



Bear TAG

4th Edition

Regional Collection Plan



Regional Collection Plan

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December 2015

Bear Taxon Advisory Group

Association of Zoos and Aquariums (AZA)

www.aza.org

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Bear TAG

Regional Collection Plan

Mission Statement and Summary of Goals

MISSION STATEMENT

The Bear Taxon Advisory Group (Bear TAG) supports bears around the world through *ex situ* and *in situ* activities, including management strategies, education, research, upholding welfare standards, conservation programs, and advocacy for bears.

SUMMARY OF GOALS

a. Genetic and Demographic Management

The Bear TAG will attempt to maintain genetically and demographically healthy, well-managed captive populations of bears for public education and scientific study and to generate support of *in situ* conservation.

b. Education

The Bear TAG will promote consistent educational messaging about bears and their plight in the wild.

c. Research and Conservation

The Bear TAG will maximize the conservation and research potential of captive bear populations by:

- evaluating and prioritizing research projects involving AZA bears;
- supporting selected bear conservation projects with Bear TAG funds

d. Quality of Life

To maintain the health and promote the well-being of captive bears, the TAG will:

- work with the AZA and individual program leaders to produce Animal Care Manuals for the care of each of the species under the TAG.
- provide support to individual AZA institutions to ensure that husbandry, exhibition, and interpretive programs: 1) accurately portray the biology and conservation status of the species, 2) do not require bears to behave in ways that detract from their dignity or inherent value, 3) minimize hand rearing and promote the development of species-typical behaviors; and 4) do not detract from the conservation of the species or welfare of the individual.

Bear TAG Structure

BEAR TAG GROUP STRUCTURE AND MEMBERSHIP

The Bear TAG has five officers (Chair, Vice Chair, Immediate Past Chair, Secretary, and Treasurer) and a nine member Steering Committee. All officers are voting members. Eight of the Steering Committee members have voting privileges. The ninth Steering Committee position is specified to be held by a bear keeper and this member is non-voting. The Bear TAG also has program leaders for each of the eight bear species and advisors. Program leaders and advisors are non-voting.

Institutional Representatives

All AZA institutions may appoint one Institutional Representative (IR) to the Bear TAG. The primary responsibility of the IRs is to communicate with the steering committee and disseminate information from the TAG to their respective institutions.

The Steering Committee is elected from the pool of IRs. Steering committee members serve three-year terms with no term limits. Steering committee members are responsible for taking part in decision-making in TAG operation, assisting with the development of the Regional Collection Plan, oversight of program management, leadership of standing and *ad hoc* committees, and other administrative duties as needed. Steering committee members are required to have access to electronic communication, and are encouraged to attend at least one Bear TAG meeting each year.

Bear TAG officers are elected from the steering committee by the steering committee. The chair serves a four year term. The vice chair serves a four year term and then is expected to become chair. This structure ensures that the TAG has consistency in direction while allowing greater participation in the leadership role by steering committee members. The treasurer and secretary may serve unlimited terms for as long as they sit on the steering committee.

The Denver Zoo maintains Bear TAG funds in an audited account. Financial reports are provided to the Chair and Steering Committee quarterly. Distribution of Bear TAG funds for amounts up to \$300 requires approval of the Chair and Vice Chair. For amounts greater than \$300, the Chair, Vice Chair, and a 2/3 majority of the entire Steering Committee must provide approval.

Advisors are appointed by the Steering Committee. Advisors to the TAG include Program Leaders (i.e., SSP Coordinators, Studbook Keepers, and Species Managers) as well as experts in the fields of research, education, nutrition, reproduction, veterinary medicine, record keeping, conservation, husbandry and welfare, and representatives from WCMC, IUCN, and range country sanctuaries. Advisors are non-voting participants in TAG operations and management.

Officers:

Chair: **Rebecca Snyder**, Ph.D., Oklahoma City Zoo, rsnyder@okczoo.org, 405-425-0256

Vice Chair: vacant

Immediate Past Chair: **Debbie Thompson**, Little Rock Zoo, dthompson@littlerock.org, 501-661-7206,

Secretary: **Ann Konopik**, International Exotic Animal Sanctuary, akonopik@bigcat.org, 410-713-9138

Treasurer: **B.J. Schoeberl**, Denver Zoo, bjschoeberl@denverzoo.org, 720-337-1505

Steering Committee:

Diana Weinhardt, Minnesota Zoo, Diana.Weinhardt@state.mn.us, 952-431-9372,

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Program Leaders:

Scott Silver, Ph.D., Andean Bear SSP Coordinator, Queens Zoo, ssilver@wcs.org, 718-271-3622

Mike Connolly, Andean Bear Studbook Keeper, Tulsa Zoo, mconnolly@tulsazoo.org, 918-669-6214

