastric ulcers observed during endoscopy were mild however it is possible that more extensive lesions were not observed.
4. Trauma to the gastrointestinal tract from inadequately masticated culm bamboo is a possible explanation for fresh blood in his feces.
5. A mild increase was seen in his blood urea nitrogen. Possible explanations include BUN elevations due to dehydration and/or underlying renal compromise.

Treatment Plan

1. The following medications were prescribed orally: 13mg/kg Clavamox for 14 days, 13.8mg/kg Metronidazole for 5 days, 0.83mg/kg Omeprazole for 7 days, 0.04g/kg Suflcralfate for 7 days.
2. Ongoing monitoring of fecal occult blood.
3. Monitoring of feces for protozoa.
4. His current dietary management plan is being re-evaluated.
5. Gao Gao has been treated in the past with commercial probiotic products. We are going to attempt transfaunation with a fecal slurry from Bai Yun and/or Xiao Liwu.

Summary

1. Gao Gao's dentition has not significantly deteriorated since his last exam February 2016.
2. Gao Gao exhibited no complications from his cardiac disease during this procedure.
3. Gao Gao has experienced previous episodes of inappetence with some presumed gastrointestinal discomfort but never with vomiting. He appears to have recovered from this episode.

3. Giant panda, Xiao Liwu, 512108, DOB 29Jul2012

Xiao Liwu was examined February 2016 as part of an inspection by a delegation of Chinese colleagues from the China Conservation and Research Center for Giant Pandas and the China Wildlife Conservation Association. This was his first examination performed under anesthesia. A caudal spinal deformity was noted on radiographs. A detailed report from that examination follows.

We continue to measure awake blood pressures routinely to gather baseline data. He is also trained for venipuncture using behavioral restraint.

Clinical Problem Summary

No prior clinical problems.

Exam 25 February 2016. In attendance were Dr. Tang Chunxiang, Veterinarian/Senior Engineer Wolong, and Mr. Wei Rongping, Deputy Director Wolong.

Anesthesia

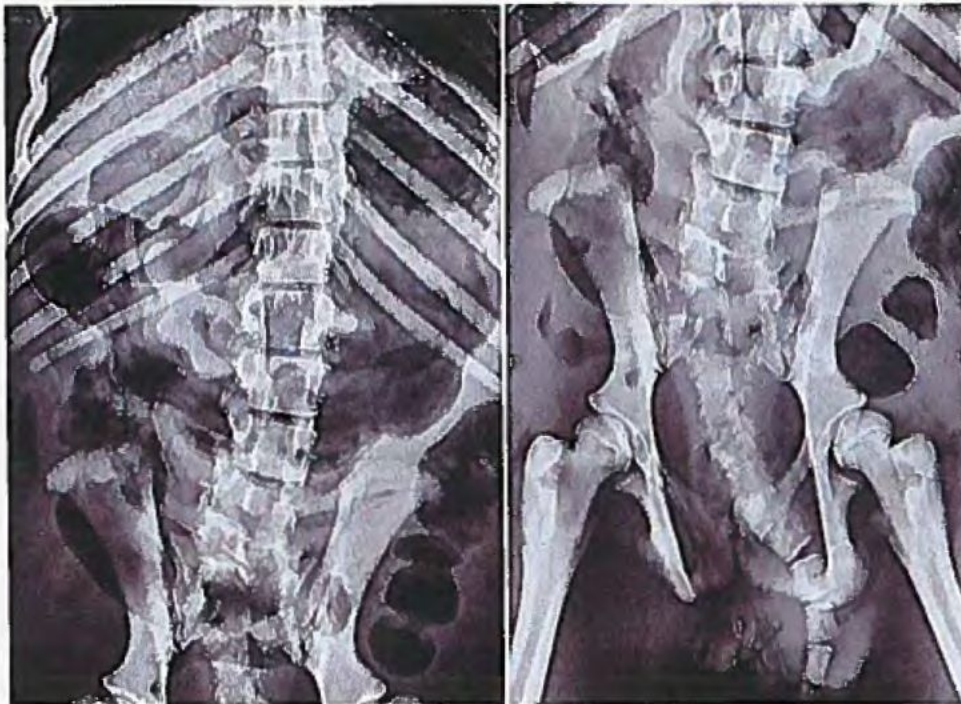
Xiao Liwu was hand-injected in the squeeze with 9.4 mg/kg of ketamine and 0.07 mg/kg midazolam using an extension set and a needle. Following induction he was transported to the hospital and isoflurane was administered via mask. 100 mg propofol was administered intravenously to facilitate intubation with a 12 mm endotracheal tube. He was maintained on isoflurane and an additional 50 mg of propofol was administered intravenously when he became light during the procedure. It is standard procedure to maintain animals at a surgical plan of anesthesia during most procedures for the safety of personnel and the animals. Anesthesia was discontinued 2 ½ hours from induction injection. He was extubated 16 minutes later. He intermittently slept for 28 minutes following extubation. He was up and alert within 2 hours back at his enclosure.

Physical examination

Xiao Liwu's dentition revealed mild-moderate staining and calculus. Mild-moderate rotation of right and left maxillary PM2. No other abnormalities were noted on physical examination. He underwent a dental cleaning and polishing.

Imaging

Radiographs were taken of his chest and abdomen. Abnormal curvature of spine involving the caudal lumbar, sacral, and coccygeal vertebrae was seen. The two most caudal lumbar vertebrae are misshapen and there appears to be partial fusion of the lumbar vertebra with the sacrum. The sacrum also appears to be misshapen and his pelvis is angled to the left.



Cardiac ultrasound was performed by Dr. Joao Orvalho, a veterinary cardiologist, and abdominal ultrasound was performed by SDZ veterinarians. Final cardiology report is pending and will be forwarded when available. No significant findings were noted.

Laboratory

Blood was collected for a CBC and serum chemistries. His packed cell volume (PCV) is at the low end of ISIS normal s. His serum chemistries were normal.

Assessment

Xiao Liwu's spinal scoliosis is likely due to the malformed vertebrae which is likely due to a congenital or developmental problem. Trauma is also a possibility. We are unable to predict how this abnormality will affect his mobility and/or ability to breed in the future.

Plan

1. Xiao Liwu will have his CBC rechecked in one month.
2. Periodic radiographs should be taken to monitor for changes or progression in his spine.
Recommend next recheck radiographs in one year.
3. Monitor locomotion and mobility.
4. Continue to collect blood pressure data.

Respectfully submitted:

Meg Sutherland-Smith, D.V.M., Dipl. A.C.Z.M.

San Diego Zoo

Giant Panda 2017 Veterinary Report for the United States Fish and Wildlife Services

Preventive medicine & monitoring

Fecal samples are screened for enteric parasites and animals are treated prophylactically with anti-helminthics every six months. Animals are vaccinated for rabies and canine distemper viruses annually. All three giant pandas are trained for awake venipuncture and blood pressure monitoring. Our keeper staff keep detailed logs tracking a variety of behavioral and biological data.

No examinations under anesthesia were performed in 2017. All three giant pandas will have examinations under anesthesia in 2018. The following is a medical summary for each giant panda on loan to San Diego Zoo Global.

1. Giant panda, Bai Yun 596443, SB 371, DOB 7Sept1991

Bai Yun's last examination under anesthesia was February 2016 as part of an inspection by a delegation of Chinese colleagues from the China Conservation and Research Center for Giant Pandas and the China Wildlife Conservation Association.

Clinical Problem Summary

Dentition

A chipped right mandibular canine was first evaluated in September 2014. There was no pulp exposure at that time.

Reproductive

Bai Yun is being managed as a post-reproductive female at this time.

Current medications:

None

No clinical concerns or examinations conducted in 2017.

2. Giant panda, Gao Gao, 503007, SB415, DOB estimated 1990

Gao Gao is a geriatric giant panda with several health problems (cardiac, dental, degenerative, & episodes of inappetence). Blood pressure measurements are done two to three times a month and blood is collected every three-four months. In addition to being trained for blood pressure measurements and venipuncture, Gao Gao has been trained to stand for awake cardiac ultrasounds to monitor a cardiac condition, pulmonary stenosis, diagnosed in 2013. He is now also trained for awake abdominal ultrasounds to monitor ascites. Gao Gao continues to have intermittent episodes of lethargy and inappetence some of which are associated with mucoid

feces while others are not. He is managed with symptomatic therapy during these episodes. His diet continues to be adjusted to accommodate for significant dental wear.

Gao Gao's last exam was December 2016.

Clinical Problem Summary

Dentition

Gao Gao has significant dental wear of his molars and premolars and has had portions of his molar teeth fracture. These changes have resulted in a reduced ability to adequately masticate culm bamboo. Because of worn and deteriorating teeth Gao Gao is offered culm that has been cut up by the keepers into ~ 4 cm X 18 cm strips. He does not consume what would be considered normal amounts of bamboo so to supplement his fiber intake he is offered bamboo bread made with a mixture of ground biscuits, ground bamboo leaf, gelatin, and water.

Over the course of 2017 Gao Gao bamboo leaf consumption has decreased and he occasionally does not consume all the bamboo culm matchsticks. This is attributed to continued dental wear and tooth deterioration.

Musculoskeletal

Gao Gao has progressive bridging spondylosis involving multiple thoracic and lumbar vertebrae. There has been only a slight decrease in his activity/mobility over the course of 2017.

He has been started on joint supplements as well as acupuncture therapy. Senior veterinarian, Dr. Beth Bicknese, is certified in acupuncture through the Medical Acupuncture for Veterinarians program at Colorado State University. She performs acupuncture on Gao Gao every two weeks.

Reproductive

A testicular seminoma was diagnosed in 2014 and a hemicastration was performed.

