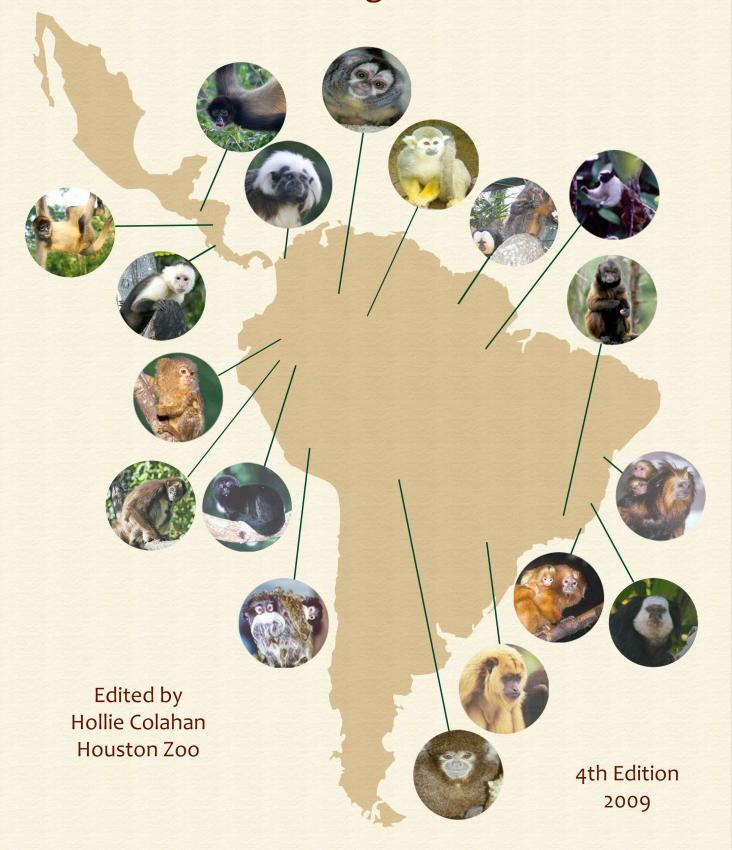
## New World Primate Regional Collection Plan



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#### INTRODUCTION

#### MISSION AND DEFINITION

The mission of the New World Primate Taxon Advisory Group (NWPTAG) is to coordinate and facilitate North American captive breeding efforts for New World primates, ensuring that captive populations are selected and managed to support *in situ* conservation. The NWPTAG began as an interest group in 1990 and was formally approved as a TAG in August of 1991. The NWPTAG definition encompasses all Neotropical primates in AZA accredited facilities (see Table 2 on page 8 for a complete list of species).

#### Goals of the NWPTAG:

- 1. Monitor the status of wild and captive populations
- 2. Identify and prioritize taxa in need of captive breeding efforts and work to establish and manage AZA captive populations of these taxa
- 3. Establish clear management goals for all AZA captive populations
- 4. Identify and prioritize research necessary to improve captive husbandry and management
- 5. Serve as a resource to all AZA institutions for information on the status, management and conservation needs of New World Primates
- Foster communication and cooperation between zoo biologists and field primatologists so as to support the development and implementation of comprehensive conservation programs
- 7. Provide logistic and financial support for in-country captive breeding and education programs as well as *in situ* conservation efforts

The NWPTAG is governed by a Steering Committee of up to 12 members elected by institutional representatives (IRs), headed by the chair, who is selected by the AZA Wildlife Conservation and Management Committee (WCMC). A Vice-Chair and Secretary are elected by the Steering Committee. A larger TAG Working Group is made up of the steering committee, program leaders, and advisors. Contact information is listed on in Table 1 on page 4.

Previous RCPs were published in 2005, 2000 and 1994. Much of this document is taken from the previous RCPs.

#### **Using This Document**

The RCP is intended to be a resource for curators, directors and other animal managers when making collection planning decisions. Institutions are strongly encouraged to contact the TAG and/or the relevant population manager when considering changes or additions to their New World Primate collection. The NWPTAG is committed to maintaining healthy captive populations and meeting institution's needs for diverse, dynamic Neotropical exhibits.

# WORKING GROUP CONTACT INFORMATION Table 1

Position	Name	Institution	Contact Information
Steering Committee			
Chair	Hollie Colahan	Houston Zoo	hcolahan@houstonzoo.org 713-533-6528
Vice-Chair	Keith Lovett	Palm Beach Zoo	klovett@palmbeachzoo.org 561-533-0887 x213
Steering Committee	Mike Coker	Topeka Zoo	mcoker@topeka.org 785-368-9131
Steering Committee	Kevin Drees	Blank Park Zoo	kevin.drees@blankparkzoo.com 515-323-8374
Steering Committee	Don Goff	Connecticut's Beardsley Zoo	dgoff@beardsley.org 230-394-6564
Steering Committee	Ken Kaemmerer	Dallas Zoo	kenneth.kaemmerer@dallascityhall.com 214-671-0778
Steering Committee	Kristy Newland	Lee Richardson Zoo	knewland@garden-city.org 620-276-1250
Steering Committee	Andy Henderson	Utah's Hogle Zoo	ahenderson@hoglezoo.org 801-584-4544
Steering Committee	Vince Sodaro	Brookfield Zoo	vince.sodaro@czs.org 708-688-8707
Advisors			
Genetics	Dr. Jean Dubach		jedubach@gmail.com
Behavior/Training	Michelle Farmerie	Pittsburgh Zoo	mrfarmerie@aol.com 412-365-2385
Callitrichid Veterinary	Dr. Pilar Fish	National Aviary	pilar.fish@aviary.org 412-323-7235 x282
Cebid Veterinary	Dr. Lauren Howard	Houston Zoo	Ihoward@houstonzoo.org 713-533-6630
Field Conservation	Dr. Anthony Rylands	Conservation International/IUCN Primate Specialist Group	a.rylands@conservation.org
Nutrition	Dr. Mark Edwards	California Polytechnic State University	msedward@calpoly.edu 805-756-2599
WCMC Liaison	Beth Bahner	Philadelphia Zoo	bahner.beth@phillyzoo.org 215-243-5214
Program Managers			
Callitrichid Coordinator*	Rebecca Phillips	Disney's Animal Kingdom	rebecca.s.phillips@disney.com 407-939-7342
Callitrichid Phase- Out Manager**	Liz Larsen	Utah's Hogle Zoo	llarsen@hoglezoo.org 801-584-1754
Pygmy Marmoset PMP/Studbook	Stephanie Dampier	Palm Beach Zoo	sdampier@palmbeachzoo.org 561-533-0887 x253
Geoffroy's Marmoset SSP/Studbook	Beth Bahner	Philadelphia Zoo	bahner.beth@phillyzoo.org 215-243-5214
Cotton Top Tamarin SSP	Rebecca Phillips	Disney's Animal Kingdom	rebecca.s.phillips@disney.com 407-939-7342
Cotton Top Tamarin Studbook	Hollie Colahan	Houston Zoo	hcolahan@houstonzoo.org 713-533-6528

Position	Name	Institution	Contact Information
Emperor Tamarin PMP/Studbook	Tyrene Fayard	Audubon Zoo	tfayard@AudubonInstitute.org 504-212-5342
Pied Tamarin SSP/Studbook	Dr. Andy Baker	Philadelphia Zoo	Baker.Andy@phillyzoo.org 215-243-5245
Lion Tamarin SSP/Studbook	Jon Ballou	Smithsonian's National Zoo	ballouj@si.edu 202-633-4183
Goeldi's Monkey SSP/Studbook	Mark Warneke	Brookfield Zoo	mark.warneke@czs.org 708-688-8568
Capuchin Monkey PMP/Studbook	Mark Warneke	Brookfield Zoo	mark.warneke@czs.org 708-688-8568
Squirrel Monkey PMP/Studbook	Beth Ricci	Utica Zoo	zoocleo@hotmail.com 315-738-0472
Owl Monkey PMP/Studbook	Erik Beck	Mesker Park Zoo	ebeck@meskerparkzoo.com 812-435-6143 x404
Saki Monkey PMP/Studbook	Tracy Frampton	Brevard Zoo	tframpton@brevardzoo.org 321-254-9453 x323
Titi Monkey PMP/Studbook	Andy Henderson	Utah's Hogle Zoo	ahenderson@hoglezoo.org 801-584-4544
Howler Monkey PMP/Studbook	Kristin Harris	Little Rock Zoo	gorillalady@sbcglobal.net 501-666-2406
Spider Monkey SSP	Keith Lovett	Palm Beach Zoo	klovett@palmbeachzoo.org 561-533-0887 x213
Spider Monkey Studbooks	Gwen Lovett	Palm Beach Zoo	glovett@palmbeachzoo.org 561-533-0887 x215

<sup>\*</sup>Callitrichid Coordinator serves as a first point of contact for institutions interested in acquiring a new species of tamarin or marmoset in their collection

<sup>\*\*</sup>Callitrichid Phase-Out Manager description is provided in Appendix I of this document

## **TAXONOMY OF NEW WORLD PRIMATES**

Captive management of New World Primates is further complicated by taxonomic uncertainty, with new findings and changes outpacing the publication schedule of this document and causing data conflicts with historical records, individual institutional records and ISIS. The taxonomy in this document follows Groves (2001) and the IUCN Primate Specialist Group at the genus and species level unless otherwise noted.

Common names are used in conjunction with Latin names throughout this document to facilitate its use by a wide range of zoo professionals. However, many species have multiple common names, more than one of which is widely used. In general common names used are those that correspond with the names of studbooks and management programs. Several programs cover multiple species under one common name (e.g. Spider Monkey SSP).

## REGIONAL COLLECTION PLAN OVERVIEW

Publication of a Regional Collection Plan is one of the primary responsibilities of a Taxon Advisory Group. The RCP identifies captive breeding priorities for the region, thereby providing direction to institutions as they develop institutional collection plans. The RCP helps ensure that space be used to support sufficient numbers of specified taxa to establish and maintain viable populations. The RCP is a dynamic document and as husbandry knowledge expands and status in the wild changes, priorities may change.

#### **Goals of Captive Breeding Programs**

The ultimate goal of captive breeding programs is to support wild populations. The NWPTAG recognizes that captive populations can contribute to the long-term conservation of wild populations in a variety of ways. These include:

- 1. serving as the focus of public education programs and highlight species and habitat conservation needs;
- 2. leveraging financial and/or logistical support for in-country conservation programs;
- 3. providing a research population that increases knowledge of those aspects of a species' biology or husbandry critical to supporting conservation efforts;
- 4. maintaining genetic and demographic reservoirs that may eventually support reintroduction efforts.

#### **Management Categories**

The NWPTAG uses four of AZA's management program categories, assigned using criteria described later in this document. Those programs are:

**Species Survival Plan (SSP):** Intense management (mandatory participation), including a studbook, is required to maintain captive population.

**Population Management Plan (PMP):** Moderate management (participation encouraged), including a studbook, is required to maintain captive population.

**Display, Education, Research Program (DERP):** Populations that fill a potentially valuable role but are not managed by AZA.

**Phase Out Population (POP):** Currently in AZA institutions but should be phased out through a breeding moratorium and natural attrition.

# CONSERVATION STATUS OF NEW WORLD PRIMATES Table 2

Common Name	Latin Name	USFW	CITES	IUCN
Rio Acari Marmoset	Callithrix (Mico) acariensis		П	Data Deficient
Gold-and-White Marmoset	Callithrix (Mico) chrysoleuca		II	Data Deficient
Emilia's Marmoset	Callithrix (Mico) emiliae		II	Vulnerable
Tassel-Eared Marmoset	Callithrix (Mico) humeralifer		II	Data Deficient
Dwarf Marmoset	Callithrix (Callibella) humilis		II	Vulnerable
Hershkovitz's Marmoset	Callithrix (Mico) intermedius		II	Least Concern
White Marmoset	Callithrix (Mico) leucippe		II	Vulnerable
Rio Manicore Marmoset	Callithrix (Mico) manicorensis		II	Data Deficient
Marca's Marmoset	Callithrix (Mico) marcai		II	Data Deficient
Rio Maues Marmoset	Callithrix (Mico) mauesi		II	Least Concern
Black-Headed Marmoset	Callithrix (Mico) nigriceps		II	Data Deficient
Satere Marmoset	Callithrix (Mico) saterei		II	Data Deficient
Silvery Marmoset	Callithrix (Mico) argentatus argentata		II	Least Concern
Black-Tailed Marmoset	Callithrix (Mico) argentata melanurus		II	Least Concern
Buff Headed Marmoset	Callithrix flaviceps	Endangered	I	Endangered
Geoffroy's Marmoset	Callithrix geoffroyi		II	Vulnerable
Common Marmoset	Callithrix jacchus	Endangered	II	Least Concern
White-Eared Marmoset	Callithrix <del>jacchus</del> aurita			Vulnerable
Wied's Tufted-Ear Marmoset	Callithrix kuhli		II	Near Threatened
Black Tufted-Ear Marmoset	Callithrix penicillata		II	Least Concern
Pygmy Marmoset	Callithrix (Cebuella) pygmaea		II	Least Concern
Pied Tamarin	Saguinus bicolor	Endangered	I	Endangered
Cruz Lima's Saddleback Tamarin	Saguinus fuscicollis cruzlimai		II	Least Concern
Saddleback Tamarin	Saguinus fuscicollis fuscicollis		II	Least Concern
Avila Pires Saddleback Tamarin	Saguinus fuscicollis avilapiresi		II	Least Concern
Illiger's Saddleback Tamarin	Saguinus fuscicollis illigeri		II	Least Concern
Red-Mantled Saddleback Tamarin	Saguinus fuscicollis lagonotus		II	Least Concern
Andean Saddleback Tamarin	Saguinus fuscicollis leucogenys		II	Least Concern
Geoffroy's Saddleback Tamarin	Saguinus fuscicollis nigrifrons		II	Least Concern
Saddleback Tamarin	Saguinus fuscicollis primitivus		II	Data Deficient
Weddell's Saddleback Tamarin	Saguinus fuscicollis weddelli		II	Least Concern
Lesson's Saddleback Tamarin	Saguinus fuscicollis fuscus		II	Least Concern
Geoffroy's Tamarin	Saguinus geoffroyi		I	Least Concern
Graell's Black-Mantled Tamarin	Saguinus graellsi		II	Near Threatened
Emperor Tamarin	Saguinus imperator imperator		II	Least Concern
Emperor Tamarin	Saguinus imperator subgrisescens		II	Least Concern
Mottle-faced Tamarin	Saguinus inustus		II	Least Concern