Randi Meyerson, DVM, Polar Bear SSP Coordinator and Polar Bear Studbook Keeper, Toledo Zoological Gardens, randi@toledozoo.org, 419-385-5721 ext. 2052

Ron Swaisgood, Ph.D. Giant Panda SSP Coordinator, San Diego Zoo Global, rswaisgood@sandiegozoo.org, 760-291-5431

Travis Vineyard, Sloth Bear SSP Coordinator and Sloth Bear Studbook Keeper, Cleveland Metroparks Zoo, tg@cleveandmetroparks.com, 216-635-3350

Gaylene Thomas, Sun Bear Studbook Keeper, San Diego Zoo Global, gthomas@sandiegozoo.org, 619-231-1515 ext. 4020

Travis Vineyard, Asiatic Black Bear Studbook Keeper, Cleveland Metroparks Zoo, tg@cleveandmetroparks.com, 216-635-3350

Gail Karr, Brown Bear Registry Keeper, Memphis Zoo, gakarr@memphiszoo.org, 901-333-6702

Ann Konopik, Black Bear Registry Keeper, International Exotic Animal Sanctuary, akonopik@bigcat.org, 410-713-9138

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Terri Roth, Ph.D., Reproduction Advisor, terri.roth@cincinattizoo.org, 513-569-8220

Bear TAG Taxa

The bear family consists of eight extant species. All eight species fall within the Bear TAG's purview. The following taxonomic classifications are taken from Wilson, D.E., & Mittermeier, R.A., eds. (2009). *Handbook of the Mammals of the World*, Vol. I. Carnivores. Lynx Edicions, Barcelona. Subspecies information is only provided for the sun bear, because this is the only bear species currently managed as distinct subspecies populations within AZA institutions.

GIANT PANDA (Common name)

Family: Ursidae

Subfamily: Ailuropodinae

Genus: *Ailuropoda*

Species: *melanoleuca*

ASIATIC BLACK BEAR (Common name)

Family: Ursidae

Subfamily: Ursinae

Genus: *Ursus*

Species: *thibetanus*

ANDEAN BEAR (Common name)

Family: Ursidae

Subfamily: Tremarctinae

Genus: *Tremarctos*

Species: *ornatus*

AMERICAN BLACK BEAR (Common name)

Family: Ursidae

Subfamily: Ursinae

Genus: *Ursus*

Species: *americanus*

SUN BEAR (Common name)

Family: Ursidae

Subfamily: Ursinae

Genus: *Helarctos*

Species: *malayanus*

Subspecies: *H. m. malayanus* (commonly referred to as mainland subspecies)

Subspecies: *H. m. eurypilus* (commonly referred to as Bornean subspecies)

BROWN BEAR (Common name)

Family: Ursidae

Subfamily: Ursinae

Genus: *Ursus*

Species: *arctos*

POLAR BEAR (Common name)

Family: Ursidae

Subfamily: Ursinae

Genus: *Ursus*

Species: *maritimus*

SLOTH BEAR (Common name)

Family: Ursidae

Subfamily: Ursinae

Genus: *Melursus*

Species: *ursinus*

Conservation Status of the Bears

Of the eight extant bear species, only one, the giant panda, has endangered status according to the International Union for Conservation of Nature (IUCN) Red List and the United States (US). Five species, the Andean bear, sun bear, sloth bear, Asiatic black bear, and polar bear, are listed as vulnerable on the IUCN Red List. The Andean bear, sun bear, and sloth bear are not listed by the US. One subspecies of Asiatic black bear (*Ursus thibetanus gedrosianus*) is listed as endangered by the US. The polar bear is listed as threatened by the US. The American black bear and brown bear have least concern status on the IUCN Red List. One subspecies of American black bear (*Ursus americanus luteolas*) is listed as threatened by the US. The brown bear is listed as threatened in the lower 48 US states by the US and some subspecies of brown bear are listed as endangered by the US. All bear species which do not occur in the US, giant panda, Andean bear, sun bear, sloth bear, and Asiatic black bear, are listed as CITES Appendix I. The American black bear and polar bear are CITES Appendix II. The brown bear is CITES Appendix II, except for the populations of Bhutan, China, Mexico and Mongolia, which are included in Appendix I. Table I summarizes this information.

Table I: Conservation status of the bears.