Cardiac

2011: A heart murmur was first noted on physical examination at a pre-breeding exam in 2011. A follow-up cardiac ultrasound was done during a dental exam in September of 2011. There were no clinically significant findings at that time.

2013: A recheck cardiac ultrasound was performed during a dental examination in January. At that time mild pulmonic stenosis with post-stenotic dilation of the pulmonary artery was noted. Some mild reflux of blood from the tricuspid valve was also present. Hypertension was considered a possible explanation for the changes seen. No treatment was initiated. However training for blood pressure monitoring was initiated due to suspected hypertension.

2014: Another cardiac ultrasound was done in February and findings were similar to his 2013 cardiac exam. Over the course of 2013-2014 blood pressure readings were not definitive for hypertension though normal reference ranges have not been established. Because of this, giant panda, Xiao Liwu, was subsequently trained for blood pressure monitoring. In June of 2014, a repeat cardiac ultrasound was done. Pulmonic stenosis and post-stenotic dilation of the pulmonary artery had not significantly progressed but because of continued suspicion of hypertension, a medication to lower blood pressure (amlodipine) was started. After being on amlodipine for 8 months a definitive change in his blood pressure was not demonstrated and there was no large difference between Xiao Li Wu's and Gao Gao's blood pressure measurements so his dose was adjusted.

2015: Keepers trained Gao Gao for awake cardiac ultrasounds so we could monitor his heart more frequently and avoid multiple examinations under anesthesia. In October fluid accumulation around the heart and in his chest was noted in addition to the pulmonic stenosis. At this time Gao Gao was considered to be in right-sided heart failure. Therefore, furosemide, a diuretic to help eliminate excess fluid around his heart and in his chest was started. Another medication, benazepril, was started to dilate blood vessels and reduce the amount of work done by the heart. Follow-up cardiac ultrasounds using behavioral restraint have revealed reduction in the amount of fluid around his heart and in his chest.

2016: Two additional cardiac ultrasounds (awake) have been performed by veterinary cardiologist, Dr. Joao Orvalho, in June & October 2016. Variable amounts of fluid present around his heart and in his chest cavity have been noted but no significant progression of disease based on these ultrasound examinations. Blood pressure monitoring is on-going. Graphic representation of blood pressure measurements are included below. Awake abdominal ultrasounds using behavioral restraint are now being performed to monitor the amount of fluid in his abdomen.

2017: Awake cardiac ultrasounds using behavioral restraint have been done every 3-4 months. No significant cardiac changes have been noted on these examinations.

Inappetence:

Gao Gao maintained normal activity and appetite through the breeding season. Intermittent episodes of lethargy and decreased appetite occurred mid-July into mid-October.

Current medications:

Calcium carbonate

Amlodipine

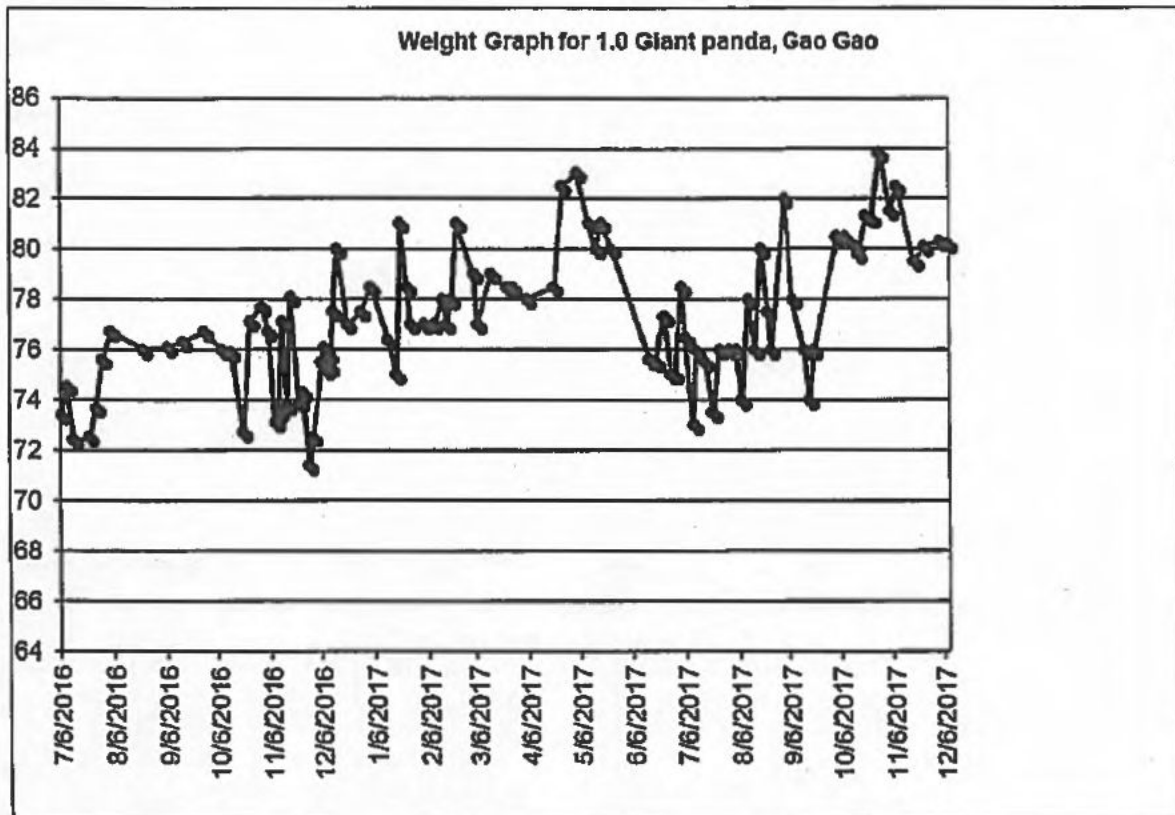
Benazepril

Spiroinolactone

Cosequin started Jan 2017

Summary

1. Gao Gao is a geriatric panda who requires close monitoring of his cardiac disease. Continued awake cardiac ultrasounds are needed to monitor for progression of cardiac disease and adjustment of medications accordingly. Continued blood pressure monitoring is also needed.
2. He requires continued monitoring of his dentition and may need additional dental treatment of left mandibular 2nd molar as well as specialized food preparation to support effective consumption of food materials and a desirable nutritional status.
3. His mobility is expected to decline over time due to the changes in his spine and with exercise intolerance associated with progressive cardiac disease.
4. Continued medical care will need to be supplemented by management adjustments and changes to mitigate and control environmental stressors in order to not exacerbate additional cardiac complications including sudden heart failure.



3. Giant panda, Xiao Liwu, 512108, DOB 29Jul2012

Xiao Liwu has remained healthy with no clinical concerns. He remains asymptomatic for the caudal spinal conformational changes noted in 2016.

We continue to measure awake blood pressures routinely to gather baseline data. He is also trained for venipuncture using behavioral restraint.

Respectfully submitted:
 Meg Sutherland-Smith, D.V.M., Dipl. A.C.Z.M.
 San Diego Zoo

Chinese Directives To Return Giant Pandas To China

"Dear Mabel, Regarding the issues you mentioned in your email, here is our comment after communication with relevant Chinese authorities:

(A) Execution of the current loan extension agreement - In considering the loan extension agreement signed between our two parties in 2013, both Gao Gao and Bai Yun have reached old age already, it is not suitable to extend the loan agreement again. As far as the panda cub, Xiaoliwu, our signed loan extension agreement has clearly stipulated his stay and go status. In view of this, the Chinese side's opinion is to follow the terms of the agreement, including:

(i) Please have the US side submit a written report of the project summary to the Chinese side at the end of December 2017, so that the Chinese side can make timely assessment of the project.

(ii) In considering the apply for CITES export/import permits may take a longer period of time, we suggest both parties should start initiate the quarantine and import and export formalities for the shipment of the three pandas to China at the beginning of 2018 to ensure the fulfillment of the relevant issues of the agreement as scheduled.

(iii) Complete the other related matters stipulated in the agreement.

(B) Regarding new cooperative plan: At present, our two sides have not yet formally discussed the new cooperation plan. Base on the written report of the project submitted by the US side by the end of December 2017, the Chinese side will organize a discussion and assessment group with relevant Chinese authorities, in order to put forward the ideas and suggestions for next step cooperation. The Chinese side will consider going to the San Diego Zoo in the first half of 2018 to conduct on-site assessment exchange and discussion with the Zoo personnel, however, the exact time of visit is not yet certain. This is due to the fact that a couple of large scale events have scheduled between January and early February, the Chinese side will not be able to come to San Diego. The earliest the Chinese side can come will most likely be between March and April 2018.

Thank you for your support and understanding.

Si Ping

Division Chief, CWCA Dept. of International Cooperation

Mabel :

另外，三只从圣地亚哥动物园回来的大熊猫将在都江堰基地检疫隔离。

我放的收货信息如下，请你们和我们填写的内容一致*add是检疫隔离场的具体位置。

Zhang Hemin

China Conservation and Research Center for the Giant Panda

ADD: Shiqiao Village, Qingchenshan Town, Dujiangyan City, Sichuan, P.R.C 611844

Tel:13730879961

有疑问请及时联系我。

祝好

罗瑜

Mabel,

The three giant pandas to be returned from the San Diego Zoo, they will be kept at the Dujiangyan Base.

The consignee address for both CITES export and import permits should be:

Mr. Zhang Hemin

China Conservation and Research Center for the Giant Panda

Shiqiao Village, Qingchenshan Town, Dujiangyan City, Sichuan, P.R.C. 611844

Telephone: [REDACTED]

Please contact me if you have further questions.