Common Name	Name Latin Name USFW CITES		IUCN	
Red-bellied Tamarin	Saguinus labiatus labiatus	II		Least Concern
Red-Bellied Tamarin	Saguinus labiatus rufiventer	II		Least Concern
Thomas' Moustached Tamarin	Saguinus labiatus thomasi		II	Least Concern
White Footed Tamarin	Saguinus leucopus	Threatened	1	Endangered
Martin's Bare-Faced Tamarin	Saguinus martinsi		I	Least Concern
Ochraceous Barefaced Tamarin	Saguinus martinsi ochraceus		I	Least Concern
Carndall's Saddle-Back Tamarin	Sagunus melanoleucus crandalli	Sagunus melanoleucus		Data Deficient
White Saddle-Back Tamarin	Saguinus melanoleucus melanoleucus		II .	Least Concern
Golden-Handed Tamarin	Saguinus midas midas		II	Least Concern
Spix's Mustached Tamarin	Saguiunus mystax mystax		II	Least Concern
Red-Cap Mustached Tamarin	Saguimus mystax pileatus		II	Least Concern
White-Rump Mustached Tamarin	Saguinus mystax pluto		II	Least Concern
Black Tamarin	Saguinus niger		II	Vulnerable
Black-mantled Tamarin	Saguinus nigricollis nigicollis		II	Least Concern
Hernandez-Camachos Black Mantle	Saguinus nigricollis hernandezi		II	Least Concern
Cotton-Top Tamarin	Saguinus oedipus	Endangered	1	Critically Endangered
Red-capped Moustached Tamarin	Saguinus pileatus	J	II	Least Concern
Golden-mantled Saddle-back Tamarin	Saguinus tripartitus		II	Near Threatened
Black-faced Lion Tamarin	Leontopithecus caissara		1	Endangered
Golden-Headed Lion Tamarin	Leontopithecus chrysomelas	Endangered	1	Endangered
Black Lion Tamarin	Leontopithecus chrysopygus	Endangered	1	Critically Endangered
Golden Lion Tamarin	Leontopithecus rosalia	Endangered	1	Endangered
Goeldi's Monkey	Callimico goeldii	Endangered	<u> </u>	Vulnerable
White-Fronted Capuchin	Cebus albifrons		II	Least Concern
Ecuadorian Capuchin	Cebus albifrons aequatorialis		<u>II</u>	Critically Endangered
White Fronted Capuchin	Cebus albifrons albifrons		<u>II</u>	Least Concern
Capuchin	Cebus albifrons cesarae		II	Data Deficient
Shock Headed Capuchin	Cebus albifrons cuscinus		<u>II</u>	Near Threatened
Capuchin	Cebus albifrons malitiosus		II	Endangered
Trinidad White Fronted Capuchin	Cebus albifrons trinitatis		II	Endangered
Varied Capuchin	Cebus albifrons versicolor		II	Endangered
Andean White Fronted Capuchin	Cebus albifrons yuracus		II	Data Deficient
Tufted Capuchin	Cebus apella		II	Least Concern
Guiana Brown Capuchin	Cebus apella apella		II	Least Concern
Margarita Island Capuchin	Cebus apella margaritae		II	Critically Endangered
Crested Capuchin	Cebus apella robustus		II	Endangered
Golden-bellied Tufted Capuchin	Cebus apella xanthosternos		II	Critically Endangered
White-Throated Capuchin	Cebus capucinus		II	Least Concern
White Faced Capuchin	Cebus capucinus capucinus		II	Least Concern
Gorgona White Fronted Capuchin	Cebus capucinus curtus		II	Vulnerable
Panamanian White Throated Capuchin	Cebus capucinus imitator		II	Least Concern

White Faced Capuchin	Common Name Latin Name		USFW	CITES	IUCN
Marograf's Capuchin   Cebus flavius   II   Critically Endangered Black-striped Tutted Capuchin   Cebus libidinosus   II   Least Concern   Least Current   Least Concern   Least Current   Le	White Faced Capuchin	Cebus capucinus limitaneus		ll	Least Concern
Black-striped Tufted Capuchin   Cebus Ilbidinosus   II   Least Concern	Hooded Capuchin	Cebus cay		Least Concern	
Least Concern	Marograf's Capuchin	Cebus flavius		II	Critically Endangered
Black Tufted Capuchin  Cebus nigritus  II Least Concern  Cebus nigrivattatus (-civivaceus)  II Least Concern  Weeper Capuchin  Cebus olivaceus  II Least Concern  Weeper Capuchin  Cebus olivaceus  II Least Concern  Weeper Capuchin  Cebus olivaceus brunneus  II Least Concern  II Leas	Black-striped Tufted Capuchin	Cebus libidinosus		II	Least Concern
Weeper Capuchin   Cebus nigrivattatus	Large Headed Capuchin	Cebus macrocephalus		П	Least Concern
Wedge Capped Capuchin         (=olivaceus)         II         Least Concern           Weeper Capuchin         Cebus olivaceus apiculatus         II         Least Concern           Brown Weeper Capuchin         Cebus olivaceus prunneus         II         Least Concern           Chestnut Capuchin         Cebus olivaceus castaneus         II         Least Concern           Ka'apor Capuchin         Cebus olivaceus kaapori         II         Critically Endangered           Wedge Capped Capuchin         Cebus olivaceus olivaceus         II         Least Concern           Chestnut Capuchin         Cebus olivaceus olivaceus         II         Least Concern           Chestnut Capuchin         Cebus olivaceus olivaceus         III         Least Concern           Chestrut American Squirrel Monkey         Saimiri boliviensis jaburuensis         III         Least Concern           Squirrel Monkey         Saimiri boliviensis jaburuensis         III         Least Concern           Certual American Squirrel Monkey         Saimiri oersted	Black Tufted Capuchin	Cebus nigritus		II	Near Threatened
Weeper Capuchin   Cebus olivaceus apiculatus   II   Least Concern	• •			II	Least Concern
Brown Weeper Capuchin   Cebus olivaceus brunneus   II   Least Concern	Wedge Capped Capuchin	Cebus olivaceus		II	Least Concern
Chestnut Capuchin   Cebus olivaceus castaneus   II   Least Concern   Ka'apor Capuchin   Cebus olivaceus kapori   II   Critically Endangered   Cebus olivaceus nigrivitatus   II   Least Concern   Chestnut Capuchin   Cebus olivaceus olivaceus   II   Least Concern   Chestnut Capuchin   Cebus oliviensis boliviensis   II   Least Concern   Chestnut Capuchin   Cebus olivaceus   Chestnut Capuchin   Cebus olivaceus   Chestnut Capuchin   Cebus oliviensis poliviensis   II   Least Concern   Capuchin Capuchin   Cebus oliviensis   Capuchin Capuchin Capuchin   Cebus oliviensis   Capuchin Capuchi	Weeper Capuchin	Cebus olivaceus apiculatus		Ш	Least Concern
Ka'apor Capuchin   Cebus elivaeeus kaapori   II   Critically Endangered   Wedge Capped Capuchin   Cebus olivaceus nigrivitatus   II   Least Concern   Chestnut Capuchin   Cebus olivaceus nigrivitatus   II   Least Concern   Least Concern   Cebus olivaceus   II   Least Concern   Least Concern   Cebus olivaceus   II   Least Concern   Least Concern   Cebus olivaceus   II   Least Concern   Cebus olivaeeus   II   Least Concern   Cepturian Squirrel Monkey   Saimiri boliviensis peruviensis   II   Least Concern   Cepturian Squirrel Monkey   Saimiri boliviensis peruviensis   II   Least Concern   Central Monkey   Saimiri boliviensis peruviensis   II   Least Concern   Central American Squirrel Monkey   Saimiri oerstedi   Endangered   I   Endangered   Central American Squirrel Monkey   Saimiri oerstedi   Endangered   I   Endangered   Central American Squirrel Monkey   Saimiri sciureus   II   Critically Endangered   Common Squirrel Monkey   Saimiri sciureus   II   Least Concern   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Saimiri sciureus   II   Least Concern   Central American Squirrel Monkey   Aotus azarae   II   Least Concern   Central American Squirrel Monkey   Aotus azarae   II   Least Concern   Central American Squirrel Monkey   Aotus azarae boliviensis   II   Least Concern   Central	Brown Weeper Capuchin	Cebus olivaceus brunneus		II	Least Concern
Wedge Capped Capuchin   Cebus olivaceus nigrivittatus   II   Least Concern	Chestnut Capuchin	Cebus olivaceus castaneus		II	Least Concern
Cebus olivaceus olivaceus   II   Least Concern	Ka'apor Capuchin	Cebus <del>olivaceus</del> kaapori		II	Critically Endangered
Bolivian Squirrel Monkey	Wedge Capped Capuchin	Cebus olivaceus nigrivittatus		II	Least Concern
Bolivian Squirrel Monkey   Saimiri boliviensis boliviensis   II   Least Concern	Chestnut Capuchin	Cebus olivaceus olivaceus		ll	Least Concern
Bolivian Squirrel Monkey   Saimiri boliviensis boliviensis   II   Least Concern					
Squirrel Monkey   Saimiri boliviensis jaburuensis   II   Least Concern	Bolivian Squirrel Monkey	Saimiri boliviensis		П	Least Concern
Peruvian Squirrel Monkey Saimiri boliviensis peruviensis II Least Concern Squirrel Monkey Saimiri boliviensis pluvialis II Least Concern Red-backed Squirrel Monkey Saimiri oerstedi oerstedi Central American Squirrel Monkey Saimiri oerstedii citrinellus II Endangered Certral American Squirrel Monkey Saimiri oerstedii citrinellus II Critically Endangered Squirrel Monkey Common Squirrel Monkey Saimiri sciureus Saimiri varzolinii II Least Concern Golden-Backed Squirrel Monkey Saimiri vanzolinii II Vulnerable  Azara's Night Monkey Aotus azarae II Least Concern Aotus azarae III Least Concern Feline Night Monkey Aotus azarae infulatus II Near Threatened Owl Monkey Aotus azarae boliviensis II Least Concern Brumback's Night Monkey Aotus azarae boliviensis II Least Concern Brumback's Night Monkey Aotus brumbacki II Vulnerable Hershkovitz's Night Monkey Aotus hershkovitzi III Vulnerable Hernández-Camacho's Night Monkey Aotus lemurinus griseimembra II Vulnerable Lemurinu Owl Monkey Aotus lemurinus -Iemurinus Andean Night Monkey Aotus Imurious III Vulnerable Panamanian Night Monkey Aotus Imurious -Iemurinus III Vulnerable	Bolivian Squirrel Monkey	Saimiri boliviensis boliviensis		II	Least Concern
Peruvian Squirrel Monkey   Saimiri boliviensis peruviensis   II   Least Concern	Squirrel Monkey	Saimiri boliviensis jaburuensis		II	Least Concern
Squirrel Monkey       Saimiri boliviensis pluvialis       II       Least Concern         Red-backed Squirrel Monkey       Saimiri oerstedi oerstedi       Endangered       I       Endangered         Central American Squirrel Monkey       Saimiri oerstedii       II       Endangered         Grey-crowned Central American Squirrel Monkey       Saimiri oerstedii citrinellus       II       Critically Endangered         Common Squirrel Monkey       Saimiri sciureus       II       Least Concern         Saimiri sciureus       II       Least Concern         Saimiri sciureus albigena       II       Least Concern         Squirrel Monkey       Saimiri sciureus sciureus       II       Least Concern         Squirrel Monkey       Saimiri sciureus sciureus       II       Least Concern         Golden-Backed Squirrel Monkey       Saimiri vanzolinii       II       Near Threatened         Blackish Squirrel Monkey       Saimiri vanzolinii       II       Vulnerable         Azara's Night Monkey       Aotus azarae       II       Least Concern         Feline Night Monkey       Aotus azarae infulatus       II       Near Threatened         Owl Monkey       Aotus azarae boliviensis       II       Near Threatened         Owl Monkey       Aotus berinkovitz's Night Monkey <t< td=""><td>Peruvian Squirrel Monkey</td><td></td><td></td><td>II</td><td>Least Concern</td></t<>	Peruvian Squirrel Monkey			II	Least Concern
Red-backed Squirrel Monkey       Saimiri oerstedi oerstedi       Endangered       I       Endangered         Central American Squirrel Monkey       Saimiri oerstedii       II       Endangered         Grey-crowned Central American Squirrel Monkey       Saimiri oerstedii citrinellus       II       Critically Endangered         Common Squirrel Monkey       Saimiri sciureus       II       Least Concern         Common Squirrel Monkey       Saimiri sciureus       II       Near Threatened         Humboldt's Squirrel Monkey       Saimiri sciureus       II       Least Concern         Squirrel Monkey       Saimiri sciureus sciureus       II       Near Threatened         Golden-Backed Squirrel Monkey       Saimiri ustus       II       Near Threatened         Blackish Squirrel Monkey       Saimiri vanzolinii       II       Vulnerable         Azara's Night Monkey       Aotus azarae       II       Least Concern         Feline Night Monkey       Aotus azarae infulatus       II       Near Threatened         Owl Monkey       Aotus azarae boliviensis       II       Least Concern         Brumback's Night Monkey       Aotus brumbacki       II       Vulnerable         Hershkovitz's Night Monkey       Aotus brumbacki       II       Vulnerable         Hernández-Camac		Saimiri boliviensis pluvialis		II	Least Concern
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Blackish Squirrel Monkey   Saimiri vanzolinii   II   Vulnerable	Squirrel Monkey	·		II	Least Concern
Blackish Squirrel Monkey   Saimiri vanzolinii   II   Vulnerable	Golden-Backed Squirrel Monkey	Saimiri ustus		II	Near Threatened
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Hernández-Camacho's Night MonkeyAotus jorgehernandeziIILeast ConcernGrey-Legged Owl MonkeyAotus lemurinus-griseimembraIIVulnerableLemurine Owl MonkeyAotus lemurinus -lemurinusIIVulnerablePanamanian Night MonkeyAotus lemurinus-zonalisIIData DeficientAndean Night MonkeyAotus miconaxIIVulnerable	Hershkovitz's Night Monkey	Aotus hershkovitzi	ershkovitzi II		Vulnerable
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Lemurine Owl MonkeyAotus lemurinus -lemurinusIIVulnerablePanamanian Night MonkeyAotus lemurinus-zonalisIIData DeficientAndean Night MonkeyAotus miconaxIIVulnerable		Aotus <del>lemurinus</del> griseimembra		11	Vulnerable
Panamanian Night MonkeyAotus Iemurinus-zonalisIIData DeficientAndean Night MonkeyAotus miconaxIIVulnerable	, , , , ,	_	1	II	Vulnerable
Andean Night Monkey Aotus miconax II Vulnerable		Aotus <del>lemurinus</del> zonalis		II	Data Deficient
y ,		Aotus miconax		II	Vulnerable
Own with they have a factor than the factor of the factor	Owl Monkey	Aotus nancymae		II	Least Concern
Peruvian Night Monkey  Aotus nigriceps  II Least Concern		-			