Common Name	Scientific Name	U.S. ESA	IUCN Red List	CITES
Giant panda	<i>Ailuropoda melanoleuca</i>	Endangered	Endangered	Appendix I
Andean bear	<i>Tremarctos ornatus</i>	Not listed	Vulnerable	Appendix I
Sun bear	<i>Helarctos malayanus</i>	Not listed	Vulnerable	Appendix I
Sloth bear	<i>Melursus ursinus</i>	Not listed	Vulnerable	Appendix I
Asiatic black bear	<i>Ursus thibetanus</i>	Subspecies <i>U.t.gedrosianus</i> endangered	Vulnerable	Appendix I
American black bear	<i>Ursus americanus</i>	Subspecies <i>U.a.luteolus</i> threatened	Least concern	Appendix II
Brown bear	<i>Ursus arctos</i>	Threatened in US Some subspecies endangered	Least concern	Appendix II Except the populations of Bhutan, China, Mexico and Mongolia, which are included in Appendix I.
Polar bear	<i>Ursus maritimus</i>	Threatened	Vulnerable	Appendix II

Species Selection Criteria

These are the criteria used to determine how the Bear TAG oversees each species of bear in AZA institutions:

1. IUCN Red List status.
2. Ease of breeding. Specifically, status of offspring production in the last five years.
3. Institutional interest and resources available to take steps necessary to achieve a sustainable population. Specifically, commitment to increase the female probability of breeding and/or import individuals into the AZA population.
4. Status of studbook and population viability analysis to determine if number of individuals, demography, breeding history, and projected gene diversity are known.
5. Number of individuals in AZA institutions, demography, and projected gene diversity.
6. Available space in AZA institutions.

Bear TAG Decision Tree

The following is the decision tree used to apply the species selection criteria listed above to the eight species of bears:

1. Is the species listed as endangered or vulnerable according to the IUCN Red List?
 - YES – proceed to Question 2
 - NO – designate as MONITORED POPULATION NOT RECOMMENDED FOR BREEDING
2. Has the AZA population produced any surviving offspring in the last 5 years?
 - YES – proceed to Question 4
 - NO – proceed to Question 3
3. Is there adequate institutional interest and resources to increase the female probability of breeding and/or import individuals into the AZA population?
 - YES – proceed to Question 4
 - NO – designate as PHASE OUT
4. Is there a current studbook for the species?
 - YES – proceed to Question 5
 - NO – determine number of animals in AZA institutions, then proceed to Question 5
5. Is there a current Population Viability Analysis (PVA) for this species?
 - YES – proceed to Question 6
 - NO – determine projected gene diversity, then proceed to Question 6
6. Are there currently 50 or more animals at 3 or more AZA institutions and is the projected gene diversity 90% or above for the next 100 years?
 - YES – designate as GREEN SSP
 - NO – proceed to question 7
7. Are there currently 50 or more animals at 3 or more AZA institutions and is the projected gene diversity less than 90% for the next 100 years?
 - YES – designate as YELLOW SSP
 - NO – proceed to question 8
8. Are there currently 20-49 animals at 3 or more AZA institutions and is the projected gene diversity less than 90% for the next 100 years?
 - YES – designate as RED SSP
 - NO – proceed to question 9
9. Is there appropriate space available to maintain a demographically stable population of this species in an AZA program?
 - YES – proceed to Question 1
 - NO – designate as NOT RECOMMENDED

Outcome of Bear TAG Species Selection Criteria

Table 1: Animal program designations based on species selection criteria

Common Name (Genus species)	IUCN Status	Recent Surviving Offspring	Institutional Interest and Resources	Current Studbook	Current PVA	# Animals	Projected Gene Diversity >90%	Designation
Giant panda (<i>Ailuropoda melanoleuca</i>)	Endangered	Yes	Yes	Yes	No	396	Yes	Green SSP
Andean bear (<i>Tremarctos ornates</i>)	Vulnerable	Yes	Yes	Yes	Yes	49	No	Red SSP
Sun bear (<i>Helarctos malayanus</i>)	Vulnerable	No	No	Yes	Yes	37	No	Phase Out
Sloth bear (<i>Melursus ursinus</i>)	Vulnerable	Yes	Yes	Yes	Yes	40	No	Red SSP
Asiatic black bear (<i>Ursus thibetanus</i>)	Vulnerable	No	No	Yes	No	24	No	Phase Out
American black bear (<i>Ursus americanus</i>)	Least Concern	No	NA	No	No	224	Unknown	Monitored Non-Breeding
Brown bear (<i>Ursus arctos</i>)	Least Concern	No	NA	No	No	122	Unknown	Monitored Non-Breeding
Polar bear (<i>Ursus maritimus</i>)	Vulnerable	Yes	Yes	Yes	Yes	69	No	Yellow SSP