Thanks,

Cindy Lo

CCRCP

12/10/2017

**Extension Agreement
On Cooperative Research and Breeding
Of The Giant Panda
2013 – 2018**



**EXTENSION AGREEMENT
ON COOPERATIVE RESEARCH AND BREEDING
OF THE GIANT PANDA**

BETWEEN

CHINA WILDLIFE CONSERVATION ASSOCIATION

AND

ZOOLOGICAL SOCIETY OF SAN DIEGO

10th November 2013

EXTENSION AGREEMENT ON COOPERATIVE RESEARCH AND BREEDING OF THE GIANT PANDA

The China Wildlife Conservation Association (hereinafter "the Chinese Party") and the Zoological Society of San Diego (hereinafter "the American Party") signed the Giant Panda Cooperative Research and Breeding Agreement on May 14, 1994. Subsequently, both parties signed a 5-year extension of the Giant Panda Cooperative Research and Breeding Agreement on December 18, 2008, which ended on September 1, 2013. The cooperative program has achieved excellent scientific research results and positive response from the public.

According to the Convention on International Trade in Endangered Species (CITES) and the regulations and guidelines established by both countries with regards to the conservation of the giant panda, and after friendly consultation, both the Chinese Party and the American Party agreed to continue the cooperative program, and have reached the terms and conditions as follows, dated on 10 November 2013.

Article I: Duration of Cooperation

The term of this Agreement shall be five (5) years (September 1, 2013 to September 1, 2018).

During the term of this Agreement, the Chinese Party shall allow the American Party to retain the pair of giant pandas Gao Gao (male, studbook number 415), Bai Yun (female, studbook number 308) and their offspring Xiao Liwu born in 2012 (male) currently kept at the San Diego Zoo, USA.

The giant panda cub, Xiao Liwu, and any of the offspring born during the term of this Agreement shall return to China younger than four (4) years old.

Both parties agree to conduct a program inspection and evaluation in the US in May 2016.

Article II: Ownership

Ownership of the giant pandas Gao Gao, Bai Yun, Xiao Liwu, and any offspring born during the term of this agreement as well as all the panda biological and genetic materials belong to the Chinese Party.

During the term of this Agreement, the Chinese Party has the right to use the above-mentioned biological and genetic materials in other giant panda conservation projects in China.

Article III: Conservation Support

During the term of this Agreement, the American Party shall transfer, based on relevant regulations in the United States, to the Chinese Party a total of Five Hundred Thousand United States Dollars (US\$500,000) per year for the conservation of giant pandas in China. The agreed payment shall be made in June of each year to the bank account designated by the Chinese Party.

Both parties agree that, of the agreement conservation fund (US\$500,000) provided by the American Party, seventy percent (70%) shall be used for the conservation of the giant panda in China, twenty percent (20%) to the China Conservation and Research Center for the Giant Panda for its scientific research work, and ten percent (10%) to the Chinese Party as part of its project management fees and expenses.

The Chinese Party shall distribute projects based on relevant regulations in China and for the sake of giant panda conservation, and distribute no less than fifty one percent (51%) of the agreed fund towards in-situ conservation according to the "Types of Programs for In-Situ Conservation" as attachment in Appendix 2.1. The Chinese Party shall provide the American Party notification regarding the progress and its activities in January of each year, using the "Brief Table for Program Information" as provided in Appendix 2.2. The Chinese Party also agrees to provide project assessment report using the "Notification Form for Results of Program Implementation" as provided in Appendix 2.3,

either upon completion of a project or on an annual basis when a multi-year project is undertaken.

Article IV: Cooperative Program

An implementation agreement on "Cooperative Research Projects" shall be negotiated and signed by the China Conservation and Research Center for the Giant Panda and the American Party, which should be integrated into this Agreement. Any arrangement concerning research contents, methods and implementation arrangements shall be subject to approval by competent authorities in compliance with relevant regulations.

The Chinese Party shall allow the American Party to utilize the pair of giant pandas "Gao Gao" and "Bai Yun" for further research on senescence and related matters.

Any result derived from the "Cooperative Research Projects" shall be shared by the Chinese Party and the American Party, and no publication or utilization shall be allowed without prior consultation between and in agreement by the two Parties. Research results must be jointly published in the names of both parties.

The American Party shall inform the Chinese Party in advance (except in the case of medical treatment emergency) regarding the collection of giant panda biological materials including blood, sperm, and eggs, etc., provide the Chinese Party copies of research results as well as inform the health status of all the pandas during the implementation of the Cooperative Program. The American Party shall be allowed to collect urine, fecal, scent mark samples, and sample for vaginal cytology without prior approval from the Chinese Party.

Without prior written approval from the Chinese Party, the American Party shall not conduct any activity beyond the term of this Agreement related to the above mentioned giant pandas or their offspring, nor shall the American Party collect samples such as genetic materials of the giant panda for scientific research or transfer any samples to a third party. The American Party may conduct routine health examination or other

necessary activity for emergency anesthesia without approval by the Chinese Party; however, it shall keep record of such activity and preserve any samples collected during the process, and return such record to the Chinese Party upon expiration or termination of this Agreement.

Article V: Giant Panda Transportation Insurance

In the event of the completion or termination of this Agreement, and/or after receiving the Chinese CITES import permit and the US CITES export permit, the American Party shall cease exhibiting the pandas. The American Party agrees to return all giant pandas and relevant preserved genetic/derivative materials to the Chinese Party upon completion of this Agreement, or within sixty (60) days upon the termination of this Agreement subject to both parties having obtained all relevant permits. The American Party shall bear all such transportation expenses.

The American Party agrees to purchase life insurance for the said giant panda(s) (including any giant panda cub over 12 months old) for transportation back to China. The insurance amount shall be One Million US Dollars (US \$1,000,000) and the Chinese Party shall be the sole beneficiary of the said insurance. The American Party shall sign the insurance agreement prior to the transportation of the giant panda(s) to China, and shall provide the Chinese Party a copy of the insurance policy before shipment starts. Shipment shall be following a veterinary evaluation that confirms the pandas are healthy for travel. If the Chinese Party requires the shipment of a giant panda to China that does not meet standard and mutual veterinary shipment requirements, provision of insurance for such animal is waived.

Article VI: Giant Panda Mortality and Compensation Thereof

The American Party shall ensure the safety of the giant pandas during their stay in the US. In the event that any panda (including a newborn cub) dies in the US, the American Party shall immediately notify the Chinese Party via telephone and email. The Chinese Party shall respond to the notification within eight (8) hours and make a proposal for carcass

processing to the American Party, and proceed by sending specialists to the US as early as possible. Scientific processing of the carcass by qualified pathologists, in order to determine a scientifically accurate cause of death, may begin as soon as communication between the American Party and the Chinese Party has been completed or if the Chinese Party does not respond within 8 hours.

It is understood that all biological materials from the deceased panda are property of the Chinese Party. Thus, such biological materials from the deceased panda shall be returned to the Chinese Party or delivered to a designated party under the Chinese Party's instruction. During the term of this Agreement, the American Party shall be allowed to use and transfer giant panda biological materials subject to the advance agreement of the Chinese Party. Each year, prior to the end of October, the American Party shall provide the Chinese Party their needs of using and transferring giant panda genetic materials for the following year. Both parties will obtain required approvals and permits from their government authorities.

Any result obtained from the necropsy shall belong to both Parties, and neither party shall publish or announce the result unilaterally. The American Party agrees to take the responsibility for proper preservation of the giant panda carcass, and to bear any expenses for preservation of the carcass and its transportation to China.

Where it is concluded the death of a giant panda is caused by misconduct by the American Party, the American Party agrees to compensate the Chinese Party for Bai Yun and Gao Gao Four Hundred Thousand US Dollars (US\$400,000) per panda. For any newborn cub of 12 months or older, the compensation is One million US dollars (US\$1,000,000).

If any one of the giant pandas (not including their offspring) dies during the term of this Agreement, both Parties shall friendly negotiate whether to replace the dead one with another panda and whether to maintain the existing giant panda.

Article VII: Daily Management and Safeguard of the Giant Panda

In the event that the American Party plans to undertake risky procedures such as anesthesia (for physical examination, treatment, semen collection, artificial insemination, and pregnancy diagnosis), giving birth, and nursing, the American Party shall inform the Chinese Party sixty (60) days in advance. Once agreed, the Chinese Party may send one to two (1-2) specialists, upon invitation of the American Party, to the US in order to jointly work out implementation plans and execute such procedure subject to the terms and conditions as provided in Appendix 1. If an urgent treatment for disease or injury is necessary, the American Party shall immediately notify the Chinese Party by telephone and email. In the event that the Chinese Party's designated contact person fails to respond to the notification, the American Party may take responsive action toward the medical emergency (including using anesthesia as necessary). In the event that a giant panda is seriously sick or severely injured, the American Party shall invite the Chinese specialist(s) to participate in the treatment.

The American Party shall inform the Chinese Party in writing the general report on rearing, management and health of the giant panda on a quarterly basis. Additionally, a written summary covering twelve (12) months shall be provided to the Chinese Party by the American Party at the end of each year.

In addition to daily monitoring and monthly status report on the giant panda, the American Party shall conduct at least one comprehensive physical examination on the giant panda per year, and provide the examination report to the Chinese Party.

The American Party shall have safety management, patrol and monitoring, and emergency reaction plans in place. In addition, written record concerning safety of the giant panda shall be maintained by attendant(s) of the American Party.

Both Parties shall facilitate information exchange; strengthen cooperation and coordination in the premise of providing healthy and safe living environment for the giant pandas. If disagreement arises between the two Parties, the Chinese Party shall respect

the American Party's opinions in exchange of information. However, any implementation, which may cause danger to the life of the giant panda(s), shall not be made without agreement between the Chinese Party and the American Party.