Common Name	Latin Name	USFW	CITES	IUCN
Northern Grey-Necked Owl	Aotus trivirgatus			Least Concern
Monkey	· ·			
Owl Monkey	Aotus vociferans		II	Least Concern
White Near d Deanded Cali	Chivanatas albinaava		11	Endangered
White-Nosed Bearded Saki	Chiropotes albinasus	,		
Guianan Bearded Saki	Chiropotes chiropotes		II	Least Concern
Rio Negro Bearded Saki	Chiropotes israelita		II	Vulnerable
Black Saki	Chiropotes satanas		II	Critically Endangered
Equatorial Saki	Pithecia aequatorialis		II	Data Deficient
White Saki	Pithecia albicans		II	Vulnerable
Bald-Faced Saki	Pithecia irrorata		II	Data Deficient
Gray's Bald Faced Saki	Pithecia irrorata irrorata		II	Data Deficient
Vanzolini's Bald Faced Saki	Pithecia irrorata vanzolinii		II	Data Deficient
Red-Bearded Saki	Pithecia monachus		II	Least Concern
Miller's Monk Saki	Pithecia monachus milleri		II	Data Deficient
Geoffroy's Monk Saki	Pithecia monachus monachus		II	Least Concern
Napo Monk Saki	Pithecia monachus napensis		II	Data Deficient
Guianan Saki	Pithecia pithecia		II	Least Concern
Golden Faced Saki	Pithecia pithecia chrysocephala		II	Least Concern
White-Faced Saki	Pithecia pithecia pithecia		II	Least Concern
	Cacajao ayresi		II	Vulnerable
Red Uakari	Cacajao calvus rubicundus		I	Vulnerable
Bald Uakari	Cacajo calvus		II	Vulnerable
White Bald-Headed Uakari	Cacajo calvus calvus		II	Vulnerable
Novae's Bald-Headed Uakari	Cacajo calvus novaesi		II	Vulnerable
Ucayali Bald-Headed Uakari	Cacajo calvus ucayalii		II	Vulnerable
	Cacajo hosomi		II	Vulnerable
Humbolt's Black-Headed Uakari	Cacajo m. melanocephalus		II	Least Concern
Black Uakari	Cacajo melanocephalus		II	Least Concern
Spix's Black-Headed Uakari	Cacajo m.ouakary		II	Least Concern
·				
Madidi Titi	Callicebus aureipalatil		II	Least Concern
Baptista Lake Titi	Callicebus baptista		II	Data Deficient
Northern Bahian Blonde Titi	Callicebus barbarabrownae		II	Critcally Endangered
Prince Bernhard's Titi	Callicebus bernhardi		II	Least Concern
Brown Titi	Callicebus brunneus		II	Least Concern
Booted Titi	Callicebus caligatus		II	Least Concern
Ashy-Black Titi	Callicebus cinerascens		II	Least Concern
Coimbra-Filho'sTiti	Callicebus coimbrai		II	Critically Endangered
Red Titi Monkey	Callicebus cupreus cupreus		II	Least Concern
White-Tailed Titi	Callicebus discolor		II	Least Concern
Bolivian Grey Titi	Callicebus donacophilus	l II		Least Concern
Hershkovitz'sTiti	Callicebus dubius			Least Concern
Hoffmann's Titi	Callicebus hoffmannsi		II	Least Concern
Lucifer Titi	Callicebus lucifer		II	Least Concern
Black Titi	Callicebus lugens		II	Least Concern
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Common Name	Name Latin Name USFW CITES		IUCN	
Colombian Black-Handed Titi	Callicebus medemi	II		Vulnerable
Coastal Black-Handed Titi	Callicebus melanochir	II		Vulnerable
Rio BentiTiti	Callicebus modestus	II		Endangered
Dusty Titi	Callicebus moloch		II	Least Concern
Black-Fronted Titi	Callicebus nigrifrons		II	Near Threatened
Andean Titi	Callicebus oenanthe		II	Endangered
Beni Titi	Callicebus olallae		II	Critically Endangered
Ornate Titi	Callicebus ornatus		II	Vulnerable
Pallid Titi	Callicebus pallescens		II	Least Concern
Masked Titi	Callicebus personatus		II	Vulnerable
Red-Crowned Titi	Callicebus purinus		II	Least Concern
Red-Headed Titi	Callicebus regulus		II	Least Concern
Stephen Nash's Titi	Callicebus stephennashi		II	Data Deficient
Collared Titi	Callicebus torquatus		II	Least Concern
Ursine Howling Monkey	Alouatta arctoidea		II.	Least Concern
Red Handed Howler Monkey	Alouatta belzebul		II	Vulnerable
Red Handed Howling Monkey	Alouatta belzebul discolor		II	Least Concern
Red Handed Howling Monkey	Alouatta belzebul ululata		II	Critically Endangered
Southern Black Howler	Alouatta caraya		II	Least Concern
Coiba Island Howling Monkey	Alouatta coibensis		ı	Vulnerable
Brown Howler Monkey	Alouatta guariba		II	Least Concern
Southern Brown Handed Howler	Alouatta guariba clamitans		II	Least Concern
Northern Brown Handed Howler	Alouatta guariba guariba		II	Critically Endangered
Guyanan Red Howler Monkey	Alouatta macconnelli		II	Least Concern
Amazon Black Howler Monkey	Alouatta nigerrima		II	Least Concern
Golden Mantled Howling Monkey	Alouatta palliata			Least Concern
Ecuadorian Mantled Howler	Alouatta palliate equatorialis		I	Vulnerable
Mexican Howling Monkey	Alouatta palliata mexicana		I	Critically Endangered
Mantled Howler	Alouatta palliata palliata	Endangered	ı	Least Concern
Azuero Howling Monkey	Alouatta palliata trabeata		II	Critically Endangered
Guatemalan Black Howler	Alouatta pigra	Threatened	I	Endangered
Purús Red Howling Monkey	Alouatta puruensis		II	Least Concern
Bolivian Red Howler Monkey	Alouatta sara		II	Least Concern
Red Howler	Alouatta seniculus		II	Least Concern
Trinidad Howling Monkey	Alouatta seniculus insulanus		П	Vulnerable
Jurua Red Howling Monkey	Alouatta <mark>seniculus</mark> juara		II	Least Concern
Colombian Red Howling Monkey	Alouatta seniculus seniculus		II	Least Concern
Maranhão Red-Handed- Howling	Alouatta ululata		II	Endangered
Monkey	Alouatta ululata			Lituarigereu
White Fronted Spider Monkey	Ateles belzebuth belzebuth		<u>                                      </u>	Endangered
Chamek Spider Monkey	Ateles belzebuth chamek		<u> </u>	Endangered
Brown Headed Spider Monkey	Ateles fusciceps fusciceps		II	Critically Endangered
Black-Headed Spider Monkey	Ateles fusciceps (rufiventris)robustus		II	Critically Endangered
Black-Handed Spider Monkey	Ateles geoffroyi		II	Least Concern
Azuero Spider Monkey	Ateles geoffroyi azuerensis		II	Critically Endangered

Common Name	Latin Name	USFW	CITES	IUCN	
Red Bellied Spider Monkey	Ateles geoffroyi frontatus	Endangered	I	Least Concern	
Geoffroy's Spider Monkey	Ateles geoffroyi geoffroyi		Ш	Critically Endangered	
Hooded Spider Monkey	Ateles geoffroyi grisescens		II	Data Deficient	
Ornate Spider Monkey	Ateles geoffroyi ornatus		II	Endangered	
Red Spider Monkey	Ateles geoffroyi panamensis	Endangered	I	Endangered	
Colombian Spider Monkey	Ateles geoffroyi rufiventris		II	Vulnerable	
Mexican Spider Monkey	Ateles geoffroyi vellerosus		II	Critically Endangered	
Yucatan Spider Monkey	Ateles geoffroyi yucatanensis		II	Endangered	
Variegated Spider Monkey	Ateles hybridus		II	Critically Endangered	
Brown Spider Monkey	Ateles hybridus brunneus		Ш	Critically Endangered	
White-Whiskered Spider Monkey	Ateles marginatus		II	Endangered	
Black Spider Monkey	Ateles paniscus		II	Vulnerable	
Southern Muriqui	Brachyteles arachnoides		I	Endangered	
Northern Muriqui	Brachyteles hypoxanthus		I	Critically Endangered	
Gray Woolly Monkey	Lagothrix cana		Ш	Endangered	
Geoffroy's Wooly Monkey	Lagothrix cana cana		Ш	Endangered	
	Lagothrix cana tschudii		Ш	Data Deficient	
Yellow Tailed Woolly Monkey	Lagothrix flavicauda	Endangered	†	Critically Endangered	
Woolly Monkey	Lagothrix lagotricha		II	Vulnerable	
Geoffroy's Woolly Monkey	Lagothrix lagotrichacana		Ш	Near Threatened	
Colombian Woolly Monkey	Lagothrix <del>lagotricha</del> lugens		II	Critically Endangered	
Lowland Woolly Monkey	Lagothrix <del>lagotricha</del> poeppigii		II	Vulnerable	
Yellow Tailed Woolly Monkey	Oreonax flavicunda		I	Critically Endangered	

IUCN: IUCN 2007. 2007 IUCN Red List of Threatened Species. http://www.iucnredlist.org.

CITES: CITES Species Database 2008. Appendices I, II & III (01/07/2008) http://www.cites.org

USFWS: US Fish and Wildlife Service, 2008. http://www.fws.gov/endangered/

Items in red indicate recent unpublished data and strikethrough indicates a change in taxonomy, courtesy of Dr. Anthony Rylands, from:

Preliminary results from the IUCN/SSC Primate Specialist Group (PSG) Red List Assessment Workshop for the Neotropical Primates, Disney Institute, Orlando, Florida, 27 November – 2 December 2007

## SELECTION CRITERIA

Groves (2001) splits New World primates into 4 families and 16 genera. All 4 families and 13 of the genera are represented in North American collections, so this RCP covers substantial taxonomic diversity. When writing the 2005 RCP, given the distinct differences between genera and recognizing the TAG's responsibility to address AZA institutional needs for diverse collections, the TAG applied the criteria below to each genus separately as well as considering issues that emerge across genera. In practice, this means that at least one member of each genus currently represented in North American collections is recommended at an SSP or PMP level. The single exception is the genus *Lagothrix*, as described more fully below.

Where space allowed and where criteria assessment supported such a decision, multiple taxa from a single genus were recommended. Cross-genus analysis was important in assessing how many taxa could be accommodated from each "exhibit type" group. The genera were broken into 6 groups, based on housing requirements:

- 1. Pygmy marmosets (Cebuella or Callithrix pygmaea).
- 2. Marmosets, tamarins, and Goeldi's monkey (*Callithrix*, *Saguinus*, *Leontopithecus*, *Callimico*).
- 3. Owl monkeys (Aotus)
- 4. Squirrel monkeys, titis, sakis (Saimiri, Callicebus, Pithecia)
- 5. Capuchins, uakaries, howlers (Cebus, Cacajao, Alouatta)
- 6. Woolly monkeys, spider monkeys (*Lagothrix*, *Ateles*)

These housing requirement divisions are not well defined. Titis and even sakis can be housed adequately in many exhibits which now hold marmosets or tamarins. Large groups of squirrel monkeys or medium-sized groups of capuchins may require as much space as a smaller group of spider monkeys. Nevertheless, the divisions allow some cross-genus analysis of space availability. Cross-genus analysis was particularly important in making RCP decisions for the callitrichids (marmosets, tamarins and Goeldi's monkey). The end result did include recommendations for at least one member of each callitrichid genus, but cross-genus comparison on other criteria weighed heavily in the decisions as to which additional species to recommend from among these genera. The criteria used in within-genus assessments are listed below. These criteria were also used in assessing across callitrichid genera, as described in the paragraph above.

- 1. **Conservation status** in the wild was assessed using current IUCN conservation listings. Taxa of conservation concern were considered a higher priority for AZA programs, with increasing priority given with increasing level of threat.
- 2. Status of current North American populations was determined using the ISIS database and studbooks where available. The TAG examined the number of animals presently in captivity in the region and any information available about the genetic status of the population. Within each genus, and across genera where applicable, taxa with larger or genetically more viable populations were considered higher priority for AZA programs.
- 3. Existence of captive populations and programs in other regions. Population status in Europe and other regions was determined using ISIS data and studbooks where available. EEP RCP recommendations were received from our European counterparts. Because captive populations in other regions are the most practical source of additional founders for AZA populations, species with sizable populations in other regions were considered to have better prospects for long-term survival and therefore considered higher priority for AZA programs. Those species recommended for programs in the EEP

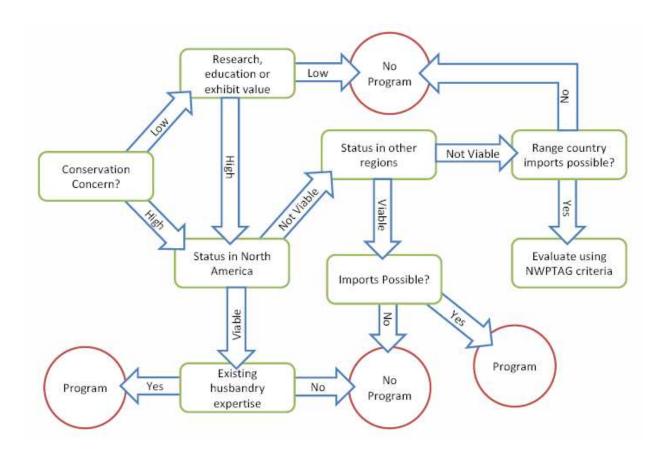
RCP were considered to have an incremental advantage, independent of absolute population size, due to the added likelihood of their long-term persistence in Europe. In the (few) cases where the North American population was large enough to be sustainable without imports over a long time horizon, issues around captive populations in other regions were considered less important. In assessing available space, the NWPTAG also came to the conclusion that to maintain populations that are viable in the long-term, we either need to substantially reduce the number of taxa currently recommended for AZA programs and increase the populations of the remaining recommended taxa or need to develop, over time, multi-regional programs. Europe, with its substantial available space for New World primates, will likely be the most important partner in most of these programs. As an example, there are currently an estimated 1100-1200 spaces for callitrichids in AZA zoos. With 300 as a probably low-end figure for a callitrichid population large enough to maintain reasonable genetic diversity over a long time frame (50-100 years), there would be sufficient space within AZA for only 3-4 programs if we considered North American populations as stand-alone (versus the 10 taxa recommended in the last version of the RCP). To optimize the trade-off between overall collection diversity in North America and long-term viability of the recommended populations, the NWPTAG assumed that we would be successful over time in developing multi-regional programs. We have successful existing models with lion tamarins and Goeldi's monkey which gives us confidence that such programs can be developed. These considerations were particularly important in arriving at recommendations for callitrichids. One result of this approach, again particularly for callitrichids, is that the North American RCP tends to mirror rather than complement the European RCP.

4. **Founder availability.** Outside of availability through other captive populations, if there were other known sources of founders, this was taken into consideration in assessing the overall prognosis for the taxon.

Additional criteria applied in earlier versions of the NWP RCP included:

- Knowledge of necessary husbandry techniques.
- The ability of the captive population to affect in-situ conservation of the species or habitat.
- The value of the *ex situ* population for research, education, and/or exhibition.
- In revising the RCP for the 2005 version, the TAG did not find these criteria at this point useful in prioritizing among competing taxa and did not apply them

# PREVIOUS RCP SELECTION CRITERIA Figure 1



#### MANAGEMENT ASSESSMENT CRITERIA

The taxa that were selected for management in the 2005 RCP were then assessed using the following WCMC Management Assessment Criteria (MAC) to assist in determining the type of management program to recommend.