Table 2: Bear TAG Animal Program Summary Table

Common Name (Genus species)	Date of Last PVA/ Breeding and Transfer Plan	Current Pop Size (N)	Current Number of Participating AZA Member Institutions	Projected %GD at 100 years or 10 generations	SSP Program Designation	5 year Target Population Size	Long-term Target Population Size	Space Needed (target pop size - current space)	Recent 5 Year Population Trend	USFWS IUCN CITES
Giant panda (<i>Ailuropoda melanoleuca</i>)	Dec 2014	396 ^b	6 ^b AZA 66 ^b non-AZA	93.7% ^b	Green SSP	400-600 ^b	400-600 ^b	400-400 = 0	Increasing	Endangered Endangered Appendix I
Andean bear (<i>Tremarctos ornates</i>)	11 July 2012/25 April 2012	49 ^a	27 ^a	61% ^c	Red SSP	55	100 ^c	100-49 = 51	Increasing	Not Listed Vulnerable Appendix I
Sun bear (<i>Helarctos malayanus</i>)	6 Sept 2012/14 June 2010	37 ^c	20 ^c	<i>H.m.</i> ^c <i>malayanus</i> 55% <i>H.m.</i> <i>eurypilus</i> 68%	Phase Out	<37	0	0-37 = -37	Decreasing	Not Listed Vulnerable Appendix I
Sloth bear (<i>Melursus ursinus</i>)	12 July 2012/25 May 2010	40 ^a	16 ^a	62.4% ^c	Red SSP	45	54 ^c	54-39 = 15	Increasing	Not Listed Vulnerable Appendix I
Asiatic black bear (<i>Ursus thibetanus</i>)	NA	24 ^e	14 ^e	NA	Phase Out	<24	0	0-24 = -24	Decreasing	One subspecies endangered Vulnerable Appendix I
American black bear (<i>Ursus americanus</i>)	NA	224 ^f	44 ^f	NA	Monitored non- breeding	NA	NA	NA	Stable	One subspecies threatened Least Concern Appendix II
Brown bear (<i>Ursus arctos</i>)	NA	122 ^d	37 ^d	NA	Monitored non- breeding	NA	NA	NA	Stable	Threatened Least Concern Appendix II
Polar bear (<i>Ursus maritimus</i>)	30 Aug 2012/14 May 2014	69	29 AZA 34 in SSP	63 +/-17 ^c	Yellow SSP	100	126 ^c	100-101 = -1	Decreasing	Threatened Vulnerable Appendix II

^aSource is current species studbook posted on AZA website.

^bSource is Dr. Kathy Traylor-Holzer at Conservation Breeding Specialist Group. Dr. Traylor-Holzer does the population planning for the giant panda, a government owned and globally managed population.

^cSource is the Population Viability Analysis report posted on the AZA website.

^dSource is Brown bear registry maintained by Gail Karr, Memphis Zoo

^eSource is Asiatic black bear studbook keeper, Travis Vineyard, Cleveland Metroparks Zoo

^fSource is American black bear registry maintained by Ann Konopik, International Exotic Animal Sanctuary

Table 3: Bear TAG Animal Program Roles, Goals, and Essential Actions

Common Name / Scientific Name	Giant panda (<i>Ailuropoda melanoleuca</i>)
Animal Program Designation	Green SSP
Primary Role	Conservation action
Goal #1 / Essential Action(s)	Generate money for field conservation through loan programs and verify use of loan money as part of required annual reports to US Fish and Wildlife Service.
Goal #2 / Essential Action(s)	Collaborate with other US giant panda holding institutions and partners in China to carry out scientific research on the captive and wild giant panda populations. Progress is measured through reporting at the annual SSP meeting and through required annual reports to US Fish and Wildlife Service.
Goal #3 / Essential Action(s)	Provide training opportunities for Chinese staff at partner institutions and build capacity. Progress is measured through reporting at the annual SSP meeting and through required annual reports to US Fish and Wildlife Service.
Common Name / Scientific Name	Andean bear (<i>Tremarctos ornates</i>)
Animal Program Designation	Red SSP
Primary Role	Education and Exhibition
Goal #1 / Essential Action(s)	Increase population through increased reproduction and importation of breeding age females
Goal #2 / Essential Action(s)	Increase holding institutions for Andean bears
Goal #3 / Essential Action(s)	Forge collaborative relationships with <i>in-situ</i> conservation projects
Common Name / Scientific Name	Sloth bear (<i>Melursus ursinus</i>)
Animal Program Designation	Red SSP
Primary Role	Education and Exhibition
Goal #1 / Essential Action(s)	Recruit additional holding facilities; beginning in 2015 the SSP Coordinator will monitor the Asiatic black bear population in relation to spaces being vacated by attrition of that population. Those holding facilities will be directly solicited to consider SSP managed species.
Goal #2 / Essential Action(s)	Facilitate successful reproduction, cub rearing and cub weaning; in 2016 the SSP will create a document targeting these specific topics to distribute to facilities with breeding recommendations.
Goal #3 / Essential Action(s)	Serve as an educational model for <i>in-situ</i> human / wildlife conflict; starting in 2015 the SSP will continue to facilitate a conservation partnership with Wildlife SOS. The goal in 2016 is to coordinate a unified educational message and project support strategy.
Common Name / Scientific Name	Polar bear (<i>Ursus maritimus</i>)
Animal Program Designation	Yellow SSP
Primary Role	Conservation action
Goal #1 / Essential Action(s)	Increase captive population size by increasing births and founders. This is an ongoing effort.
Goal #2 / Essential Action(s)	Work with US Fish and Wildlife Service through the Polar Bear Conservation plan to allow for international acquisitions. These acquisitions would facilitate polar bears' roles as climate change education ambassadors and as non-invasive research participants that help gain information for <i>in-situ</i> applications. Plan to accomplish this in 2016-2017.
Goal #3 / Essential Action(s)	In 2016, increase the number of facilities that participate in <i>ex-situ</i> research projects with <i>in-situ</i> applications