Article VIII: Obligations

The American Party's Obligations

Take all reasonable steps to obtain all consents, approvals, and permits that are required for the transfer of the Pandas or that are required for the consummation of the transactions and activities contemplated in this Agreement.

Be solely responsible for all costs and expenses associated with the transportation of the Pandas to and from the Chinese port of embarkation/disembarkation to/from the United States of America.

Use the panda only for those purposes contemplated by the cooperative program and not primarily for commercial purposes as defined by the Convention on International Trade in Endangered Species (CITES) and the US Endangered Species Act (ESA). Any use of the pandas for cloning will not be allowed during this term of Agreement.

Ensure the safety of the giant pandas in the USA.

Designate two "named contact persons" for communication with the Chinese Party via telephone and/or email on a regular basis on issues related to management and safety of the animals and on emergency matters (the Chinese Party may contact the American Party at any time).

Chinese Party's Obligations

Provide the American Party with all necessary background information on the pandas, as may be requested by the American Party.

Take all reasonable steps to obtain all consents, approvals; permits that are required for the transfer of the pandas or that are required for the consummation of the transactions and activities contemplated in this Agreement.

Provide project progress and completion reports to the American Party on an annual basis as previously described.

Designated two "named contact persons" for communication with the American Party via telephone and/or email on a regular basis on issues related to management and safety of the animals and on emergency matters (the American Party may contact the Chinese Party at any time).

Article IX: Termination of Agreement

If one party seriously violates the performance of this Agreement, the other party shall have the right to terminate the Agreement.

If the American Party UNILATERALLY, and without legitimate legal reason, fails to pay the relevant conservation funds within the prescribed period, by 30 June of each year or within 30 days of receiving USFWS approval for payment based on timely provided Chinese project reports, whichever date is later, during the term of this Agreement, the American Party shall pay an additional 0.5% of the loan fund per day for each day late. If, after due and diligent payment of relevant conservation funds, international banking problems, not the responsibility of the American Party, delay the deposit of funds into the Chinese account, the American Party shall not be held responsible for penalty payments. If six months overdue without mutually understood and communicated reasons, and payment is still not made by the American Party, the Chinese Party has the right to terminate this Agreement as well as retaining the right of recourse.

Without advance approval from the Chinese Party and consistent with relevant Chinese and U.S. regulations, any giant panda cub born during the term of this agreement must

return to China without extension by its 4th birthday. The American Party, if through unilateral action has delayed the shipment of the cub, shall pay the Chinese Party a compensation of US\$5,000 per day. The American Party however shall not be responsible for penalty payments for relevant governmental delays in permit issuance and shall have 60 days from receipt of a late issued permit to ship the panda to China. The American Party shall also not be responsible for penalty payments if there is an inability of the Chinese Party to receive the panda in a timely fashion. If there are serious airlines complications that delay shipment, the two parties will communicate and come to a mutual agreement without penalty to the American Party. If the return of the cub is overdue 6 months without mutually justifiable reason, the Chinese Party has the right to terminate this Agreement.

Each party shall serve a written, thirty-day (30-day) notice to the other party prior to any termination of this Agreement. Upon any termination of this Agreement, and until the return of the pandas and relevant derivative materials to China, the American Party agrees to continue making payment to the Chinese Party on a pro-rata basis (day-to-day basis).

Upon any termination of this Agreement, the Chinese Party shall, according to pro-rata basis, refund to the American Party the excess conservation funds paid to the Chinese Party prior to the return of the Giant Pandas to China.

Article X: General Provision

No amendment, waiver or consent with respect to any provision of this Agreement shall in any event be effective, unless the same shall be in writing and signed by both parties, and then such amendment, waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

Matters not covered by the Agreement shall be resolved by friendly consultation of both parties.

Any dispute occurred during the course of execution of this Agreement is to be resolved by friendly consultation of both parties. If friendly consultation is unable to settle the dispute, then arbitration will proceed by an arbitration agency acceptable by both parties. Both parties shall accept and execute the arbitration judgment.

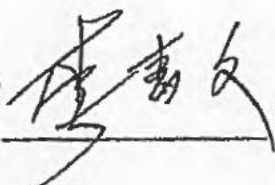
This Agreement, written in both Chinese and English languages, both versions shall have the equal legal effect.

This Agreement and the documents referred to in the Agreement contain the entire understanding among the parties with respect to the transactions completed. The contents of this Agreement shall become effective after the granting of necessary approvals by the relevant authorities of the Chinese and US governments. This Agreement supersedes all other agreements, understandings and undertakings among the parties on this subject matter upon execution by the parties.

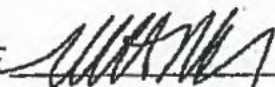
Chinese Party Representative:

American Party Representative:

Signature:



Signature:



Name : Li Qingwen

Name : Matthew N. Musella

Title : Deputy secretary general

Title: Chief Operating Officer

Date : 10 November 2013

Date : 10 November 2013

Organization: China Wildlife Conservation Association

Organization: Zoological Society of San Diego

Address: No.18 Hepingli Dongjie, Beijing, China

Address : 2920 Zoo Dr. San Diego, CA, USA

Tel : 861084239015

Tel : 619-231-1515

Fax : 861064238030

Fax : 619-232-4117

Appendix 1

THE EXTENSION AGREEMENT ON COOPERATIVE RESEARCH AND BREEDING OF THE GIANT PANDA- SUPPLEMENT AGREEMENT

According to the terms of the Agreement for Cooperative Research and Breeding for the Giant Panda signed between the China Wildlife Conservation Association (the Chinese Party) and the Zoological Society of San Diego (the American Party), to reflect the desire to support the conservation of the giant panda in China; both parties reached the following supplement agreement through friendly consultation:

1. Other than the conservation fund stipulated in the "Extension Agreement on Cooperative Research and Breeding of the Giant Panda" signed between the Chinese and American parties; the American Party agrees to provide an additional donation of US\$100,000. annually to the Chinese Party (total US\$500,000. in five years). This amount will be paid in June of each year to the bank account designated by the Chinese Party upon the extension agreement becomes effective.
2. The additional donations provided by the American Party shall be used directly by the Chinese Party for only giant panda conservation purposes in China.
3. During the implementation of risky procedures such as anesthesia (for physical examination, treatment, semen collection, artificial insemination, and pregnancy diagnosis), birthing and nursing, etc., the American Party shall invite 1-2 Chinese specialists to the US. The American Party shall be responsible for the Chinese specialists' international and national transportation, accommodation, and a per diem of US\$100 (including meals) per day for each of the specialist during their stay in the US. The duration of the Chinese specialists shall be discussed and confirmed between both parties based on the circumstance.

4. In the event of any panda(s) is seriously sick or severely injured, or found dead during the term of this Agreement, the American Party shall invite 2-3 Chinese specialists to participate in the treatment or identify cause of death of the animal in the US. In the case of death of a giant panda, the American Party is authorized to begin a scientific necropsy process within 8 hours of notification of the Chinese Party in order to avoid the loss of diagnostic data through carcass decomposition. In the case of serious illness or injury, when immediate medical care is required to preserve a panda's life, the American party is authorized to implement such treatment. The American Party shall be responsible for the Chinese specialists' international and national transportation, accommodation, and a per diem of US\$100 (including meals) per day for each of the specialist during their stay in the US. The duration of stay of the Chinese specialists shall be discussed and confirmed between both parties based on the circumstance.

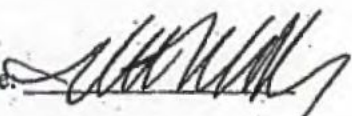
5. Invite five (5) personnel from the Chinese Party to the US in 2016 to conduct a program inspection and evaluation. The Chinese Party will be responsible for the international transportation expenses; the American Party will be responsible for the 5-member delegation's food and lodging in the US.

6. This supplemental agreement reached by both parties serve as an appendix to the "Extension Agreement of the Cooperative Research and Breeding of the Giant Panda", and possesses equal effect.

Chinese Party Representative:

American Party Representative:

Signature: 

Signature: 

Name: Li Qingwen

Date: 10 November 2013

Name: Matthew N. Musella

Date: 10 November 2013

Appendix 2

2.1 Types of Programs for In Situ Conservation

Code Activity Type

1.0.0 Infrastructure for conservation

1.2.0 Construction of basic protection stations and nature reserve administrative offices

1.2.1 Construction and renovation of protection station and nature reserve administrative office

1.2.2 Associated necessities only for protection stations and nature reserve administrative office (e.g. water and power supply

1.2.3 Construction of facilities necessary for field research

1.2.4 Construction of facilities for public education and outreach

1.2.5 Maintenance of above mentioned items

1.3.0 Field gear for the nature reserve

1.3.1 Boundary signs and boundary boards (including for gate plaques, etc.)

1.3.2 Permanent informational boards and tablets, etc. (for outreach purposes)

1.3.3 Patrol posts and observation stations

1.3.4 Patrol roads, culverts, bridges, etc. within the reserve

1.3.5 Field gear and equipment

1.3.6 Meteorological monitoring equipment

1.3.7 Maintenance of above mentioned items

1.4.0 Furnishing and equipment for use by reserve management staff

1.4.1 Office furniture and equipment (computer hardware and software, photocopiers, printers, etc.) for reserve and field offices, both inside and outside reserves