- 1. What is the availability of the taxon in AZA collections?
- 2. What is the availability of the taxon outside AZA collections?
- 3. What is the extinction risk for the taxon within AZA collections if it is not managed?
- 4. What is the extinction risk for the taxon within AZA collections if it is managed?
- 5. What is the demand for the taxon within AZA collections?
- 6. What is the institutional commitment to the taxon within AZA membership?
- 7. How easy is it to breed the taxon?
- 8. What is the extinction risk for the taxon in the wild?
- 9. What are the acquisition costs for this taxon?
- 10. What are the program costs for this taxon?
- 11. Is there an international conservation/management program for this taxon?
- 12. What type of link would a management program have to conservation of this taxon in the wild?
- 13. Is there a North American governmental conservation program associated with this taxon?

At the 2007 Working Group Meeting, each program was evaluated using the above questions and the table on the following page. Question 13 was not considered in the evaluation process because no TAG programs have a North American governmental conservation program.

Responses were recorded as:

N = No management/DERP

P = PMP

S = SSP

The program's current status is listed at the top of the column. The total number of each response (N, P, or S) was tallied and the largest total is listed at the bottom of the column. For example, Golden Lion Tamarins received 4 PMP responses and 8 SSP responses so the MAC recommends SSP, which agrees with the existing program status. When the current status conflicts with the MAC criteria, explanation and justification is provided.

## Management Assessment Criteria for Recommended Taxa Table 3

CRITERIA	SSP	PMP	No Management (DERP/PHASE IN)
Availability within AZA	LOW	MODERATE	EXTREMES**
Availability outside AZA	LOW	MODERATE	EXTREMES**
Extinction Risk without			
Management*	ENDANGERED/THREAT		
(in Zoos & Aquariums)	ENED	VULNERABLE	EXTREMES**
Extinction Risk with			
Management* (in Zoos &			
Aquariums)	DECREASES	DECREASES/STABLE	STABLE
Demand within AZA	HIGH	MODERATE	LOW
Institutional Commitment	HIGH	MODERATE	LOW
Ease of Breeding	LOW/MODERATE	HIGH	EXTREMES**
	ENDANGERED/THREAT		
Extinction Risk (Wild)	ENED	VULNERABLE	LEAST CONCERN
Acquisition Cost (Outside			
AZA)	HIGH	MODERATE	LOW
Program Operating Costs	HIGH	MODERATE	LOW
International Program	YES	NO	NO
Link to Conservation of Wild			
Population	DIRECT	INDIRECT OR NONE	NONE
North American			
Governmental Conservation			
Program	YES	NO	NO

## **CHARACTERISTICS OF POPULATION MANAGEMENT LEVELS**

	SSP	PMP	No Management (DERP/Phase In)
Participation	FULL/MANDATORY	VOLUNTARY	N/A
Memorandum of Participation	NO	NO	N/A
Compliance	MANDATORY	VOLUNTARY	N/A
AZA Conflict Resolution			
Process	YES	NO	N/A
		PER PARTICIPANT	PER PARTICIPANT
Non-member Participation	YES	A/D POLICY	A/D POLICY
Animal-by-Animal		PER PROGRAM	
Recommendations	YES	DECISION	NO
Steering Committee	OPTIONAL	NO	N/A
AZA PMC Assistance	YES	YES	NO
			EVALUATED ON A CASE-BY-CASE
SPMAG Assistance	YES	YES	BASIS
AZA Regional Studbook	YES	YES	NO

<sup>\*\*&</sup>quot;Extremes" refers to species that are either so highly abundant or so rare as to render management impractical or unnecessary.

## Management Criteria for Callitrichids Table 4

	Pygmy Marmoset PMP	Geoffroy's Marmoset SSP	Golden Lion Tamarin SSP	Golden Headed Lion Tamarin SSP	Pied Tamarin PMP	Cotton Top Tamarin SSP	Goeldi's Monkey SSP	Emperor Tamarin PMP
1	S	Р	Р	Р	S	Ν	S	S
2	S	Р	Р	Р	Р	Ν	Р	S
3	Р	S	Р	S	S	Р	S	S
4	Р	S	S	S	S	N	Р	Р
5	S	Р	S	Р	Р	S	Р	Р
6	Р	Р	S	S	Р	Р	S	Р
7	Р	S	Р	Р	S	Р	S	Р
8	N	Р	S	S	S	S	S	N
9	S	S	S	S	S	S	S	S
10	Ν	N	S	S	Р	Р	Р	S
11	Р	Р	S	S	S	Р	S	Р
12	Р	Р	S	S	Р	S	Р	Р
13	NA	NA	NA	NA	NA	NA	NA	NA
	PMP	PMP	SSP	SSP	SSP	PMP	SSP	PMP

## **Comments**

Pied tamarins will be upgraded to an SSP based on this assessment criteria.

Geoffroy's Marmoset and Cotton Top Tamarin SSPs are long standing programs that benefit greatly from more intense management.

All other programs are functioning well in their current state.

## Management Criteria for Cebids Table 5

	Squirrel Monkey PMP	Owl Monkey PMP	Saki Monkey PMP	Titi Monkey PMP	Howler Monkey PMP	Capuchin PMP (C. robustus)	Capuchin PMP (C. capucinus)	Capuchin PMP (Generic)
1	Р	S	Р	S	Р	S	Р	Р
2	Р	Р	S	S	Р	S	Р	N
3	Р	S	Р	S	Р	S	Р	N
4	Р	Р	Р	S	Р	Р	Р	N
5	S	Р	Р	Р	Р	Р	Р	Р
6	S	S	Р	Р	Р	S	Р	Р
7	Р	Р	Р	Р	Р	S	Р	Р
8	N	S	N	N	N	Р	N	N
9	Р	Р	S	S	S	S	Р	Р
10	N	N	N	N	N	N	N	N
11	Р	Р	Р	Р	Р	S	N	N
12	Р	Р	Р	Р	Р	Р	Р	N
13	NA	NA	NA	NA	NA	NA	NA	NA
	PMP	PMP	PMP	PMP	PMP	SSP	PMP	DERP

	Spider Monkey SSP ( <i>A.</i> <i>hybridus</i> )	Spider Monkey SSP ( <i>A.</i> robustus)	Spider Monkey SSP (A. vellerosus)	Spider Monkey SSP (A. geoffroyi)
1	S	Р	S	Р
2	S	S	S	Р
3	S	S	S	Р
4	Р	Р	Р	Р
5	S	Р	S	Р
6	S	S	S	S
7	S	Р	Р	Р
8	S	Р	S	S
9	N	S	S	Р
10	Р	N	N	N
11	Р	S	Р	Р
12	Р	Р	Р	Р
13	NA	NA	NA	NA
	SSP	PMP	SSP	PMP

#### **Comments**

The TAG does not recommend changes to the status of any of these programs from the 2005 RCP. Programs that came out as a different level in this matrix are nested within larger programs that currently function well at their current level (Capuchin Monkeys and Spider Monkeys). Two programs were not listed in the matrix above (Uakari and Woolly Monkey) because they are not self sustaining populations. Further explanation is provided in the text that follows.

## SPACE ANALYSIS

The TAG conducted a space survey in early 2008 of all 229 AZA institutions. The survey enquired as to current holdings and future plans for all New World primate species in both terms of number of groups and individuals. Additional open-ended questions covered future plans that were not species-specific and comments to cover any items not covered in the survey questions. The category "Unspecified Callitrichids" below represents spaces an institution has designated for callitrichids in the future but the specific species has not yet been identified. The response rate was 94% of AZA institutions (129) that have designated an Institutional Representative to the NWPTAG (137). A summary of the survey results are presented below.

## **Table 6 Space Survey Summary**

Species		Individu	als		Groups		
Species	2008	2012	Observe	2008	2012	Ola a sa asa	
	Spaces	Spaces	Change	Spaces	Spaces	Change	
Callitrichids		•		•	•		
Pygmy Marmoset	87	235	148 (+170%)	28	44	16 (+57%)	
Geoffroy's Marmoset	111	149	38 (+34%)	15	19	4 (+27%)	
Emperor Tamarin	58	67	9 (+16%)	19	16	3 (-16%)	
Pied Tamarin	30	56	26 (+87%)	11	11	0	
Cotton-Top Tamarin	282	329	47 (+17%)	76	70	6 (-8%)	
Golden Lion Tamarin	238	292	54 (+23%)	61	62	1 (+2%)	
Golden-Headed Lion Tamarin	80	97	17 (+21%)	23	21	2 (-9%)	
Goeldi's Monkey	110	169	59 (+54%)	27	33	6 (+22%)	
Phase-Out Species	219	177	42 (-19%)	52	42	10 (-19%)	
Unspecified Callitrichids	NA	253	253	NA	83		
Totals	1240	1849	609 (+49%)	312	402	90 (+29%)	
Cebids				•			
Owl Monkey/Douroucouli	49	55	16 (+33%)	15	15	0	
Grey Titi	41	81	40 (+98%)	13	17	4 (+31%)	
Red Titi	3	12	9 (+300%)	2	5	3 (+150%)	
Squirrel Monkey	228	389	161 (+71%)	35	37	2 (+6%)	
Capuchin Monkey	106	133	27 (+25%)	18	20	2 (+11%)	
White Faced Saki	130	154	24 (+18%)	38	41	3 (+8%)	
Bearded Saki	0	12	12	0	3	3	
Red Uakari	3	16	13 (+430%)	1	4	3 (+300%)	
Red Howler	8	40	32 (+400%)	1	8	7 (+700%)	
Southern Black Howler	97	110	13 (+13%)	22	24	2 (+9%)	
Black Howler	19	19	0	6	6	0	
Spider Monkey	298	330	32 (+11%)	56	50	6 (-12%)	
Woolly Monkey	6	31	25 (+416%)	1	8	7 (700%)	
Unspecified Cebids	NA	64	64	NA	25		
Totals	988	1446	458 (+46%)	208	263	55 (+26%)	

## **PROGRAM RECOMMENDATIONS**

#### Overview

The TAG recommends only minor changes in program status from the 2005 RCP (see Table 17 on page 38). As in 2005, the TAG encourages AZA institutions to continue to hold Phase-Out taxa rather than disposition them outside of AZA. Space currently held by these taxa will become available to recommended programs through natural attrition and will be continually evaluated by the TAG. Holding non-breeding groups of phase-out taxa supports the NWPTAG programs just as holding SSP and PMP species does.

Institutions are encouraged to contact the TAG when considering the addition of New World primate species to their collections. The TAG is available to advise on animal availability, exhibit design, mixed species, imports and husbandry. In addition to this document TAG programs have published three husbandry manuals and AZA Animal Care Manuals are currently in review.

#### **Target Population Numbers**

When the NWPTAG began planning to revise this document in late 2007 the Population Management Center (PMC) was not available until 2010 so a PMC review of all programs was not possible. In 2004 the PMC conducted an analysis of all Callitrichid programs using ZooRisk and this information was used to set target number in the 2005 RCP. For Cebid programs, whenever possible space recommendations are based on the most recent published masterplan. Again, due to scheduling challenges with the PMC, not all Cebid programs have conducted analysis with the PMC at this time. The 2005 RCP target numbers and available PMC masterplan target numbers were then compared to the results of the 2008 space survey to determine 2008 target numbers. In cases where the space survey indicated more available space than the 2005 target number, the target was increased. Further explanation of target population numbers is included in the specific information about each program.

#### **Program Function**

Captive populations in AZA facilities should not exist simply to fulfill the whims of collection managers. Careful consideration and planning, as outlined in this RCP, should be used when selecting which species to manage. Each program in the TAG can fulfills one of the following categories. Some programs may serve more than one function and the TAG encourages all institutions participating in these programs to support *in situ* efforts. Institutions seeking to support field projects can contact the program manager or the steering committee for assistance in identifying projects.

**Conservation:** taxa serve as a genetic reservoir for an established reintroduction program

**Research:** taxa serve as a model for understanding the captive management of the same or related taxa

**Education:** taxa serve as a flagship species to generate attention to the conservation needs of wild populations

#### **Callitrichids (Marmosets and Tamarins)**

Genera Callithrix, Cebuella, Saguinus, Leontopithecus, Callimico

Many taxa are competing for these limited spaces – 18 taxa (including pygmy marmosets) are currently held in AZA institutions, with 8 of those recommended for SSP or PMP management in the 2000 RCP. The TAG was concerned that continuing to manage that many taxa might keep some of the programs at population levels that would damage their prospects for long-term viability. In April 2004 the TAG met at the AZA Population Management Center to assess the status of its Callitrichid programs. As a result of this analysis, one program was recommended for phase-out based on space needs. The TAG also decided to consider bi-regional management with EAZA programs in Europe, which increases both the number of spaces and potential founders. While this strategy requires additional time, resources and expense, the TAG has found it to be successful so far, highlighted most recently by the import of ten Pied Tamarins from the Jersey Zoo. The full report from this meeting is available upon request to the TAG or PMC.

There are approximately 1200 callitrichids held in AZA zoos. The space survey conducted in 2003 provided conflicting information on future space trends for callitrichids other than the pygmy marmoset. The responses as to how many *individuals* institutions thought they could hold over the next 3-5 years suggested a substantial increase of ~27%. However, institutional responses indicated an increase in number of *social groups* (= number of actual exhibits or holding spaces) of only 3%. Thus, it appeared that institutions are planning to increase their holdings by increasing group sizes or mixing species. The TAG did not believe that it was realistic to expect that much space would be gained through these methods in practice and reached its recommendation for callitrichids based on an assumption of flat growth in space for this group. The 2003 projections did not include pygmy marmosets, as they are do not typically occupy space that is useable by other callitrichids. When the 2008 survey is adjusted in the same way, results indicate an increase of just over 3%, which is consistent with the TAG's 2003 and 2005 assessments.

Institutions holding species designated as "Phase Out" are encouraged to contact the Callitrichid Phase-Out Manager with updates on the status of their holdings. Institutions interested in acquiring Callitrichids are encouraged to contact the Callitrichid Coordinator for advice on taxa most in need of additional space. Contact for both of these individuals is provided in this document.

Current target populations are based on the most recent masterplan for each program, the 2004 PMC meeting mentioned above, 2005 RCP recommendations, and 2008 space survey data.

**Table 7 Callitrichid Program Recommendations** 

Species	Current Population	Target Population	Function
Pygmy Marmoset (C. pygmae)	90	200	Education Research
Geoffroy's Marmoset (C. geoffroyi)	100	125	Education
Cotton Top Tamarin (S. oedipus)	302	300	Education
Emperor Tamarin (S. imperator subgriscens)	30	100	Education
Pied Tamarin (S. bicolor)	37	100	Education Conservation
Golden Lion Tamarin ( <i>L. rosalia</i> )	255	200	Education Conservation
Golden Headed Lion Tamarin ( <i>L. chrysomelas</i> )	79	100	Education
Goeldi's Monkey (C. goeldii)	105	125	Education
Phase Out species	>200	0	NA
AZA Total	1189	1250	

#### Notes:

- 1. Although some callitrichid taxa currently held in AZA institutions are recommended for Phase-Out as described below, the NWPTAG encourages AZA institutions to provide homes for individuals of Phase-Out taxa already held within AZA, whether through continuing to hold individuals already in your collection or acquiring individuals from another AZA institution. In general, we are hoping to transition space from Phase-Out taxa to PMP and SSP taxa through natural attrition rather than through moving individuals of Phase-Out taxa to non-AZA facilities. Holding/exhibiting Phase-Out species in non-breeding situations supports NWPTAG programs just as holding PMP and SSP species does.
- 2. Because of the large number of both taxa and individuals within this group, the TAG has created two positions to help with group-wide management. The Phase-Out Manager tracks the status of taxa recommended for Phase-Out and should be the first contact for managers with issues regarding acquisition or disposition of phase-out taxa. The Callitrichid Coordinator helps manage space availability and placement options across callitrichid taxa. Managers with general questions about availability and program needs for callitrichids should contact the Callitrichid Coordinator. Those with questions about specific PMP or SSP taxa should contact the program leader.
- Pygmy marmoset target population size is based on institutional demand for this species. Since pygmy marmosets are frequently housed in mixed species exhibits or exhibits too small for other Callitrichids (i.e. unique, dedicated space), the TAG does not consider them in the total space available for Callitrichid species.