Table 4: Bear TAG Species Replacement

Geographic Range/Theme	Phase Out Species	Replace with SSP Program Species
Asia	Sun Bear	Sloth Bear
Asia	Asiatic Black Bear	Sloth Bear

Least Concern IUCN Status	Replace with Vulnerable IUCN Status	Notes
American black bear	Andean bear	Nearly identical containment requirements. Heated space needed in colder climates. Breeding pairs may be available.
American black bear	Sloth bear	Nearly identical containment requirements. Heated space needed in colder climates. Breeding pairs may be available.

Table 5: Bear TAG Management Update

Common Name	Scientific Name	Date Animal Program Initiated	Previous Designation	Current Designation	SSP Coordinator/Studbook Keeper
Giant panda	<i>Ailuropoda melanoleuca</i>	25 June 1993	SSP	Green SSP	SSP Coordinator Ron Swaisgood, PhD rsvaisgood@sandiegozoo.org 760-291-5431 Studbook Keeper Xie Zhong
Andean bear	<i>Tremarctos ornatus</i>	6 Oct 1988	SSP	Red SSP	SSP Coordinator Scott Silver, PhD ssilver@wcs.org 718-271-3622 Studbook Keeper Mike Connolly mconnolly@tulsazoo.org 918-669-6214
Sun bear	<i>Helarctos malayanus</i>	20 Sept 1990	SSP	Phase Out	Studbook Keeper Gaylene Thomas gthomas@sandiegozoo.org 619-231-1515 ext 4020
Sloth bear	<i>Melursus ursinus</i>	20 Sept 1990	SSP	Red SSP	SSP Coordinator and Studbook Keeper Travis Vineyard tgvc@clevelandmetroparks.com 216-635-3350
Asiatic black bear	<i>Ursus thibetanus</i>	1991	Phase Out	Phase Out	Studbook Keeper Travis Vineyard tgvc@clevelandmetroparks.com 216-635-3350
American black bear	<i>Ursus americanus</i>	NA	DERP	Monitored non-breeding	Registry Keeper Ann Konopik akonopik@bigcat.org 410-713-9138
Brown bear	<i>Ursus arctos</i>	NA	DERP	Monitored non-breeding	Registry Keeper Gail Karr gkarr@memphiszoo.org 901-333-6702
Polar bear	<i>Ursus maritimus</i>	30 April 2002	SSP	Yellow SSP	SSP Coordinator and Studbook Keeper Randi Meyerson, DVM randi@toledozoo.org 419-385-5721 x2052

Space Assessment

Space surveys were distributed to all 126 Bear TAG institutional representatives (IR) in August 2015. Responses were collected from September-October, 2015. A total of 110 responses were received, which is an 87.3% response rate.

Space survey requests were also sent to institutional liaisons for AZA member institutions and other partners that do not have a designated Bear TAG IR. Responses were collected from August-October, 2015. There were 122 institutions that did not have a designated IR. Twenty-seven institutions were removed because they focus on specific taxonomic groups unrelated to bears (e.g., most aquariums, a lemur only facility, a butterfly only facility, a wolf only facility, etc.). Of the remaining 95 institutions, 76 responded, which is an 80% response rate.

Table 6 summarizes the current reported space for each bear species, as well as the space projected for each species in the next five years. Moderate increases in space are projected for Andean bears and sloth bears. These are Red SSP programs with goals to increase reproduction and recruit new holding institutions. The moderate space increases projected in the next five years may not be sufficient to accommodate offspring produced from current recommended pairs. Thus, institutions currently housing sun bears and Asiatic black bears are encouraged to fill vacated spaces with sloth bears or Andean bears. Additionally, institutions currently housing American black bears or planning new American black bear exhibits are strongly encouraged to consider housing Andean bears or sloth bears instead. The American black bear is listed by the IUCN as “least concern”. Yet, American black bears are occupying the largest number of bear spaces in AZA institutions and the largest number of projected spaces is also planned for this species. These spaces should instead be dedicated to Andean bears and sloth bears, which are listed as “vulnerable” by IUCN.