1.4.2 Vehicles (cars and motorcycles) (used solely for law enforcement and reserve activities)

1.4.3 Communication equipment and supplies for reserve and field offices, both inside and outside reserves

- 1.5.0 Habitat restoration and reformation (for field gear, equipment and materials related to habitat restoration, such as shovels, axes, seedling, etc.)
- 1.6.0 Facilities necessary for giant panda conservation outside of nature reserves
- 2.0.0 Conservation management
 - 2.1.0 Field surveys
 - 2.1.1 Baseline surveys
 - 2.1.2 Related research
 - 2.1.3 National Surveys
 - 2.2.0 Training and exchanges
 - 2.2.1 Staff training
 - 2.2.2 Exchanges for nature reserve staff
 - 2.3.0 Compiling plans and reports
 - 2.3.1 Master planning (including for national, provincial and reserve level)
 - 2.3.2 Feasibility research reports
 - 2.3.3 Development of management plans
 - 2.4.0 Conservation education
 - 2.4.1 Production of information material for public outreach
 - 2.4.2 Conservation education activities
 - 2.5.0 Data information systems
 - 2.5.1 Developing and applying GIS
 - 2.5.2 Other data collection and archiving
 - 2.5.3 Monitoring and data processing
 - 2.6.0 Patrolling and monitoring
- 3.0.0 Scientific research
 - 3.1.0 Field research
 - 3.1.1 Habitat and food
 - 3.1.2 Biological and ecological studies of giant pandas
 - 3.1.3 Research on captive giant pandas training and reintroduction

2.2 Brief Table for Program Information

Project Title	Project Type	Site of Implementation	Total Spending (US\$)
Construction of protection station	1.2.0	_____ Nature Reserve	*****

2.3 Notification Form for Results of Program Implementation

Project #	Project Title	Project Type	Brief description (1-2 sentences)	Site of Implementation	Total Spending (US\$)	Project Status
e.g.: WH001	Construction of protection station	1.2.0	Building of protection station damaged by the earthquake	_____ Nature Reserve	****	Completed <i>Month, Year</i>

Addendum 4:
Justification For Requested Activity
Questions 12 a- e

12. If live animals are to be held in captivity as part of the proposed activity:

a. Provide a detailed description and photographs or diagrams clearly depicting the existing facilities where the wildlife will be maintained.

The male giant panda Gao Gao Stb # 415 will be transported from San Diego Zoo to the CCRCGP Dujiangyan Giant Panda Base. He will reside in this location.

Please refer to the following description of the Dujiangyan Giant Panda Base which provides photographs and a description of the facility.

China Conservation and Research Center for the Giant Panda, Wolong Nature Reserve, Dujiangyan Base received its first giant pandas in 2012 upon completion of facility construction. The facility was built to provide a retirement location for aged giant pandas as well as an arrival point for giant pandas being sent to China from other countries for quarantine, acclimation or re-acclimation to China and growth to maturity, as needed.

a. Dujiangyan Facility description

Please refer to images provided.

1. The large giant panda facilities are 2000 square meters (21,527 square feet) outside area with indoor facilities of 40 square meters (430.5 square feet).
2. The smaller giant panda facilities are 1200 square meters (12,916.7 square feet) with indoor facilities of 40 square meters (430.5 square feet).
3. Animal facility perimeter walls are constructed of native stone at a height of 3 to 4 meters with a narrow moat at the base. Glass panels are used in selected areas to enhance viewing and animal observations. These walls are not climbable by giant pandas.
4. Exhibit interior substrates are of native soil with a variety of grasses and vegetation planted in the exhibits.
5. Each animal area is provided with an artificial log climbing platform that allows the animals to utilize the top as a resting area or the underside as a source of shade or shelter from rain. Additional shelter can be provided by opening the doors to the bedroom/management spaces attached to each animal exhibit.
6. A remotely controlled, camera monitoring system has been established for all animal areas. Monitors are housed in the veterinary hospital and administration building.
7. Each animal area provides a source of fresh, potable water to the pandas living within.
8. Bedroom/management spaces with potable water sources are provided for each animal exhibit. These spaces are native stone buildings with cement floors and with traditional steel bars separating interior animal spaces and between animals and care takers.
9. Minimal public viewing of the giant pandas is from the main service road/walkway as indicated in the following pictures.

b. Dujiangyan Center Personnel Expertise:

Deputy Director Li Desheng (李德生) has in excess of 24 years experience working with giant pandas and has received over 12 months of training at the San Diego Zoo's Veterinary Services Division. Mr. Li is currently in charge of all the CCRCGP's giant panda international cooperative programs.

Curator Zhang Guiquan (张贵权) has in excess of 28 years experience working with giant pandas and has received 6 months of training at the San Diego Zoo in general husbandry management. Mr. Zhang currently oversees CCRCGP's giant panda husbandry and breeding management.

Curator Wei Rongping (魏荣平) has in excess of 26 years of experience working with giant pandas and has also received 6 months training at the San Diego Zoo in general husbandry management. Mr. Wei also oversees CCRCGP's giant panda husbandry and breeding management.

Veterinarian Wang Chengdong (王承东) has over 19 years of medical experience in taking care of the health of the giant panda. He is currently responsible for managing CCRCGP's veterinary hospital and overall medical and health matters concerning the giant panda.

All of CCRCGP Dujiangyan animal care staff members are reporting to the above individuals.

c. Number of years this species has been maintained at Dujiangyan

Dujiangyan Base received its first giant pandas in 2012.

d. Dujiangyan Base Giant Panda Breeding Experience:

The Dujiangyan Base is not a giant panda breeding center. No giant panda births have been recorded for Dujiangyan.

e. Dujiangyan Base Giant Panda Mortalities from January 2012 to present:

Since operation was implemented in 2012, Dujiangyan Base has experienced three giant panda deaths.

Male died 25 Jan 2015 – old age and age related medical issues; natural death process

Female died 12 June 2015 – old age and age related medical issues; natural death process

Male died 29 July 2015 – old age and age related medical issues; natural death process.

These deaths were not preventable. Old age deaths at Dujiangyan are to be anticipated.

China Conservation and Research Center for Giant Pandas
Dujiangyan Base
Pictures of the Facility



Administration Building



Dujiangyan Sign



Dujiangyan Overview showing giant panda living quarters



Dujiangyan Overview showing native vegetation and setting



Exhibit interior and perimeter wall

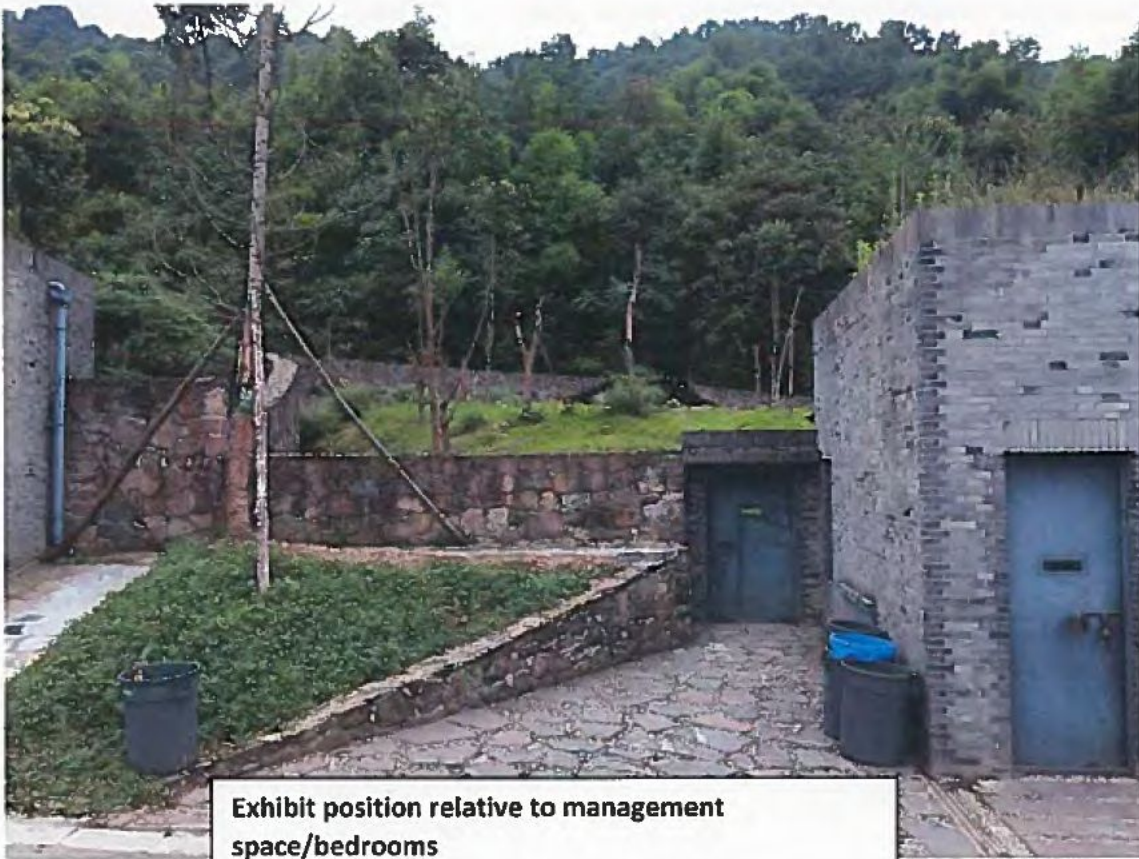




Exhibit Interior



Exhibit Interior



Small Exhibit Interior
showing relative
height of perimeter
walls



Service road and
human walkway



**Exterior of management space
or bedroom**



**Interior of management
space or bedroom.
Potable water contained
is visible on right side.
This is typical for all
animal areas.**