## **Capuchin Monkeys**

Past RCPs (2000, 2005) have recommended pursuing a program for the Cebus species of greater conservation concern (*C. n. robustus* and/or *C. xanthosternos*) but this alone will not meet institutional need. The TAG recommends further investigation of importations from Europe and/or Brazil of either of these taxa and continuing to breed white-throated capuchins to meet institutional need. If a program for *robustus* or *xanthostemos* develops in the future, those individuals could fill spaces currently held by other taxa, as the 2008 space survey does not indicate a large increase in space available for this genus.

**Table 8 Capuchin Monkey Program Recommendations** 

Species	<b>Current Population</b>	Target Population	Function
Crested Capuchin	12	25	Education
(C. nigritus robustus)	IZ	23	Ludcation
White-Fronted			
Capuchin	7	0	NA
(C. albifrons)			
White-Throated			
Capuchin	39	50	Education
(C. capucinus)			
Weeper Capuchin	2	0	NA
(C. olivaceous)	2	U	INA
Yellow Breasted			
Capuchin	0	0	NA
(C. xanthosternos)			
Generic Capuchins (C.			
apella, C. libidosus, C.	72	50	Education
nigritus)			
AZA Total	153	125	

## **Squirrel Monkeys**

Karyotyping is still in progress for this program and participation by holding institutions is essential to moving this program forward. The current TAG recommendation is to breed only *S. s. sciureus*, and phase out all other taxa, including *S. s. macrodon*. Genetics advisor Dr. Jean Dubach notes that interbreeding could impact long term viability and/or fertility as there may be species-level differences between the two.

Demand for this taxa remains high, although the space survey results indicate a demand for larger groups more than the addition of new institutions (a 71% increase in the number of individuals vs. a 6% increase in number of groups). Based on space survey results and high institutional demand, the target population has been increased from the 2005 RCP from 250 to 300. A masterplanning session at the PMC is scheduled for summer 2009, at which time there should be more information available about the true status of *S. s. sciureus*.

**Table 9 Squirrel Monkey Program Recommendations** 

Species	Current Population	Target Population	Function
Common Squirrel Monkey (S. sciureus)	79	300	Education
Bolivian Squirrel Monkey (S. boliviensis)	48	0	NA
Other/Unknown/Hybrids	148	0	NA
AZA Total	275	300	

## **Owl Monkeys**

Taxonomic questions have held this species in limbo for several years but at this time most holding institutions have submitted samples for analysis. In the 2005 RCP the TAG decided to pursue a breeding program for *A. I. grisiemembra* as this is the taxa of greatest taxonomic concern. However, the current population is not self sustaining and imports will be required. The TAG recommends investigating the possibility of importations from Europe or South America. If this is not a feasible course of action, a substantial population of *A. nancymae* exists at a non-AZA facility and in laboratories. Target population for this program is based on space survey results and institutional demand and may be re-evaluated after further investigation and analysis.

**Table 10 Owl Monkey Program Recommendations** 

Species	Current Population	Target Population	Function
A. lemurinus grisiemembra	20	TBD*	Education
A. I. lemurinus	0	0	NA
A. nigriceps	3	0	NA
A. nancymae	9	TBD*	Education
A. azarae boliviensis	7	0	NA
A. vociferans	1	0	NA
Other/Unknown/Hybrids	41	0	NA
AZA Total	81	100	

<sup>\*</sup>After further analysis, one or both of these species will be identified for long term management with a target populations totaling 100.

## Saki Monkeys

The 2000 and 2005 RCP recommended a PMP program for white-faced sakis and this recommendation remains unchanged. In 2005 the TAG left open the possibility of a bearded saki (*Chiropotes* sp.) if the opportunity presented itself. This has not materialized and given the need for additional space for the existing program, the TAG does not recommend pursuing further at this time. Based on space survey results and institutional demand, the target number has been increased from 100 to 150.

**Table 11 Saki Monkey Program Recommendations** 

Species	Current Population	Target Population	Function
White-Faced Saki ( <i>P. p. pithecia</i> )	130	150	Education
AZA Total	130	150	

#### **Uakaris**

In the 2005 RCP, the TAG recommended DERP level management for *C. calvus rubicundus*, the red uakari. The TAG encourages continued efforts with the existing small population and would support appropriate additional importations, to gain husbandry experience and biological information on this genus and to develop an AZA population. However, given the small size of the current population, the TAG continues to classify the taxon as a DERP in this version of the RCP, since a studbook and active population management are not needed. *C. calvus* has been listed as "Under Review" by the EAZA Cebid TAG, which also supports import.

**Table 11 Uakari Program Recommendations** 

Species	Current Population	Target Population	Function
Red Uakari (Cacajo calvus rubicundus)	4	10	Research Education
AZA Total	4	10	

## **Titi Monkey**

Like several other NWP genera, *Callicebus* has undergone drastic taxonomic revision in recent years. Until the late 1980's, only 3 species were recognized (*moloch*, *torquatus*, *personatus*). Reassessments have added substantially to the species number in the genus. Groves (2001) listed 16 species, some with subspecies. A more recent paper (van Roosmalen *et al.* 2002) listed 28 species. Both of the latter authors recognize all the taxa (potentially) held in North America as full species without subspecific divisions.

There is significant confusion about the *moloch* and/or *cupreus* individuals held in North America. The few individuals held at AZA zoos that are identified in ISIS as *C. moloch* (red-bellied or dusky titi), as well as the large UC Davis "*moloch*" colony, have been thought by the TAG to be *C. cupreus* (red or coppery titi) instead, and are listed as such in the titi studbook. Although authors van Roosmalen *et al.* (2002) identified the animals at the National Zoo as *C. brunneus* (brown titi), the TAG continues to be confident that these animals are *C. cupreus* (see taxonomic note at the end of this section). UC Davis now classifies their colony as *C. cupreus* (K. Bales, pers. comm.. to A. Baker, February 2005). Note that the UC Davis colony is also the source for at least most of the *C. cupreus* now held in European institutions.

In 1996, when preparing the first RCP, the NWPTAG faced the question of whether to recommend one or two titi taxa for programs. After considerable discussion, the decision was made to recommend only *C. donacophilus*, for the following reasons: 1) More zoos were already working with *C. donacophilus*; 2) Europe had a small number of *C. cupreus* and wanted more, so it made some sense to recommend that North American surplus (from the UC Davis colony) be sent to a European program; 3) Even though UC Davis wanted to reduce their collection, they wanted to retain control over the majority in the interests of their long-term research. Because the animals are involved in a research program, it was viewed as unlikely that Davis would be consistently willing or even able to abide by population management recommendations for transfers, pairing, and breeding; 4) The *C. donacophilus* population needed to grow, and competition with *C. cupreus* could limit this needed growth; 5) The *C. donacophilus* population had a history of management (and has since been under the guidance of a population master plan). This recommendation continued in the 2000 RCP.

Reconsidering the genus 2005 RCP, there was a set of circumstances that is unique among the NWP genera. On the one hand, C. donacophilus continues to have a much larger population within AZA than the other taxon and there is no reason to think that UC Davis is in any better position to manage their C. cupreus collection compatibly with an AZA program than they have been in the past. On the other hand, the total North American population of *C. cupreus* is much larger, there is a population of C. cupreus but not C. donacophilus in Europe, and the C. cupreus population is possibly slightly more genetically robust than that of C. donacophilus (The donacophilus population has an FGE of about 6, with a potential FGE of about 10. The cupreus population has a comparable FGE (~5.5, based on initial analysis of the 1998 studbook), but a somewhat higher potential FGE (~14)). There are no prospects at this point for additional donacophilus founders, and the donacophilus population has failed to increase despite continued management intended to achieve population growth. Given these circumstances, an argument could be made that cupreus has better long-term potential, even though there are challenges to recognizing that potential within an AZA program, and that the RCP should therefore recommend a focus on acquiring "founders" over time from the UC Davis cupreus colony. After considering all these factors, the TAG recommended the continuation of a program for C. donacophilus. The TAG will continues to emphasize efforts to increase the size of this population to meet perceived demand within AZA. The TAG continues to discourage acquisition of *C. cupreus* from UC Davis at this time, but recognizes that institutions may choose to attempt this to meet exhibit needs, particularly if efforts to increase the *donacophilus* population are not successful. The situation of this genus will require continued monitoring and recommendations may change in future RCPs. Based on the slow growth of this population and space survey results, the target population has been reduced from 100 to 75.

**Table 12 Titi Monkey Program Recommendations** 

Species	Current Population	Target Population	Function
Bolivian Grey Titi (C. donacophilus)	46	75	Education
Red Titi (C. cupreus)	4	0	NA
AZA Total	45	75	

#### Taxonomic note:

Ken Kaemmerer, former Titi Monkey Studbook Keeper and PMP Manager, February 2005, re: identity of *cupreus* (versus *moloch* or *brunneus*) in AZA facilities:

There are areas in Peru and Brazil where cupreus, brunneus, and caligatus all three overlap or are adjacent according to Hershkovitz (1990). But cupreus ranges north of brunneus or caligatus into Colombia and Ecuador. Based on published literature and personal correspondence with William Mason, most of the animals he first worked with were either Colombian or came through Leticia. He started the colony (with Rainer Lorenz) at Delta Primate Center in Louisiana. Mason moved part of the colony to UC Davis and Lorenz moved part of the colony to the University of Gottingen in Germany. (Around 1990, UC Davis imported a dozen animals out of Iquitos, Peru - I would like to see a karyotype of those animals and probably it exists). The National Zoo started their titi group by importing from Gottingen and the animals still alive today are descendents of animals that were imported from Germany. San Antonio Zoo in turn acquired offspring from National Zoo's pair. San Antonio karyotyped their animals and it was reported (I have the chromosome report) as 2N=46. Now regarding titi chromosome numbers and species: We don't have karyotypes of even half of the 28 species (and counting), but there is definitely a wide range of karyotypes. We do have chromosome numbers on donacophilus (50) and cupreus (46, matching the San Antonio animals). Also, incidentally, UC Davis karvotyped their animals as 46, also matching cupreus, but not moloch (48). By good fortune, we also have a karyotype of brunneus (48, see studbook). So because San Antonio's karotyped animals were 46 and came from the National Zoo, I have to conclude that the National Zoo titis which came from Gottingen are, or were, in fact, C. cupreus and not C. brunneus.

#### **Howler Monkeys**

AZA institutions currently hold 3 howler taxa, the southern black (*A. caraya*), the Venezuelan red (*A. seniculus*), and the Guatemalan black (*A. pigra*). All but *caraya* are held in very small numbers and at a single AZA institution each. An additional species, the Bolivian red howler (*A. sara*), is held in Europe. The TAG assumes that the individuals held in AZA are probably of a subspecies not listed by IUCN. The TAG does not know the subspecific status of the single individual listed as held in AZA.

In the 2000 and 2005 RCP, the TAG recommended PMP management for the southern black howler and phase-out status for the other taxa that were held at that time. The TAG continues to recommend a PMP for the southern black howler. No programs are recommended for other taxa at this time. Past experience with red howlers (*seniculus* and *sara*) has been poor, and although the single institution currently holding *seniculus* has had recent breeding success. The TAG is reluctant to recommend a program due to space concerns for *caraya*. However, the TAG does not recommend an active phase-out for this taxon, as continued work with this species at the single current holding institutions could provide valuable husbandry information.

**Table 13 Howler Monkey Program Recommendations** 

Species	<b>Current Population</b>	Target Population	Function
Southern Black Howler (A. caraya)	98	100	Education
Guatemalan Black Howler (A. pigra)	1	0	NA
Red Howler (A. seniculus)	8	10	Education Research
AZA Total	107	110	

## **Spider Monkeys**

Certain aspects of spider monkey taxonomy continue to be controversial, creating some problems and confusion with regard to the RCP. Two issues are summarized here:

- 1. The taxonomic affiliation of *Ateles fusciceps robustus* is not fully resolved. Groves (2001) continues to group this subspecies with *Ateles fusciceps*, although he uses the subspecific name *rufiventris* rather than *robustus*. Work by Collins and Dubach (2000a, 2000b), however, suggests that this taxon is a subspecies of *Ateles geoffroyi*. This issue may have little impact on RCP decisions in the short term. However, in the long term, if *robustus/rufiventris* is a subspecies of *A. geoffroyi*, it means that AZA is dedicating a substantial proportion of its total large New World monkey space to house multiple forms of the same species, with possible impacts as well on Old World monkey programs, and the TAG and AZA will have to decide whether that is the best use of that restricted space.
- 2. Taxonomy within the Ateles geoffroyi group is far from fully resolved. Groves (2001) recognizes 5 subspecies (yucatanensis, vellerosus, geoffroyi, ornatus and grisescens). Additional subspecies (panamensis, azuerensis, frontatus, others?) are recognized by some other authorities (e.g. Rylands et al. 2000). Groves (2001) argues that panamensis is a synonym of ornatus, includes azuerensis also under ornatus, and includes frontatus under geoffroyi. Regardless of the taxonomy used, a number of these subspecies, including some reported to be held by AZA institutions, are listed by IUCN as of conservation concern (see below). However, Collins and Dubach (2000a, 2000b) suggest that subspecific differentiation might be limited to northern (samples from vellerosus and vucatanensis), central (a sample from frontatus) and southern forms (samples from panamensis and Panamanian individuals not identified to subspecies). Of the subspecies listed as held in AZA institutions, one could extrapolate and assign vellerosus and yucatanensis to the northern form, geoffroyi to the central form, and panamensis and grisescens to the southern form. Obviously, these conflicting taxonomies present a challenge to the TAG and AZA, in terms of deciding what taxonomy to accept, as well as in terms of identifying individuals to subspecies, if we wanted to try to manage at a subspecific level.

In the 2000 RCP, the TAG identified *Ateles fusciceps robustus* and *Ateles hybridus* for PMP programs, and indicated the intention to create another PMP for the Central American forms of *A. geoffroyi*, with exact scope to be defined. Since then, the TAG moved the entire genus under a single SSP and had decided to institute a generic Central American *A. geoffroyi* program at the species level, and thus not attempt to manage *A. geoffroyi* at the subspecies level (except for *robustus/rubriventer*). A species-level Master Plan for Central American *A. geoffroyi* was finalized in February 2003. In the 2005 RCP, the TAG continued to recommend an SSP at the genus level.