Table 6: Current and projected space for each bear species reported by Bear TAG IR institutions and Non-Bear TAG IR institutions

Species	Current Space IR Institutions	Current Space Non- IR Institutions	Space Projected in 5 Years IR Institutions	Space Projected in 5 Years Non-IR Institutions	Projected Increase or Decrease
Andean bear	48	1	47	7	+5
Sloth bear	38	3	42	5	+6
Sun bear	39	0	33	0	-6
Asiatic black bear	12	1	13	0	0
Polar bear	101	0	121	0	+20
Brown bear	95	2	111	2	+16
American black bear	113	7	143	5	+28
Giant panda	16	0	18	0	+2

A large number of spaces are also available for polar bears and several institutions are planning new or expanded polar bear exhibits. There are not enough polar bears available to fill the current spaces. Thus, many institutions are filling these spaces with brown bears. These institutions need to keep in mind that bears are long-lived and adult brown bears are difficult to

place within AZA institutions. This means that these institutions might not be able to acquire polar bears as they become available because their space is occupied by brown bears.

Finally, the giant panda is a government owned and globally managed species. The Chinese government is committed to building space as needed for the growing giant panda population. Additionally, offspring produced by giant pandas housed at AZA institutions are required to be moved to partner institutions in China before they reach reproductive maturity.

Descriptions of Bear Species Housed in AZA Facilities

Giant Panda

Ailuropoda melanoleuca

SSP Coordinator:

Ron Swaisgood, PhD
San Diego Zoo Global
rswaisgood@sandiegozoo.org
760-291-5431

International Studbook Keeper:

Xie Zhong
Chinese Association of Zoological Gardens

RESOURCES AVAILABLE

Breeding and Transfer Plan: Dec 2014
Population Viability Analysis: underway for global population
International Studbook: 11 Nov 2014
Animal Care Manual: in progress

SUSTAINABILITY CRITERIA

Current Population: 396
Current Gene Diversity: 97.4%
GD at 100 years: 93.7%
Designation: Green SSP

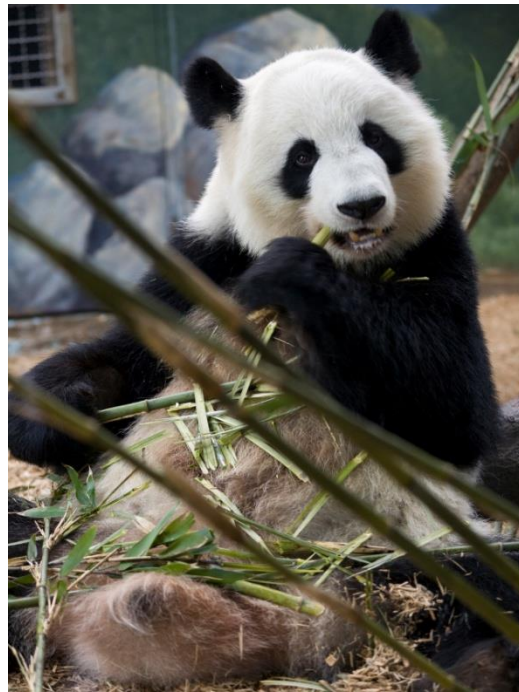


Photo courtesy of Adam Thompson, Zoo Atlanta

WILD POPULATION STATUS

CITES:	Appendix I
IUCN:	Endangered
US ESA:	Endangered

PROGRAM GOALS

1. Generate money for field conservation through loan programs and verify use of loan money as part of required annual reports to US Fish and Wildlife Service.
2. Collaborate with other US giant panda holding institutions and partners in China to carry out scientific research on the captive and wild giant panda populations. Progress is measured through reporting at the annual SSP meeting and through required annual reports to US Fish and Wildlife Service.
3. Provide training opportunities for Chinese staff at partner institutions and build capacity. Progress is measured through reporting at the annual SSP meeting and through required annual reports to US Fish and Wildlife Service.

COMMENTS

The giant panda is a government owned species and the captive population is managed globally. China provides giant pandas to institutions in other countries as part of a long-term loan program. U.S. institutions interested in acquiring giant pandas are required to obtain a permit from US Fish and Wildlife Service. As part of the permitting process, an institution must demonstrate that it will follow the US Fish and Wildlife Service's Giant Panda Policy.

Andean Bear

Tremarctos ornatus

SSP Coordinator:

Scott Silver, PhD
Queens Zoo
ssilver@wcs.org
718-271-3622

Vice-coordinator:

Vacant

Studbook Keeper:

Mike Connolly
Tulsa Zoo
mconnolly@tulsazoo.org
918-669-6214

RESOURCES AVAILABLE

Population Viability Analysis: 2013
Regional Studbook: 2014
Animal Care Manual: in progress

PROGRAM GOALS

1. Increase population through increased reproduction and importation of breeding age females.
2. Increase the number of holding institutions.
3. Forge collaborative relationships with *in-situ* conservation projects

COMMENTS

The AZA population of Andean bears was reproductively stagnant in the previous decade. Recent importations and reproduction have begun to increase the birth rate in the AZA population. This program is in need of more holding institutions to provide space for the growing population.