Animal exhibit showing
perimeter wall height and
construction



Animal exhibit perimeter
wall showing camera
monitoring system



Relationship of animal exhibit to public walkway



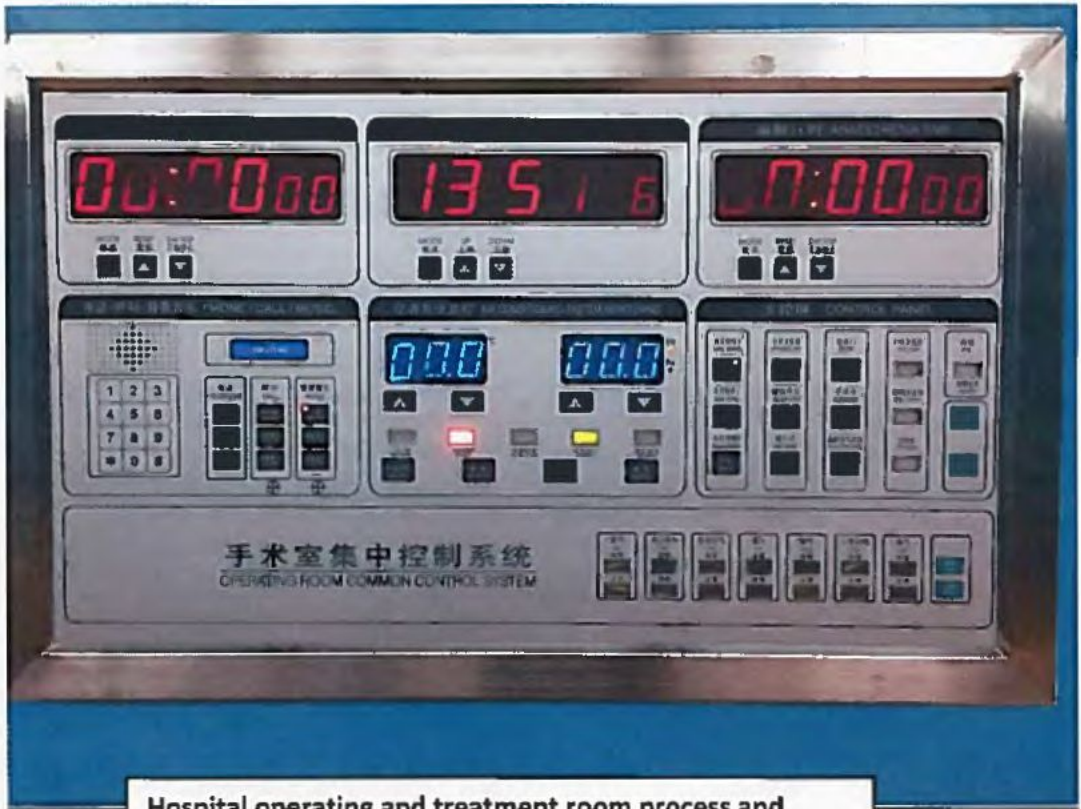
Veterinary hospital entry



Surgical preparation room



Surgical or treatment suite. Some equipment is still being acquired for this facility.



Hospital operating and treatment room process and environmental control panel

ADDENDUM 5

Question 13; Imports, Exports, Or Re-exports

Shipment of Live Specimens

Imports, Exports, or Re-exports

13. For shipment of LIVE specimens, the transport conditions for animals must comply with the CITES Guidelines for Transport of Live Animals or, in the case of air transport, with the International Air Transport Association (IATA) live animal regulations. As such, describe:

a. The type, size, and construction of any shipping container; and

Images of the crate for shipping live giant pandas are provided below. This is the same type of crate previously used for giant panda movements between China and San Diego Zoo.

Crate Dimensions

	Length	Width	Height
Outside Dimensions	77 inches	46 inches	57 inches
Inside Dimensions	72 inches	33 inches	45 inches

Crate Construction

The crate to be used for transport of the giant panda adhere to the principles and specifications for design, construction, feeding and watering capability and general care and loading outlined by International Air Transport Association (IATA) Live Animal Regulations, Container Requirement 72. A copy of these requirements is provided.

The crate to be used has internal dimensions of 72" L x 33" W x 45" H providing ample space for the giant panda to perform activities as described by IATA guidelines. The crate is a metal-frame crate that is partially constructed with perforated sheet metal and heavy-duty scratch and break-proof recycled plastic panels. The floor is made of recycled plastic, is leak-proof and spill-proof. Waterproof pans are used beneath the crate to assure containment of any waste materials. The crate has an easily accessed container for water and a port for provision of food.

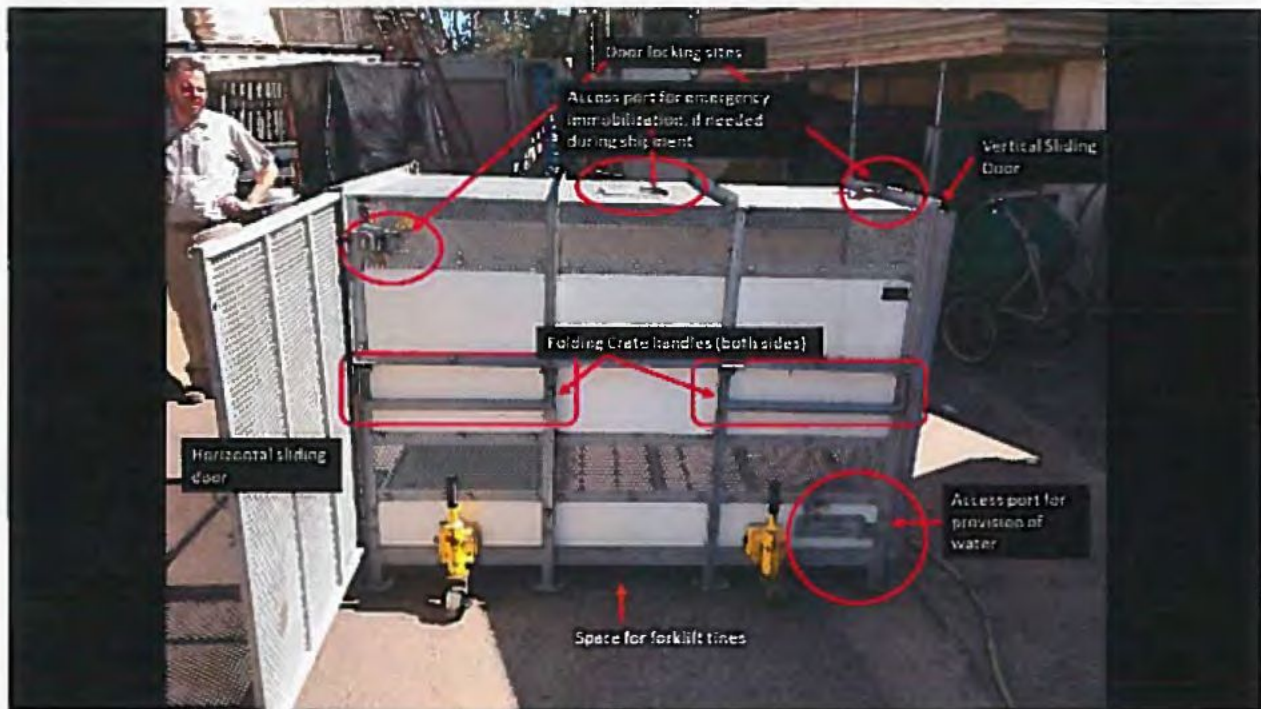
An emergency access port is provided in the top of the crates to allow immobilization by pole syringe if a medical crisis develops during transit. Once the animal is immobilized the crate can be opened safely.

A giant panda inside the crate is easily seen yet has sufficient solid surfaces so it will feel out of view if necessary. This crate structure, including materials used, facilitates and meets air security criteria and Chinese import requirements.

Labeled images of the crate to be used follow.

Shipping Container Image Description

Zoological Society of San Diego (San Diego Zoo) Application to re-export 1.0 Giant Panda
Addendum 5: Imports, Exports, or Re-exports; Question 13





b. The arrangements for watering or otherwise caring for the wildlife during transport.

During domestic and international transport, accompanying staff will have easy access to provide water for the giant panda as needed (see images). Sufficient water will be taken with the transport team for both domestic and international travel periods. The giant panda will be attended to as needed during the entire transport process.

Food will be provided to the giant panda specimen during the entire duration of transport. Food will be replenished as needed. During domestic travel fresh bamboo, giant panda bread (prepared at San Diego Zoo) and commercially prepared biscuits will be provided. During international travel because of Chinese biosecurity and phyto-sanitary guidelines all bamboo and other vegetable products will remain in the United States. At the airport, prior to loading on an aircraft the panda's crate will be cleaned and all vegetable matter as well as fecal matter if any will be removed. Food during international travel will be the cooked panda bread and the commercially prepared pellets that meet Chinese biosecurity and phyto-sanitary guidelines.

Fresh bamboo of Chinese origin will be available upon arrival in China. Time elapsed without bamboo will unlikely exceed 15 hours.

Temperature control will be maintained by truck air-conditioning during land transport. During air transport the aircraft climate control systems will regulate temperatures within IATA standards.

Domestic Transport:

The giant panda specimen will be transported from San Diego Zoo to Los Angeles International Airport overland via enclosed, air-conditioned truck. San Diego Zoo staff, who have worked with the specimens, will transport them and be in constant attendance. Also in attendance will be a Chinese veterinarian as well as a veterinarian from San Diego Zoo. At Los Angeles International Airport, the giant panda and attending traveling staff will be transferred to the most appropriate pre-arranged international flight to China following USFWS and Customs clearance.

If there is a need to use San Francisco International Airport the animals will be transported to San Francisco from San Diego International airport by air cargo or chartered flight. The animals will be accompanied by professional staff as described above.

International Travel:

Final arrangements have yet to be made and cannot be finalized until all necessary permits have been acquired. The intent is to have the giant pandas transported by air freighter to allow constant attendance of the giant panda by accompanying staff.