Two clearly defined *Ateles* taxa currently held within AZA are of conservation concern according to IUCN: *A. hybridus* (Critically Endangered) and *A. "geoffroyi" robustus/rufiventris* (Vulnerable). Based on the overall TAG selection criteria, the 2005 RCP recommended programs for both. There is a very large population of Central American *Ateles geoffroyi* within AZA. Some are reported at subspecies level in ISIS and some of the subspecies reported to be held in AZA institutions are listed as of conservation concern by IUCN. Interestingly, the Central American *A. geoffroyi* population in Europe is relatively small. The TAG struggled with how to best manage this group in 2005.

A major question in trying to decide among the possible options is the extent to which institution-

reported subspecific IDs are accurate. The individuals reported in the studbook and/or ISIS as *A.g. vellerosus* are almost entirely animals imported or confiscated (and therefore suspected to be wild-caught) since the mid-1980's or are first generation descendants of those individuals. If the subspecific IDs are correct and the imported animals are treated as founders, there are 16 living founders in AZA institutions (plus one institution that recently lost accreditation). An additional 2 "founders" are represented in AZA through first generation offspring. Thus, there is potentially a reasonably large base for a *vellerosus* program.

It is much more difficult to assess the current status of *A. g. geoffroyi*. This is an "older" population, with most of the animals that might be founders coming into the population before 1980. Among living animals identified in a cursory review as possible founders, 2 came into the population in the 1980's, 13 in the 1970's and 1 in the 1960's. Related to this older history, a high percentage (>40%) of the population has some level of unknown ancestry. In addition, a few have at least one ancestor that is identified in ISIS or the studbook as another subspecies or only at the species level. Genetic analysis may allow us to identify a reasonable number of *A.g. geoffroyi* of known ancestry.

The 2007 masterplan for this program was used to update the recommendations for these programs. Based on work done at the PMC and with Dr. Jean Dubach, the TAG recommends the following for Ateles:

- 1. Breed *A. robustus* and *A. g. vellerosus* as separate pure populations. Do not breed A. robustus hybrids.
- 2. Breed A. geoffroyi to meet institutional needs.

**Table 14 Spider Monkey Program Recommendations** 

Species	Current Population	Target Population	Function
A. paniscus	1	0	NA
A. chamek	6	0	NA
A. hybridus	8	15	Education
A. robustus	77	85	Education
A. geoffroyi	237	225	Education
A. g. geoffroyi			
A. g. vellerosus	28	50	Education
A. g. yucatensis	2	0	NA
AZA Total	359	375	

## **Woolly Monkeys**

As is the case for so many NWP genera, the genus *Lagothrix* has undergone taxonomic revision. The genus has typically been considered to contain two species (*L.. lagotricha*, the common woolly monkey, and *L.. flavicauda*, the yellow-tailed woolly monkey). Groves (2001) moved the latter into a separate genus (*Oreonax*) actually more closely allied with *Ateles*, and split the former into four species (*lagotricha*, *cana*, *lugens*, *poeppigii*). One implication of this split is that a number of individuals in the captive woolly monkey population would be species-level rather than subspecies-level hybrids.

In the 2000 RCP, the TAG recommended the management of *L. poeppigii* (or *L. l. poeppigii*) at a PMP level, and continued breeding of all other individuals in the population, matching at the (sub)species level as much as possible. Since then, the already-small population within AZA has declined sharply, from approximately 20 to approximately 6, with only one female in the population. All individuals have been moved to one AZA facility. This genus is functionally extinct in North America and given historical husbandry challenges, the TAG now recommends a Phase Out.

**Table 15 Woolly Monkey Program Recommendations** 

Species	Current Population	Target Population	Function
Woolly Monkey (Lagothrix spp.)	6	0	NA
AZA Total	6	0	

# PROGRAM RECOMMENDATIONS SUMMARY Table 16

Common Name	Latin Name	Program	Programs		
Callitrichids					
Pygmy Marmosets	Callithrix (Cebuella) pygmaeus	PMP	Population Manager Studbook Keeper	Stephanie Dampier West Palm Beach Zoo	
Common Marmoset	Callithrix jacchus	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Geoffroy's Marmoset	Callithrix geoffroyi	SSP	Coordinator Studbook Keeper	Beth Bahner Philadelphia Zoo	
Wied's Marmoset	Callithrix kuhlii	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Silvery Marmoset	Callithrix argentata	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Saddleback or Brown Mantled Tamarin	Saguinus fuscicollis	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Cotton Top Tamarin	Saguinus oedipus	SSP	Coordinator	Rebecca Phillips Disney's Animal Kingdom	
			Studbook Keeper, International	Hollie Colahan Houston Zoo	
Emperor Tamarin, Bearded	Saguinus imperator imperator	Phase Out	Population Manager Studbook Keeper	Tyrene Fayard Audubon Zoo	
Emperor Tamarin, Black-Chinned	Saguinus imperator subgrisecens	PMP	Population Manager Studbook Keeper	Tyrene Fayard Audubon Zoo	
Geoffroy's Tamarin	Saguinus geoffroyi	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Mustached Tamarin	Saguinus mystax	PMP	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Pied or Bicolored Tamarin	Saguinus bicolor	SSP	Coordinator and Studbook Keeper, International	Andy Baker Philadelphia Zoo	
Red-Handed Tamarin	Saguinus midas	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
White-Lipped or Red-Bellied Tamarin	Saguinus labiatus	Phase Out	Callitrichid Phase-Out Manager	Liz Larsen Utah's Hogle Zoo	
Golden Lion Tamarin	Leontopithecus rosalia	SSP	Coordinator	Jon Ballou Smithsonian's National Zoo	
			Studbook Keeper, International	Jennifer Mickelberg Smithsonian's National Zoo	
Golden-Headed Lion Tamarin	Leontopithecus chrysomelas	SSP	Regional Coordinator	Jon Ballou Smithsonian's National Zoo	
			Program Manager	Jennifer Mickelberg Smithsonian's National Zoo	

Common Name	Latin Name	Program	Programs		
Black Lion Tamarin	Leontopithecus chrysopygus	Phase Out	Coordinator	Jon Ballou Smithsonian's National Zoo	
Goeldi's Monkey	Callimico goeldi	SSP	Coordinator Studbook Keeper, International	Mark Warneke Brookfield Zoo	
Cebids					
Crested or Robust Tufted Capuchin	Cebus nigritus robustus	PMP		Mark Warneke	
White-Throated Capuchin	Cebus capucinus	PMP	Studbook Keeper		
Tufted Capuchin	Cebus apella	PMP	Population Manager	Brookfield Zoo	
White-Fronted Capuchin	Cebus albifrons	Phase out	1 opulation Manager		
Weeper Capuchin	Cebus olivaceus	Phase Out			
Common Squirrel Monkey	Saimiri sciureus	PMP			
Black-Capped Squirrel Monkey	Saimiri boliviensis	Phase Out	Studbook Keeper Population Manager	Beth Ricci Utica Zoo	
Central American Squirrel Monkey	Saimiri oersedti	Phase Out			
	T		1	_	
Azara's Night Monkey	Aotus azarae	Phase Out			
Owl Monkey	Aotus azarae boliviensis	Phase Out			
Grey-legged Owl Monkey	Aotus lemurinus grisiemembra	PMP		Erik Beck	
Lemurine Owl Monkey	Aotus lemurinus lemurinus	Phase Out	Studbook Keeper		
Owl Monkey	Aotus nancymae	PMP	Population Manager	Mesker Park Zoo	
Peruvian Night Monkey	Aotus nigriceps	Phase Out			
Owl Monkey	Aotus vociferans	Phase Out			
Hybrids	Aotus spp.	Phase Out			
All other taxa	Aotus spp.	Phase Out			
	T	I	To: " 14	1 <del>-</del> -	
White Faced Saki	Pithecia pithecia pithecia	PMP	Studbook Keeper Population Manager	Tracy Frampton Brevard Zoo	
Red Uakari	Cacajao calvus rubicundus	DERP			
Bolivan Gray Titi	Callicebus donacophilus	PMP	Studbook Keeper	Andy Henderson	
Red Titi	Callicebus cupreus	Phase Out	Population Manager	Utah's Hogle Zoo	

Common Name	Latin Name	Program	Programs		
Southern Black Howler	Alouatta caraya	PMP			
Venezuelan Red Howler	Alouatta seniculus	DERP	Population Manager Studbook Keeper,	Kristin Harris Little Rock Zoo	
Guatemalan Black Howler	Alouatta pigra	Phase Out	International		
Mantled Howler	Alouatta palliata	Phase Out			
Variegated Spider Monkey	Ateles hybridus	SSP	Coordinator	Keith Lovett Palm Beach Zoo	
Black Spider Monkey	Ateles fusciceps robustus	SSP			
Mexican Spider Monkey	Ateless geoffroyi vellerosus	SSP		Gwen Lovett Palm Beach Zoo	
Black Handed Spider Monkey	Ateles geoffroyi	SSP	Studbook Keeper		
All other taxa	Ateles spp.	Phase Out			
Woolly Monkey	Lagothrix lagotricha	Phase Out			

All studbooks are North American Regional unless otherwise noted.

See Table 1 for Program Leader contact information

# Program Changes From 2005 RCP Table 17

Common Name	Latin Name	2005	2008
Pied Tamarin	Saguinus bicolor	PMP	SSP
Central American Squirrel Monkey	Saimiri oersedti	Phase In	Phase Out
Owl Monkey	Aotus nancymae	Phase Out	PMP
Woolly Monkey	Lagothrix lagotricha	DERP	Phase Out

Explanation for these changes are provided in the Program Recommendations section of this document (pages 23-35).

# PROGRAM STATUS SUMMARY Table 18

Program	Program Initiation	Program Leader	Date Leadership Assumed	Last Publication
Pygmy Marmoset PMP	2000	Stephanie Dampier	2008	2007
Pygmy Marmoset Studbook	1993	Stephanie Dampier	2008	2008
Geoffroy's Marmoset SSP	2000	Beth Bahner	2000	2009
Geoffroy's Marmoset Studbook	1989	Beth Bahner	1990	2009
Cotton Top Tamarin SSP	1995	Rebecca Phillips	2001	2008
Cotton Top Tamarin Studbook	1985	Hollie Colahan	2003	2008
Emperor Tamarin PMP	2000	Tyrene Fayard	2004	2005
Emperor Tamarin Studbook	1988	Tyrene Fayard	2004	2007
Pied Tamarin SSP	2000	Andy Baker	2000	2005
Pied Tamarin Studbook	1995	Andy Baker	1995	2006
Golden Lion Tamarin SSP	1986	Jon Ballou	2000	2009
Golden Lion Tamarin Studbook	1980	Jennifer Mickelberg	2000	2007
Golden-Headed Lion Tamarin SSP	1986	Jon Ballou	2000	2008
Golden-Headed Lion Tamarin Studbook	1980	Jennifer Mickelberg	2000	2007
Goeldi's Monkey SSP	1992	Mark Warneke	2007	2009
Goeldi's Monkey Studbook	1983	Mark Warneke	1985	2007
Capuchin Monkey PMP	2000	Mark Warneke	2004	-
Capuchin Monkey Studbook	2004	Mark Warneke	2004	2007
Squirrel Monkey PMP	2000	Beth Ricci	2007	2006
Squirrel Monkey Studbook	2000	Beth Ricci	2007	2009
Owl Monkey PMP	2000	Erik Beck	2007	-
Owl Monkey Studbook	1993	Erik Beck	2007	2008
Saki Monkey PMP	2000	Tracy Frampton	2000	2007
Saki Monkey Studbook	1990	Tracy Frampton	1996	2008
Titi Monkey PMP	2000	Andy Henderson	2005	2007
Titi Monkey Studbook	1992	Andy Henderson	2005	2007
Howler Monkey PMP	2000	Kristin Harris	2000	2009
Howler Monkey Studbook	1986	Kristin Harris	1999	2008
Spider Monkey SSP	2002	Keith Lovett	2005	2007
Spider Monkey Studbook	1993	Gwen Lovett	2005	2007

### **PROGRAM FACT SHEETS**

### **Pygmy Marmoset**

Callithrix pygmaea

PMP Manager/Studbook Keeper: Stephanie Dampier Palm Beach Zoo sdampier@palmbeachzoo.org

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 200 AZA Population: 90



#### **RESOURCES AVAILABLE:**

PMP Master Plan: 2007, Zoo Montana
Regional Studbook: July 2008, Zoo Montana
Animal Care Manual: Callitrichid Husbandry Manual

#### **WILD POPULATION STATUS:**

CITES: Appendix II
ESA: No listing
IUCN Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 137.106.64 in 69 institutions\*\*

Australasia: 13.9.5 in 6 institutions\*\*

#### **COMMENTS:**

Demand for this species remains high, due to low success with breeding in AZA facilities. Pygmy marmosets do well in mixed species exhibits

<sup>\*\*</sup> Data from ISIS records

### **Geoffroy's Marmoset**

Callithrix geoffroyi

SSP Coordinator /Studbook Keeper:

Beth Bahner
Philadelphia Zoo
bahner.beth@phillyzoo.org

#### **PROGRAM GOALS:**

Recommendation: SSP Management

Population Target: 125\*

AZA Population: 100 individuals in 17

institutions

#### **RESOURCES AVAILABLE:**



Photo courtesy of Heather A. Jensen, Calltrichid Research Center, University of Nebraska at Omaha

SSP Master Plan: 2009 (MateRx provided by PMC), Philadelphia Zoo

Regional Studbook: 2009, Philadelphia Zoo

Animal Care Manual: Callitrichid Husbandry Manual

#### WILD POPULATION STATUS:

CITES: Appendix II
ESA: No listing
IUCN Vulnerable

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 112.109.32 in 62 institutions\*\*

Australasia:

#### **COMMENTS:**

\*This SSP is currently seeking new institutions to increase spaces. These spaces could come from Phase-Out taxa

Vet advisor: Donna laleggio, DVM, Philadelphia Zoo, laleggio.donna@phillyzoo.org, 215 243-5304

Nutrition advisor: Barbara Toddes, Philadelphia Zoo, toddes.barbara@phillyzoo.org, 215 243-5253

\*\* Data from ISIS records

### **Cotton Top Tamarin**

Saguinus oedipus

SSP Coordinator: Rebecca Phillips Disney's Animal Kingdom rebecca.s.phillips@disney.com

Studbook Keeper (International):
Hollie Colahan
Houston Zoo
hcolahan@houstonzoo.org

#### PROGRAM GOALS:

Recommendation: SSP Management

Population Target: 300 AZA Population: 302

Photograph courtesy of Vince Sodaro, Chicago Zoological Society – Brookfield Zoo

#### **RESOURCES AVAILABLE:**

SSP Master Plan: July 2008, Disney's Animal Kingdom

International Studbook: 2008, Houston Zoo

Animal Care Manual: Callitrichid Husbandry Manual

Cotton Top Tamarin Husbandry Manual, 1996

#### WILD POPULATION STATUS:

CITES: Appendix I ESA: Endangered

IUCN: Critically Endangered

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 232.190.96 in 108

institutions\*

Australasia: 55.46.12 in 15 institutions\*

#### **COMMENTS:**

This species has been successfully mixed with other species, including free ranging exhibits, but should not be housed with breeding birds. Cotton top tamarins are easily trained and are active and visible exhibit animals.