Photo courtesy of Queens Zoo

SUSTAINABILITY CRITERIA

Current Population: 49
Current Gene Diversity: 93.44%
GD at 100 years: 61%

WILD POPULATION STATUS

CITES: Appendix I
IUCN: Vulnerable
US ESA: Not Listed

Sun Bear

Helarctos malayanus

Studbook Keeper:

Gaylene Thomas
San Diego Zoo Global
gthomas@sandiegozoo.org
619-231-1515 ext 4020

RESOURCES AVAILABLE

Population Viability Analysis: 6 Sept 2012
Studbook: 1 Feb 2012
Animal Care Manual: in progress

SUSTAINABILITY CRITERIA

Current Population: 34
Current Gene Diversity: <90 %
GD at 100 years: *H.m. malayanus* 55%
H.m. eurypilus 68%
Designation: Phase Out

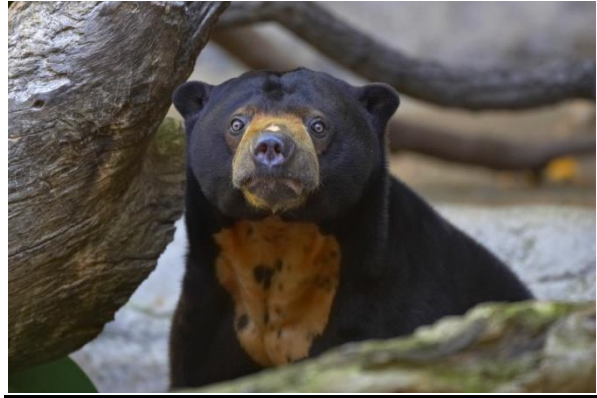


Photo courtesy of San Diego Zoo Global

WILD POPULATION STATUS

CITES: Appendix I
IUCN: Vulnerable
US ESA: Not Listed

COMMENTS

Based on results from the 2012 Population Viability Analysis, the TAG decided to designate the sun bear as a phase out species. Nevertheless, the TAG considers this an important species for conservation, research, and education. The sun bears currently in AZA institutions have not been breeding well so the TAG has not imposed a breeding moratorium, but the TAG will not be recommending imports or putting new pairs together. Pairs that are currently together do not need to be contracepted and institutions with the capability to pursue artificial insemination are encouraged to consider it. If offspring are produced, the sun bear studbook keeper will help with placement. However, institutions must be patient and willing to hold offspring until appropriate placement can be recommended. In most cases this will be a minimum of 2-3 years and possibly more. The TAG encourages AZA institutions currently holding sun bears to transition those vacated spaces to sloth bears or Andean bears.

Sloth Bear

Melursus ursinus

SSP Coordinator:

Travis Vineyard
Cleveland Metroparks Zoo
tgvy@clevelandmetroparks.com
216-635-3350

Studbook Keeper:

Travis Vineyard
Cleveland Metroparks Zoo
tgvy@clevelandmetroparks.com
216-635-3350

RESOURCES AVAILABLE

Breeding and Transfer Plan: 15 June 2015
Studbook: 20 March 2015
Animal Care Manual: in progress

SUSTAINABILITY CRITERIA

Current Population: 40
Current Gene Diversity: 92.46%
GD at 100 years: 62.4%
Designation: Red SSP

PROGRAM GOALS

1. Recruit additional holding facilities; beginning in 2015 the SSP Coordinator will monitor the Asiatic black bear population in relation to spaces being vacated by attrition of that population. Those holding facilities will be directly solicited to consider SSP managed species.
2. Facilitate successful reproduction, cub rearing and cub weaning; in 2016 the SSP will create a document targeting these specific topics to distribute to facilities with breeding recommendations.
3. Serve as an educational model for *in-situ* human / wildlife conflict; starting in 2015 the SSP will continue to facilitate a conservation partnership with Wildlife SOS. The goal in 2016 is to coordinate a unified educational message and project support strategy.

COMMENTS

The 2012 Population Viability Analysis identified three main areas of focus to achieve sustainability; improving reproduction, importing genetically appropriate animals, and recruiting additional spaces. In recent years the population has demonstrated the ability to meet the reproductive goals but has been hampered by available spaces and the lack of new holding institutions. To address the challenges of space the TAG encourages holders of Asiatic black bears and sun bears to transition those vacated spaces to one of the managed species.



Photo courtesy of Dennis Dow

WILD POPULATION STATUS

CITES: Appendix I
IUCN: Vulnerable
US ESA: Not Listed

Asiatic Black Bear

Ursus thibetanus

Studbook Keeper:

Travis Vineyard
Cleveland Metroparks Zoo
tgvy@clevelandmetroparks.com
216-635-3350

RESOURCES AVAILABLE

Studbook: 1 June 2015

SUSTAINABILITY CRITERIA

Current Population: 24
Current Gene Diversity: TBD
GD at 100 years: N/A
Designation: Phase Out

PROGRAM GOAL

Phase out and use vacated space for other TAG recommended bear species

COMMENTS

The TAG established the Asiatic Black Bear as a phase out species in 1999/2000. This decision was largely based on the less than robust genetics/demographics, the need for space for the managed species, and the high density of individuals under human care in international facilities. The TAG discourages breeding of this species in North America and a PVA projects the captive population to be effectively extinct in 20-30 years. In the interim, vacated spaces are recommended to be reserved for managed bear species, specifically sloth bears and Andean bears.