Attending Staff:

During all phases of transport, the giant panda specimens will be attended by one San Diego Zoo giant panda experienced veterinarian, one Chinese veterinarian from the China Conservation and Research Center for the Giant Panda Dujiangyan Base and one giant panda experienced Collection Husbandry Science staff member. Individual personnel for this travel have not yet been identified and will not be until closer to the shipment of the specimens.

Shipment plans are in full compliance with CITES Guidelines for Transport of Live Animals (as described in Resolution Conf. 10.21 (Rev.CoP16) as well as the International Air Transport Association (IATA) live animal regulations.

IATA Live Animal Regulations
Shipping Container Requirement 72

CONTAINER REQUIREMENT 72

The illustrations shown in this Container Requirement are examples only. Containers that conform to the principle of written guidelines for the species but look slightly different will still meet the IATA standards.

Applicable to:

- Bear species
- Binturong
- Cheetah
- Jaguar
- Leopard species
- Lion species
- Panther species
- Puma species
- Snow leopard
- Tasmanian devil
- Tiger

Note:

The above species must be provided with space to lie comfortably but not turn around, except for bear species and binturong which must have space to turn around. There must be at least a 10 cm (4 in) clearance around the animal when standing in a normal position. For polar bears only, containers must be of sufficient size to allow the animal to turn around freely in a four paw stance, to sit in an upright position, and to lie down in a natural position with all body parts contained within the crate.

Note:

Should a veterinary certificate be provided stating that the large cat being shipped is suitable to be transported in a container which permits it to turn around, that container may be accepted for shipment.

STATE VARIATIONS: GBG-01/02/03/04,
USG-Variations

OPERATOR VARIATIONS: GF-07, QF-01, SV-01

1. CONTAINER CONSTRUCTION

Principles of Design

The following principles of design must be met in addition to the General Container Requirements outlined at the beginning of this chapter.

Materials

Hardwood, metal, 1.3 cm minimum (½ in) plywood or similar material, welded mesh, iron bars.

Dimension

The height of the container must allow the animal to stand erect with its head extended and the length must permit it to lie in the prone position. The measurements will vary with the species involved.

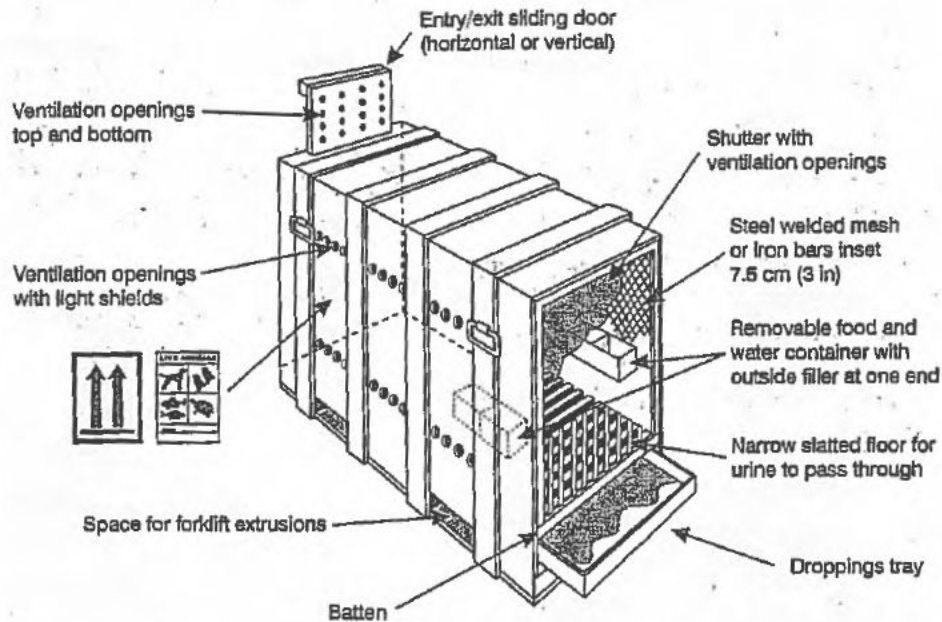
Frame

The frame must be made from solid wood or metal bolted or screwed together. The frame must provide the spacer bar requirement of 2.5 cm (1 in) depth to the sides for air circulation. When the weight of the container plus animal exceeds 60 kg (132 lb), or the animal is very aggressive the frame must have additional metal re-enforcing braces.

Sides

Suitable plywood or similar material must line the frame to give a smooth and strong interior.

EXAMPLE:



Floor

The floor must either be constructed in a narrow slatted form over a liquid proof tray in such a manner that all the excreta falls onto the tray or, if a slatted floor is not required for that species, it must be leak-proof and covered by sufficient absorbent material in order to prevent any excreta escaping.

When slats are used, they must be resistant to destruction by the animal. Expanded metal may be preferable with some species.

Roof

Must be solid.

Doors

Sliding or hinged entry/exit door must be provided. The front entry/exit door and the opposite end must be made of welded steel mesh or strong iron bars. The iron bars must be spaced in such a way that the animal cannot pass its legs between them.

Alternatively, the front entry/exit door may be made from heavy plywood, steel lined, with ventilation openings, while the end is made of welded steel mesh or strong iron bars. When welded steel mesh or strong iron bars are used, they must be covered with a light sliding wooden shutter. The upper two thirds of the shutter must have either ventilation openings of 10 cm (4 in) or slats with 7 cm (2¾ in) spaces between them, in order to reduce the disturbance to the animal and to protect the handlers.

The mesh or bars may also be covered with burlap or similar material instead of the shutter.

The door must be fastened with screws or bolts in order to prevent accidental opening.

Ventilation

Ventilation openings must be placed at heights that will provide through ventilation at all levels, particularly when the animal is lying down in a prone position. Exterior meshed ventilation openings, with a minimum diameter of 2.5 cm (1 in), must be made on the sides, entry door and roof, as shown in the illustration.

Spacer Bars/Handles

Must be made to a depth of 2.5 cm (1 in), and formed from the framework of the container.

Feed and Water Containers

Food and water containers must be fixed off the floor, to prevent soiling, at the front of the container. Safe outside access must be provided for filling in emergency.

Special Requirements

Bears and other strong clawing animals must have the container totally lined with sheet iron or other hard metal sheeting with ventilation openings punched through to the exterior.

Forklift Extrusions

Must be provided if the total weight of the container plus animal exceeds 60 kg (132 lb).

Multiple Containers

When more than one animal is to be carried in a container, multiples of the above requirements must apply. The container can be divided into compartments by the use of partitions made of metal grills. There must be a separate access into each compartment. Compatible animals that are not likely to harm each other during shipment need not be separated by a partition.

2. PREPARATIONS BEFORE DISPATCH (see Chapter 5)

Food intake must be reduced 2 to 3 days before shipment. A light meal may be given prior to dispatch and food must be provided in case of emergency.

These species must be kept in darkened containers to avoid stimulus from their surroundings. They have the tendency to become aggressive and belligerent if disturbed by outside interference or noise.

3. FEEDING AND WATERING GUIDE (for emergency use only)

Animals do not normally require feeding or watering during 24 hours following the time of dispatch.

If feeding or watering is required due to an unforeseen delay, feed once daily, preferably late afternoon, 1 kg of

meat per 20 kg (1 lb per 22 lb) of live weight. Polar bears will also eat fish and brown bears like fish and fruit.

4. GENERAL CARE AND LOADING (see Chapters 5 and 10)

Animals covered by this Container Requirement prefer to travel in darkness or semi-darkness. For polar bears only, cargo compartment temperature and ventilation requirements should be discussed with the airline prior to the transport.

Transport at lower cabin pressure altitudes is preferable for polar bears. Special arrangements should be made with the airline prior to the transport.

ADDENDUM 6

Question 18; Import, Export, or Re-export

18. If the specimen is being re-exported (e.g., exporting a specimen that was previously imported into the United States), provide:

a. A copy of the canceled CITES export or re-export document issued by the appropriate CITES office in the country from which the wildlife was imported (if applicable); and

A copy of the canceled Chinese CITES export document 2002CN/EC0204/AH is provided. A copy of the Chinese health certificate is also included.

b. A cleared copy of Form 3-177, wildlife Declaration for Import; OR

Please refer to the attached 3-177 form which was signed and cleared on 01/5/2003 (also provided in Addendum 2).

An additional copy of U.S. import permit 02US053884/9 is provided.

c. If you did not make the original import, provide a copy of the importer's documents outlined above and the invoice or other documentation that shows you acquired the wildlife from the original importer or history of transactions which demonstrate chain of ownership.

Not Applicable

Chinese Export Document:

CITES Export Permit 2002CN/EC0204/AH

Chinese Health Certificate 519999803000016



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

濒危野生动植物种国际贸易公约

PERMIT/CERTIFICATE FOR IMPORT/EXPORT & REEXPORT

允许进出口证明书

☒ XX EXPORT 出口

☐ RE-EXPORT 再出口

☐ IMPORT 进口

☐ OTHER 其它

1. PERMIT/CERTIFICATE No. 证号

2002CN/EC0204/AH

2. Valid Until 有效期至

JUN.12, 2003

3. Importer (Name, Address and Country) 进口者 (名称, 地址和国家)
THE ZOOLOGICAL SOCIETY OF SAN DIEGO

P.O. BOX 120551, SAN DIEGO, CA 92112-0551, U.S.A.