<sup>\*</sup> Data from ISIS.

### **Pied Tamarin**

Saguinus bicolor

PMP Manager/Studbook Keeper (International):
Andy Baker
Philadelphia Zoo
baker.andy@phillyzoo.org

#### PROGRAM GOALS:

Recommendation: PMP Management

Population Target: 100

AZA Population: 37 individuals in 8

institutions



#### **RESOURCES AVAILABLE:**

PMP Master Plan: November 2005, Philadelphia Zoo Regional Studbook: June 2006, Philadelphia Zoo

Animal Care Manual: Management Guidelines for Pied Tamarins from Durrell WCT (EEP)

#### **WILD POPULATION STATUS:**

CITES: Appendix I ESA: Endangered IUCN Endangered

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Canada: 2 individuals in 1 institution

Europe: 96 in 13 institutions

Australasia:

#### COMMENTS:

Five pairs of pied tamarins were imported from the Jersey Wildlife Preservation Trust in March 2007, to improve the demographic and genetic status of the U.S. population. Thanks to the St. Louis Zoo for carrying out the CDC quarantine! The five imported pairs (at Lincoln Park, San Francisco and Philadelphia) all reproduced by May 2008, with a remarkable 100% survival of the first 6 litters (10 infants). These imports represent 4 new founders for the PMP and additional representation of other under-represented founders. The PMP will be looking for additional holders when these offspring mature, beginning probably mid-2009. An immediate need is a holder for a non-breeding pair. Participants are required to provide information to and sign a loan agreement with the Brazilian wildlife authorities. Because of the difficulty of moving animals into the U.S., attempts have been made to tie the population in Canada with the EEP

## **Emperor Tamarin**

### Saguinus imperator subgrisescens

PMP Manager/Studbook Keeper: Tyrene Fayard Audubon Zoo tfayard@auduboninstitute.org

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 100 AZA Population: 30

#### **RESOURCES AVAILABLE:**

PMP Master Plan:

Regional Studbook:

Animal Care Manual:

November 2005, Audubon Zoo

June 2007, Audubon Zoo

Callitrichid Husbandry Manual

#### **WILD POPULATION STATUS:**

CITES: Appendix II ESA: No listing

IUCN: Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 145.151.40 (336)

Australasia:

#### **COMMENTS:**



Photograph courtesy of Como Zoo

### **Golden Lion Tamarin**

Leontopithecus rosalia

SSP Coordinator /Studbook Keeper:
Jon Ballou
Smithsonian National Zoological Park
ballouj@si.edu

#### **PROGRAM GOALS:**

Recommendation: SSP Management

Population Target: 200 AZA Population: 255



Photograph courtesy of Vince Sodaro, Chicago Zoological Society – Brookfield Zoo

#### **RESOURCES AVAILABLE:**

SSP Master Plan:

Regional Studbook:

Animal Care Manual:

2009, Smithsonian National Zoological Park

April 2007, Smithsonian National Zoological Park

Husbandry Protocol for Golden Lion Tamarins, 1996

Callitrichid Husbandry Manual

#### **WILD POPULATION STATUS:**

CITES: Appendix I
ESA: Endangered
IUCN: Endangered

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 83.55.4 in 52 institutions\*\*
Australasia: 9.7.4 in 7 institutions\*\*

#### **COMMENTS:**

This species has been successfully exhibited with a variety of species. Free range exhibits have also been very popular and offer an opportunity share the conservations story of this species – contact the SSP for guidelines for this program.

<sup>\*\*</sup> Data from ISIS.

### **Golden Headed Lion Tamarin**

Leontopithecus chrysomelas

SSP Coordinator/Studbook Keeper:
Jon Ballou
Smithsonian National Zoological Park
ballouj@si.edu

#### **PROGRAM GOALS:**

Recommendation: SSP Management

Population Target: 100 AZA Population: 79



Photograph courtesy of Vince Sodaro, Chicago Zoological Society – Brookfield Zoo

#### **RESOURCES AVAILABLE:**

SSP Master Plan: 2008, Smithsonian National Zoological Park Regional Studbook: 2007, Smithsonian National Zoological Park

Animal Care Manual: Callitrichid Husbandry Manual

#### **WILD POPULATION STATUS:**

CITES: Appendix I
ESA: Endangered
IUCN: Endangered

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 98.80.26 in 44 institutions\*\*

Australasia: 7.1.0 in 3 institutions\*\*

#### **COMMENTS:**

\*\* Data from ISIS.

### Goeldi's Monkey

Callimico goeldii

SSP Coordinator/Studbook Keeper:
Mark Warneke
Chicago Zoological Society - Brookfield Zoo
mark.warneke@czs.org

#### **PROGRAM GOALS:**

Recommendation: SSP Management

Population Target: 125\* AZA Population: 105



Photograph courtesy of Vince Sodaro, Chica Zoological Society – Brookfield Zoo

#### **RESOURCES AVAILABLE:**

SSP Master Plan: 2009, Chicago Zoological Society – Brookfield Zoo Regional Studbook: July 2007, Chicago Zoological Society – Brookfield Zoo

Animal Care Manual: Callimico Husbandry Manual 2004

Callitrichid Husbandry Manual EEP Callitrichid Husbandry Manual

<u>WILD POPULATION STATUS:</u> Species occurs over a fairly wide area of North Amazonia but distribution is patchy and sparse. May require specialized habitat.

CITES: Appendix I
ESA: Endangered
IUCN: Vulnerable

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 386 in 88 institutions\*\*

Australasia: A few that were not recently well documented in Japan.

Africa/South America: One holder in South Africa. A few documented in South America.

#### COMMENTS:

\* Need additional holding space to reach 2011 target population size, which could come from Phase Out species holdings.

Notes: There are currently 4 institutions on the waiting list for Callimico. We want to keep a little below our target population for now to allow for a future import.

\*\* About 1/3 of these are not recorded in ISIS.

### **Crested Capuchin**

Cebus nigritus robustus

PMP Manager/Studbook Keeper:
Mark Warneke
Chicago Zoological Society – Brookfield Zoo
mark.warneke@czs.org

#### PROGRAM GOALS:

Recommendation: PMP Management

Population Target: 25 AZA Population: 12

#### **RESOURCES AVAILABLE:**



Photo courtesy of Keith Lovett, Palm Beach Zoo at Dreher Park

PMP Master Plan: With the low number of individuals in the population as of now it was felt that an

official Master Plan was not needed-PMP Manager will make recommendations.

Regional Studbook: June 2007, Chicago Zoological Society – Brookfield Zoo

Animal Care Manual:

#### **WILD POPULATION STATUS:**

CITES: Appendix II as all capuchins though not recognized as a distinct species or subspecies.

ESA: No listing

#### **OTHER REGIONAL CAPTIVE POPULATIONS:**

Europe: None Australasia: None

<u>COMMENTS:</u> This is an endangered capuchin relegated to a small habitat on the Atlantic coast of Brazil. It is hoped that future imports will become available to more firmly establish a captive breeding program in the U. S.. Once more established and growing this population should be able to move into some spaces currently occupied by "generic" tufted capuchins.

### **Tufted Capuchin**

Cebus apella (generic)

PMP Manager/Studbook Keeper:
Mark Warneke
Chicago Zoological Society – Brookfield Zoo
mark.warneke@czs.org

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 50 AZA Population: 72



#### **RESOURCES AVAILABLE:**

PMP Master Plan: To be done in 2008 but anticipate no breeding recommendations as

little interest has been expressed in breeding and population is well

over limit desired by TAG.

Regional Studbook: June 2007, Chicago Zoological Society – Brookfield Zoo

Animal Care Manual:

#### WILD POPULATION STATUS:

Doing well for the most part, although forms from the Atlantic forest of Brazil are endangered. The captive population discussed here is largely of unknown origin and does not include the endangered crested capuchin which has a separate listing.

CITES: Appendix II
ESA: No listing
IUCN: Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: ~185.155.83 in 54 institutions for "generic" (unknown origin) tufted capuchins.

Europe also has 59.32.4 individuals of the endangered monk or yellow breasted

capuchin (Cebus paella xanthosternos) in 17 institutions.

Australasia: 39.39.5 in 11 institutions

#### **COMMENTS:**

Anticipate this group to be replaced by crested capuchins if that population becomes more established. This species is somewhat common in the pet trade, so many captive animals exist that are not listed in ISIS. It also exists in non-ISIS exhibit facilities and in research facilities.

## **White-throated Capuchin**

Cebus capucinus

PMP Manager/Studbook Keeper:
Mark Warneke
Chicago Zoological Society – Brookfield Zoo
mark.warneke@czs.org

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 50 AZA Population: 39



Photograph courtesy of Keith Lovett, Palm Beach Zoo at Dreher Park

#### **RESOURCES AVAILABLE:**

PMP Master Plan: To be completed in 2008.

Regional Studbook: June 2007, Chicago Zoological Society – Brookfield Zoo

Animal Care Manual:

<u>WILD POPULATION STATUS:</u> Not threatened. Appears to be fairly consistent over its range and there may not be distinct subspecies.

CITES: Appendix II ESA: No listing

IUCN: Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: ~29.30.12 in 16 institutions

Australasia: None known in zoological gardens.

#### COMMENTS:

This species is in the pet trade so many captive animals exist that are not listed in ISIS. It is also held in non-AZA exhibit facilities and research facilities. A good exhibit species and quite different in appearance than the crested capuchins.

### **Common Squirrel Monkey**

Saimiri sciureus

PMP Manager/Studbook Keeper:
Beth Ricci
Utica Zoo
zoocleo@hotmail.com

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 250 AZA Population: 275\*



Photo Courtesy of : Sheryl Staaden, Jacksonville Zoo and Gardens

#### **RESOURCES AVAILABLE:**

PMP Master Plan:

Regional Studbook:

Animal Care Manual:

June 2006, Lion Country Safari
2009, Utica Zoo c/o Seneca Park Zoo

#### WILD POPULATION STATUS:

CITES: Appendix II
ESA: No listing
IUCN: Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 143.204.51 in 50 institutions\*\*

Australasia: 3.6.1 in 3 institutions\*\*

#### **COMMENTS**:

\* Data includes all subspecies.

Note: The population will be managed as *Saimiri sciureus*. Hybrids and *Saimiri boliviensis* will be phased out. Animals still need to be karyotyped. Master planning scheduled for June 2009 with the Population Management Center.

<sup>\*\*</sup> Data from ISIS records. Only data for Saimiri sciureus listings.

## **Bolivian Grey Titi**

Callicebus donacophilus

PMP Manager/Studbook Keeper: Andy Henderson Utah's Hogle Zoo ahenderson@hoglezoo.org

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 75 AZA Population: 46



Photograph courtesy of Vince Sodaro, Chicago Zoological Society – Brookfield Zoo

#### **RESOURCES AVAILABLE:**

PMP Master Plan: 2007, Utah's Hogle Zoo Regional Studbook: 2007, Utah's Hogle Zoo Animal Care Manual:

#### **WILD POPULATION STATUS:**

CITES: Appendix II
ESA: No listing
IUCN Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: Australasia:

#### **COMMENTS:**

### **Grey-legged Owl Monkey**

Aotus I. griseimembra

PMP Manager/Studbook Keeper: Erik Beck Mesker Park Zoo ebeck@meskerparkzoo.com

#### **PROGRAM GOALS:**

Recommendation: PMP Management Population Target: 100 individuals

AZA Population: 81\*



Photograph courtesy of Vince Sodaro, Chicago Zoological Society – Brookfield Zoo

#### **RESOURCES AVAILABLE:**

PMP Master Plan: To be completed in 2009 Regional Studbook: 2008, Mesker Park Zoo Animal Care Manual:

#### **WILD POPULATION STATUS:**

CITES: Appendix II
ESA: No listing
IUCN: Vulnerable

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 23.24.5 in 14 institutions\*\*

Australasia:

#### **COMMENTS:**

<sup>\*</sup> This includes all species, only 20 are *A. I. grisiemembra*. May need to import animals as founders or consider shifting focus of North American population to *Aotus nancymae*, which is more widely available in North America.

<sup>\*\*</sup> Data from ISIS records

### White-faced Saki

Pithecia pithecia

PMP Manager/Studbook Keeper: Tracy Frampton Brevard Zoo tframpton@brevardzoo.org

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 150 AZA Population: 130\*



Photo courtesy of Beth Nasse, Brevard Zoo.

#### **RESOURCES AVAILABLE:**

PMP Master Plan: December 2007, Brevard Zoo Regional Studbook: January 2008, Brevard Zoo Animal Care Manual:

#### WILD POPULATION STATUS:

CITES: Appendix II
ESA: No listing
IUCN: Least Concern

#### **OTHER REGIONAL CAPTIVE POPULATIONS:**

Europe: 88.69.12 in 53 institutions\*\*

Australasia: 7.9.3 in 3 institutions\*\*

#### **COMMENTS:**

Note: This species exhibits a great example of sexual dichromaticism. Sakis are fairly active yet tolerant of a variety of mixed species exhibits.

<sup>\*</sup> Studbook Keeper/PMP Manager is seeking additional holding spaces in zoos.

<sup>\*\*</sup> Data from ISIS records.

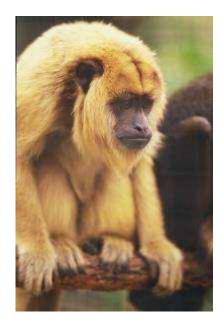
### **Southern Black Howler**

Alouatta caraya

#### **PROGRAM GOALS:**

Recommendation: PMP Management

Population Target: 100 AZA Population: 98



#### **RESOURCES AVAILABLE:**

PMP Master Plan: 2009, Little Rock Zoo Regional Studbook: 2008, Little Rock Zoo

International Studbook: Animal Care Manual:

WILD POPULATION STATUS:

CITES: Appendix II
ESA: No listing
IUCN: Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 49.40.18 in 19 institutions\*\*

Australasia: 1.3 in one institution\*\*

#### **COMMENTS:**

\*\* Data from ISIS records.

## Black-Handed Spider Monkey

Ateles geoffroyi

SSP Coordinator:
Keith Lovett
Palm Beach Zoo at Dreher Park
klovett@palmbeachzoo.org

Studbook Keeper:
Gwen Lovett
Palm Beach Zoo at Dreher Park
gweng329@aol.com



Photo courtesy of Keith Lovett, Palm Beach Zoo at Dreher Park

#### **PROGRAM GOALS:**

Recommendation: SSP Management Population Target: 225\* individuals AZA Population: 237\* individuals

#### **RESOURCES AVAILABLE:**

SSP Master Plan:

Regional Studbook:

Animal Care Manual:

November 2007, Palm Beach Zoo at Dreher Park

January 2007, Palm Beach Zoo at Dreher Park

#### WILD POPULATION STATUS:

CITES: Appendix II
ESA: No listing
IUCN: Least Concern

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 11.22.4 in 9 institutions\*\*
Australasia: 2.13.3 in 4 institutions\*\*

#### **COMMENTS:**

\*Note: According to genetic testing, all *A. geoffroyi* generics and subspecies are genetically the same. Suggestion made to breed *A. geoffroyi* (and *A. g. geoffroyi*) for exhibition purposes. Difficult to impossible to form bachelor groups, especially if females are around.