Photo courtesy of Debbie Thompson, Little Rock Zoo

WILD POPULATION STATUS

CITES: Appendix I
IUCN: Vulnerable
US ESA: 1 subspecies endangered

American Black Bear

Ursus americanus

Registry Keeper:

Ann Konopik
International Exotic Animal Sanctuary
akonopik@bigcat.org
410-713-9138

RESOURCES AVAILABLE

Registry: 2015
Animal Care Manual: in progress

SUSTAINABILITY CRITERIA

Current Population: 224
Current Gene Diversity: NA
GD at 100 years: NA
Designation: Monitored Non-Breeding



Photo courtesy of International Exotic Animal Sanctuary

WILD POPULATION STATUS

CITES: Appendix II
IUCN: Least Concern
US ESA: 1 subspecies endangered

COMMENTS

The TAG recognizes that American black bears are important exhibit animals for many AZA institutions with native species exhibits. The American Black Bear Registry Keeper works with state agencies to place non-releasable black bears into AZA institutions. Typically, the TAG is asked to help place at least 3-5 black bears each year. Space is limited, and thus institutions holding single animals are asked to consider adding additional individuals. Please contact the registry keeper with current and future needs. Moves within AZA institutions are first priority. Because space is limited for increasing the captive populations of TAG recommended species, institutions are encouraged to consider dedicating space to sloth bears or Andean bears, rather than American black bears.

Brown Bear

Ursus arctos

Registry Keeper:

Gail Karr

Memphis Zoo

gakarr@memphiszoo.org

901-333-6702



Photo courtesy of Courtney Janney, Memphis Zoo

RESOURCES AVAILABLE

Registry: April 2015

Animal Care Manual: in progress

SUSTAINABILITY CRITERIA

Current Population: 68.54 (122 total)

Designation: Monitored Non-Breeding

WILD POPULATION STATUS

CITES: Appendix II

IUCN: Least Concern

US ESA: Threatened

PROGRAM GOAL

Serve as liaison between AZA institutions and Alaska Fish and Game and U.S. Fish and Wildlife Service to place orphaned cubs in AZA facilities.

COMMENTS

The Brown Bear Registry Keeper maintains an active list of AZA institutions interested in acquiring brown bears. This list is provided to Alaska Fish and Game and U.S. Wildlife Service, so that orphaned cubs can be placed quickly. Decisions to capture orphaned brown bears are based on this list. Thus, it is critical that institutions which are on the placement list agree to take brown bears when they are found. Furthermore, institutions must be prepared to keep these animals for their entire lifespan. It is difficult to place adult brown bears in another AZA facility if the current facility can no longer house them.

Polar Bear

Ursus maritimus

SSP Coordinator:

Randi Meyerson, DVM
Toledo Zoological Gardens
randi@toledo zoo.org
419-385-5721 x2052

Vice-Coordinator:

Cyndy Kreider
Erie Zoo
Ckreider@eriezoo.org

Studbook Keeper:

Randi Meyerson, DVM
Toledo Zoological Gardens
randi@toledo zoo.org
419-385-5721 x2052

RESOURCES AVAILABLE

Breeding and Transfer Plan: 2014
Regional Studbook: 2013
Animal Care Manual: 2009

SUSTAINABILITY CRITERIA

Current Population: 69
Current Gene Diversity: 90%
GD at 100 years: 63+/-17% per 2012 PVA
Designation: Yellow SSP

PROGRAM GOALS

1. Increase captive population size through births and founders. This is an ongoing effort.
2. Work with US Fish and Wildlife Service through the Polar Bear Conservation plan to allow for international acquisitions. These acquisitions would facilitate polar bears' roles as climate change education ambassadors and as non-invasive research participants that help gain information for in-situ applications. Plan to accomplish this in 2016-2017.
3. In 2016, increase the number of facilities that participate in *ex-situ* research projects with *in-situ* applications

COMMENTS

The polar bear is an iconic flagship species for education about climate change, but currently there are not enough captive polar bears in the US to meet institutional demand. As a result of the species being listed as a depleted population in the Marine Mammal Protection Act, international importation is not available at this time. Please contact the species coordinator if you are interested in acquiring polar bears.



Photo courtesy of Toledo Zoo

WILD POPULATION STATUS

CITES:	Appendix II
IUCN:	Vulnerable
US ESA:	Threatened