4. Exporter (Name, Address and Country) 出口者 (名称, 地址和国家)
CHINA CONSERVATION AND RESEARCH CENTER FOR THE
GIANT PANDA
WOLONG NATURE RESERVE, WENCHUAN
COUNTY, SICHUAN PROVINCE 623006, P.R. CHINA

3a. Import Port 进口口岸 US LOSANGELES

4a. Export Port 出口口岸 CN SHANGHAI

5. HS Code and Special Conditions 海关协调制度编码及特殊条件
01061990 10. Information of the Giant Panda specified in this
permit: "Gao Gao"; Male; Studbook No. 415; Born 1990. 本证所列
大熊猫基本信息: 姓名"高高"; 性别: 雄性; 国际谱系号415; 生于约
1990年。

For live animals, this permit or certificate is only valid if the transport conditions
confirm to the Guidelines for Transport of Live Animals or, in case of air
transport, to the IATA Live Animals Regulations. This permit/certificate is only
valid for ONE entry/exit. 对于活体动物, 只有当运输条件符合《活体动物运输
指南》或空运条件符合 IATA《活动物运输规则》要求的情况下, 本证明书方为
有效。本证书仅限一次性使用。

6. Name, Address, National Seal of Management Authority
管理机构名称, 地址, 国家印记



The Endangered Species
Import and Export Management Office
of the People's Republic of China
Add: 18 Hepingli Dongjie, Beijing 100714
The People's Republic of China
Tel: 86-10-84239001, 84239008
Fax: 86-10-64214180, 64299515
中华人民共和国濒危物种进出口管理办公室
地址: 中华人民共和国
北京市东城区和平里东街18号
邮政编码: 100714
电话: 86-10-84239001, 84239008
传真: 86-10-64214180, 64299515

5a. Purpose of Transaction
贸易目的

S

5b. Security Stamp No.

安全印花号

NONE

7 40. 序号	7a Species (Chinese & Scientific) Name 中文名(中文名, 学名)	7b Appendix 附录	7c Source 来源	7d Description 标本类型	7e Quantity or Weight /Unit 数量或重量/单位	7f Origin of Country 原产地
A	大熊猫 <i>Ailuropoda melanoleuca</i>	I	W	活体 Live	*1. Hd *****	CN
	*****LAST ITEM*****			LAST RE-EXPORT: IMPORT: US 02-11-13 02US053884/9		

8. THIS PERMIT/CERTIFICATE IS ISSUED BY

发证机关

Hepingli, Beijing

DEC.17, 2002

陈光甫



Place 地点

Date 日期

Signature 签名

Security Stamp and Official Seal 安全印花及公章

9. For Customs Official Use Only

海关备注

9a. Bill of Lading/Airway-bill Number

提单/空运单号

Block 栏目	Quantity/Unit 数量/单位
A	
B	



中华人民共和国出入境检验检疫
ENTRY-EXIT INSPECTION AND QUARANTINE
OF THE PEOPLE'S REPUBLIC OF CHINA

正本
ORIGINAL
共1页第1页 Page 1 of 1
510000803000016

动物卫生证书
ANIMAL HEALTH CERTIFICATE

编号 No.:

发货人名称及地址

Name and Address of Consignor CHINA RESEARCH AND CONSERVATION CENTER FOR THE GIANT PANDA

收货人名称及地址

Name and Address of Consignee SAN DIGO ZOO. USA

动物种类

Species of Animals GIANT PANDA

动物学名

Scientific Name of Animals *****

动物品种

Breed of Animals *****

产地

Place of Origin SICHUAN, CHINA

报检数量

Quantity Declared -1-HEAD

检验日期

Date of Inspection 4 NOV., 2002--10 JAN., 2003

启运地

Place of Despatch SHANGHAI

发货日期

Date of Despatch JAN., 2003

到达国家/地区

Country/Region of Destination U.S.A

运输工具

Means of Conveyance BY AIR

1. THE ANIMAL DESCRIBED ABOVE IS COMING FROM NON-INFECTED AREA.
2. THE ANIMAL HAS BEEN ISOLATED AND QUARANTINED FOR ONE MONTH BY THIS BUREAU AND NO CLINICAL EVIDENCES OF INFECTIOUS DISEASE WAS FOUND DURING THE QUARANTINE PERIOD.
3. THE ANIMAL HAS BEEN TREATED AGAINST INTERNAL AND EXTERNAL PARASITES.
4. ALL MEANS AND CONTAINER FOR TRANSPORTING THE ANIMAL HAVE BEEN CLEANED AND DISINFECTED WITH OFFICIALLY APPROVED DISINFECTANTS.



印章

Official Stamp

四 证地

Place of Issue CHENGDU

签证日期 Date of Issue 10 JAN., 2003

Official Veterinarian

CAO ZONGJUN

签

名 Signature

Import Document: Male Giant Panda Studbook # 415 "Gao Gao"

3-177 Declaration for Import 01/15/2003



DECLARATION FOR IMPORTATION
OR EXPORTATION OF
FISH OR WILDLIFE

Please Type or Print Legibly

1. Date of Import/Export: (mm/dd/yyyy)
01/15/2003

2. I/E License Number:
02US060416/9

3. Indicate One:
☒ Import ☐ Export

4. Port of Clearance:
LOS ANGELES C A

5. Purpose Code:
2

6. Customs Entry Number:
[REDACTED]

7. Name of Carrier:
AIR CHINA (CA)

8. Air Waybill or Bill of Lading Number:
Master: [REDACTED]
House: [REDACTED]

9. Transportation Code:
A
License _____ State _____

10. Bonded Location for Inspection:
AIR FRANCE WAREHOUSE

11. Number of Cartons Containing Wildlife:
ONE

12. Package Markings Containing Wildlife:

13. (Indicate one) (complete name / address / phone number)
☒ U.S. Importer of Record
☐ U.S. Exporter SAN DIEGO ZOO
POB 120551
SAN DIEGO, CA 92112
(619) 231-1515

14a. Foreign Supplier / Receiver:
(complete name / address / phone number)
CHINA CONSERVATION AND RESEARCH CENTER FOR
THE GIANT PANDA. WOLONG NATURE RESERVE
WENCHUAN COUNTY, SICHUAN PROVINCE 623006
PEOPLE'S REPUBLIC OF CHINA

14b. C N

15. Customs Broker, Shipping Agent or Freight Forwarder:
[REDACTED]

Species Code (Official Use)	16a. Scientific Name	17a. Foreign CITES Permit Number	18a. Description Code	19a. Quantity / Unit	20. Country of Origin of Animal
	16b. Common Name	17b. U.S. CITES Permit Number	18b. Source	19b. Total Monetary Value	
	<u>Ailuropoda Melanoleuca</u>	<u>2002CN/EC0204/AH</u>	<u>LIV</u>	<u>1.0</u>	<u>CHINA</u>
	<u>GIANT PANDA</u>	<u>02US053884/9</u>	<u>W</u>	<u>\$12,077.30</u>	

Knowingly making a false statement in a Declaration for Importation or Exportation of Fish or Wildlife may subject the declarant to the penalty provided by 18 U.S.C. 1001 and 16 U.S.C. 3372 (d)

21. I certify under penalty of perjury that the information furnished is true and correct:
Jiren Sund Jan-15/03
Signature Date

Action/Comments: [REDACTED] FOR OFFICIAL USE ONLY

Wildlife Inspected:
None / Partial

NOTICE

Import Document: Male Giant Panda Studbook # 415 "Gao Gao"

Import Permit 02US053884/9



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

IMPORT PERMIT

Original Permit/Certificate No.

02US053884/9

2. Valid until

05/12/2003

3. Permittee (name and address, country)

ZOOLOGICAL SOCIETY OF SAN DIEGO
SAN DIEGO ZOO
2920 ZOO DRIVE
SAN DIEGO, CA 92101
U.S.A.

4. Consignee (name and address, country)

CHINA CONSERVATION AND RES. CENTER FOR THE GIANT PANDA
WOLONG NATURE RESERVE, WENCHUAN COUNTY
SICHUAN PROVINCE 623006
PEOPLE'S REPUBLIC OF CHINA

5. Special Conditions

MUST COMPLY WITH ATTACHED GENERAL PERMIT CONDITIONS

U.S. ENDANGERED SPECIES [50 CFR 17.22]

THIS REPLACES AND AMENDS 02US053884/9 ISSUED 11/5/02.

5a. Purpose of Transaction

S

5b. Security No.

014360

6. U.S. Management Authority

DIVISION OF MANAGEMENT AUTHORITY
U.S. FISH AND WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR
WASHINGTON, D.C. 20240
UNITED STATES OF AMERICA

11/13/2002

Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and species) of Animal or Plant

A. Common Name
GIANT
PANDA

Scientific Name
Ailuropoda
MELANOLEUCA

9. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)

9. IMPORT: 1.0; WILD BORN CIRCA 1990, STUDBOOK#
415, "GAO GAO".

10. Appendix No. and Source

10. W

11. Quantity (including units)

NO

12. Country of Origin

CHINA

B. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

C. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

D. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

E. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Specimen(s) will not be used for primarily commercial purposes. The recipient has suitable facilities to house and care for the specimen(s).

THIS CHECK IS VOID WITHOUT A WATERMARK - HOLD TO LIGHT TO VIEW

Zoological Society of San Diego

Bank of America
450 B Street
San Diego CA 92101

121000358

CHECK DATE	CHECK NO.
3/28/2018	
CHECK AMOUNT	

PO Box 120551 San Diego CA 92112-0551

PAY **One hundred and 00/100 Dollars**

\$** 100.00

TO
THE
ORDER
OF

US FISH AND WILDLIFE SERVICES
Branch of Permits MS: IA
5275 Leesburg Pike
Falls Church, VA 22041-3803
United States

Douglas S. Myers

Paula S. Brock

AUTHORIZED SIGNATURE

SIGNATURE HAS A COLORED BACKGROUND - BORDER CONTAINS MICROPRINTING