<sup>\*\*</sup> Data from ISIS records for A. geoffroyi only.

### **Mexican Spider Monkey**

Ateles geoffroyi vellerosus

SSP Coordinator:
Keith Lovett
Palm Beach Zoo at Dreher Park
klovett@palmbeachzoo.org

Studbook Keeper:
Gwen Lovett
Palm Beach Zoo at Dreher Park
gweng329@aol.com

#### PROGRAM GOALS:

Recommendation: SSP Management

Population Target: 50 AZA Population: 28\*



Photo courtesy of Keith Lovett, Palm Beach Zoo at Dreher Park

#### **RESOURCES AVAILABLE:**

SSP Master Plan:

Regional Studbook:

Animal Care Manual:

November 2007, Palm Beach Zoo at Dreher Park

January 2007, Palm Beach Zoo at Dreher Park

#### **WILD POPULATION STATUS:**

CITES: Appendix II ESA: No listing

IUCN: Crtitically Endangered

#### **OTHER REGIONAL CAPTIVE POPULATIONS:**

Europe: 2.3.0 in 1 institution\*\*

Australasia: 10.16.0 in 3 institutions\*\*

#### **COMMENTS:**

\*Note: According to genetic testing, all *A. geoffroyi* generics and subspecies are genetically the same. Suggestion made to breed *A. geoffroyi* (and *A. g. geoffroyi*) for exhibition purposes. Difficult to impossible to form bachelor groups, especially if females are around.

<sup>\*\*</sup> Data from ISIS records for A. g. vellerosus.

## **Black Spider Monkey**

#### Ateles robustus

SSP Coordinator:
Keith Lovett
Palm Beach Zoo at Dreher Park
klovett@palmbeachzoo.org

Studbook Keeper:
Gwen Lovett
Palm Beach Zoo at Dreher Park
gweng329@aol.com

#### **PROGRAM GOALS:**

Recommendation: SSP Management Population Target: 85 individuals

AZA Population: 77

#### **RESOURCES AVAILABLE:**

SSP Master Plan:

Regional Studbook:

Animal Care Manual:

November 2007, Palm Beach Zoo at Dreher Park

January 2007, Palm Beach Zoo at Dreher Park

WILD POPULATION STATUS:

CITES: Appendix II ESA: No listing

IUCN: Critically Endangered

#### **OTHER REGIONAL CAPTIVE POPULATIONS:**

Europe: 62.110.9 in 32 institutions\*
Australasia: 3.6.1 in 1 institution\*

#### **COMMENTS:**

\* Data from ISIS records

## **Variegated Spider Monkey**

Ateles hybridus

SSP Chair:
Keith Lovett
Palm Beach Zoo at Dreher Park
klovett@palmbeachzoo.org

Studbook Keeper:
Gwen Lovett
Palm Beach Zoo at Dreher Park
gweng329@aol.com



Photo courtesy of John Bernard

#### PROGRAM GOALS:

Recommendation: SSP Management Population Target: 15 individuals

AZA Population: 8

#### **RESOURCES AVAILABLE:**

SSP Master Plan:

Regional Studbook:

Animal Care Manual:

November 2007, Palm Beach Zoo at Dreher Park

January 2007, Palm Beach Zoo at Dreher Park

#### **WILD POPULATION STATUS:**

CITES: Appendix II ESA: No listing

#### OTHER REGIONAL CAPTIVE POPULATIONS:

Europe: 16.22.0 in 8 institutions\*

Australasia:

#### **COMMENTS:**

\* Data from ISIS records

#### APPENDIX I: SURPLUS ANIMAL GUIDELINES

The New World Primate TAG has chosen not to develop a specific definition for a "surplus" animal, recognizing that each situation should be carefully evaluated by the relevant SSP/PMP/TAG management group and the holding and/or owning institution. Exceptions to the case-by-case situation are those taxa which are recommended for phase-out as specified in this document.

The New World Primate TAG's fundamental guideline is that each institution participating in an AZA management program should assume full responsibility in preventing non-recommended births. In cases of taxa recommended for phase-out from North American collections or if, after thorough deliberation by the holding and/or owning institution and the relevant TAG taxon manager or managing group, an individual monkey is declared surplus to AZA, the New World Primate TAG endorses the following actions:

- 1. Transferring the individual to another regional cooperatively-managed program (e.g. EEP) IF it is
  - determined that the individual can contribute to the program.
- 2. Transferring the individual to a non-AZA-accredited institution that has signed a non-member
  - AZA MOP (this process is, at present time only available for SSP programs).
- 3. Transferring the individual to a non-AZA institution IF:
  - a. The individual is permanently sterilized.
  - b. The institution meets 1) the current care-giving standards of the AZA, or 2) if a TAG endorsed husbandry manual has been published for the taxon, the institution can meet any guidelines presented in the manual.
  - c. The individual is permanently identified with a microchip.
  - d. The institution maintains an animal disposition policy that assures that the transferred individual and any offspring (should they occur despite a. above) will not be placed in any animal auction; will not be sold, traded, loaned or donated to private animal breeders not participating in an AZA-sanctioned program; will not be used in any stressful or terminal research or be used for any purpose contrary to the AZA CODE of Professional Ethics.
  - e. The transfer does not violate CDC regulations (refer to CDC Advisory Memorandum issued July 26, 1988).

If a thorough and prolonged search fails to locate an appropriate housing situation and the individual can no longer be maintained in a manner that meets the individual's physical, social and psychological needs, the New World Primate TAG will support an institution's decision to euthanize the individual.

### **Callitrichid Phase-Out Manager**

AZA accredited institutions currently hold over 200 marmoset and tamarins designated as "Phase-Out" in the Regional Collection Plan. The TAG encourages institutions to continue to hold these species rather than place them outside of AZA in most cases. In 2005, the position of Callitrichid Phase-Out Manager was created to assist tracking the status of these animals.

The responsibilities of the Callitrichid Phase-Out Manager include:

- Tracking (via ISIS or a SPARKS registry) population numbers of non-managed Callitrichid species in AZA accredited institutions.
- Provide updates to the TAG on the status of these populations.
- Assist institutions holding these species with transfers and dispositions.
- Assist institutions in identifying replacement taxa as needed.

AZA institutions holding Phase-Out taxa are encouraged to contact the Callitrichid Phase-Out Manager and advise of their current holdings and update as transfers and deaths occur.

# APPENDIX II: GUIDELINES FOR ACQUISITION FROM RANGE COUNTRIES

First and foremost, the New World Primate TAG supports and promotes sound genetic and demographic management of captive populations to eliminate or reduce the need to acquire additional founders. However, if founders are required for the viability of a captive population, the NWPTAG recognizes there are different sources from which founders can be obtained (other regional captive management programs, etc). This document addresses founder acquisition from the range country(s).

The New World Primate TAG supports the acquisition of founders from free-ranging or captive populations in range countries if:

- 1. The founders are being acquired for a captive management program that has been approved in the TAG's Regional Collection Plan, the need for additional founders has been demonstrated and recommended by the TAG's Steering Committee or the relevant Species Population Manager.
- 2. The acquisition procedures have met all local, national and international regulations and laws as well as the AZA code of professional ethics.
- 3. The acquisition does not in any way encourage the trade or commerce of primates in (or outside) the range country.
- 4. The acquiring institution(s) is involved in all decision-making aspects of the acquisition, from permits to capture methods if applicable, and transport.
- 5. The acquiring institution demonstrates that it has established a relationship with range-country wildlife officials, field researchers and/or conservation organizations (use of commercial suppliers does not remove the above responsibilities from the acquiring institution).
- 6. If primates are being captured, the impact of the capture on wild populations must be understood by the acquiring institution(s).
- 7. If primates are being taken from the range country, the acquisition results in some form of support to the range countries populations.
- 8. The acquiring institution has demonstrated that all potential options to obtain founders in the range country have been evaluated and the selected course of action is the best in terms of minimizing negative impact on the wild population and maximizing animal welfare needs.

Potential sources of founders from range countries are (in general, sources 1-3 are preferable to sources 4-5, which in turn are preferable to 6):

- 1. from confiscating agencies in range country
- 2. from range country zoos, sanctuaries and primate centers
- 3. from markets in range countries if seized by local authorities (no exchange of money)
- 4. wild populations in disturbed/degraded habitat
- wild populations human/wildlife conflict situations (e.g. crop raiders and tourist area "pests")
- 6. wild populations in undisturbed habitat

# APPENDIX III: AZA PRIMATE ADVISORY GROUPS' PRIMATE PET TRADE POSITION STATEMENT

There is an active trade in pet primates in many areas of the U.S, where it is still possible to buy primates in pet stores, from private breeders and through animal dealers. The four primate taxon advisory groups of AZA, the Prosimian TAG, the New World Primate TAG, the Old World Monkey TAG, and the Ape TAG, support the elimination of the trade in pet primates for the following reasons:

- 1. Pet primates pose a risk to public health and safety through communicable illness/diseases such as Herpes B, hepatitis, and intestinal pathogens and through injuries inflicted during sudden and unpredictable episodes of aggressive behavior.
- 2. Elimination of the legal trade in pet primates aids enforcement of federal legislation that prohibits private ownership of those nonhuman primates regulated by the Centers for Disease Control (Code of Federal Regulations Subchapter F Quarantine, Inspection, Licensing Part 71 Foreign Quarantine).
- 3. Pet primates are often maintained in inadequate housing and without consideration for their physical, social and psychological needs.
- 4. There is an adverse impact on wild populations through the smuggling and import of primates which ultimately end up in the pet trade.
- 5. Pet primates are unable to contribute genetically to those conservation programs in which they are needed due to their isolation from the managed population and also in many cases to deficits in their social skills related to their rearing and maintenance in isolation from other non-human primates.

It is the consensus of AZA's primate advisory groups that **education** about primates and **legislation** to restrict the trade in primates as pets are the most effective means of curbing the trade in pet primates, and the following actions are encouraged within AZA institutions:

- 1. manage zoo collections to eliminate the sale, trade or other disposition of zoo primates to individuals, or to animal dealers known to place primates with individuals;
- 2. develop and produce materials on the issues of primate pet ownership for zoo visitors and potential primate buyers:
- cooperate with other organizations and agencies (such as the American Society of Primatologists, animal advocacy groups and local municipal and legislative agencies) to develop and enact local legislation needed to restrict the trade in pet primates.

# APPENDIX IV: Position Statement on the Use of Performing Non-Human Primates

Primate Taxon Advisory Groups (Prosimian TAG, New World Primate TAG, Old World Monkey TAG, and Ape TAG) of the American Zoo and Aquarium Association (AZA) oppose use of non-human primates primarily for entertainment, the use of performing non-human primates, and the use of non-human primates as photographic props.

The Primate TAGs oppose the disposition of non-human primates by any member of the AZA or any nonmember participant in an AZA Species Survival Plan to individuals or organizations that provide or use nonhuman primates primarily for entertainment, as performers or as photographic props. The Primate TAGs encourage all holders of non-human primates to establish and adhere to standards that ensure that exhibits and interpretive programs accurately portray their biology and conservation status.

The Primate TAGs encourage AZA members to partner with other respected stakeholders to eliminate the use of non-human primates primarily for entertainment, as performers and as photographic props.

#### Rationale

Non-human primates, including apes (e.g., chimpanzees, orangutans), monkeys (e.g., baboons, capuchins) and prosimians (e.g., lemurs) are intelligent, sensitive, long-lived and highly social animals. As humans' closest living relatives, they are fascinating, and their infants are magnetically appealing. These attributes make them popular in commercial entertainment, as performers in entertainment and advertising programs, and as photographic props. But this popularity and attractiveness mask a number of cruel and dangerous practices frequently used to make the animals compliant with their handlers. The use of non-human primates in entertainment and advertising and as photographic props also delivers inappropriate educational messages.

- 1. Non-human primate infants normally remain with their mothers for several years in a social environment where they learn social skills important for development of normal adult behavior. But non-human primates destined to be entertainers, performers or photographic props are usually removed from their mothers shortly after birth and are denied opportunities for normal social and psychological development. This has several advantages to the owner. The infant will be appealing and will remain handleable by humans for several years. Mothers whose infants are removed will resume sexual cycling and produce another profitable infant quickly. But non-human primates raised by humans in the absence of other members of their species will not normally acquire the skills to be socially and sexually competent as juveniles and adults. They may never readjust to life in a normal social group, and thus they are usually doomed to social and sexual isolation in which many become depressed and develop self-mutilating and other abnormal behaviors. They usually are not able to contribute to conservation-based breeding programs. The mothers experience repeated stress at the taking of their infants.
- 2. Although adorable as infants, non-human primates become dangerous and unpredictable to handle as they near adulthood. Their continued use as performers,

entertainers or props especially the larger apes and monkeys) becomes dangerous to both their handlers and audiences. To maintain control, their handlers may beat or electrically shock them, remove their teeth, administer continuous tranquilization, and/or deprive them of food for long periods before appearances. Because of their unpredictability, the non-human primates are normally confined alone, in small (easily transportable) cages. They often experience prolonged fear (the "smile" of a performing chimpanzee is actually a well-documented expression of fear), pain, hunger and isolation. The physical and psychological effects are difficult to cure even when the non-human primate is rescued and placed in a caring environment. More often, however, when they become too difficult to handle, they lose their commercial value as entertainers or props, and are re-sold into other inexpert and inhumane conditions.

- 3. Dressing non-human primates in human clothing, or training them to engage in unnatural (usually human) behaviors, while entertaining to some, inaccurately portrays their dignity, biology and conservation status. Since conservation efforts rely on informed public opinion, these practices may undermine conservation efforts. Audiences might also be misled into thinking that non-human primates may make good pets.
- 4. Because non-human primates (especially apes) and humans are genetically so similar, they are susceptible to many of the same communicable diseases. The close and unprotected contact between performing non-human primates, their handlers and audiences poses a threat to all of infection with viruses, bacteria and parasites. The probability of undiagnosed disease in performing non-human primates is increased since their owners frequently do not consult skilled primate veterinarians, and they are often kept in unhygienic conditions.
- 5. The use of performing non-human primates may stimulate profit-based trade. This can involve selling and buying ex-performing non-human primates as pets, and hunting and poaching wild non-human primates. Selling and buying non-human primates also weakens international commitment to their conservation.

The Primate TAGs recognize that non-human primates kept in appropriate physical and social environments in zoos, participating in humane, scientific behavioral and cognitive research, contacted in responsibly managed ecotourism programs, and portrayed in science-based documentary presentations may entertain, generate profit, or advertise, while serving educational, research and conservation goals. While not opposed to such activities, the Primate TAGs are opposed to any exploitation of non-human primates that for reasons noted above diminishes their physical or psychological well-being, portrays them as human caricatures or otherwise denigrates them, weakens conservation efforts, or endangers humans.

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