

A Message from the President.....



Does it Take a Village to Raise a Primatologist?

If it does take a village, one of the advantages of such an arrangement is the wide array of experiences, talents and skills that each individual brings. It is, likewise, a strength of the ASP that we have representatives from a wide variety of disciplines who view their subjects and their questions in quite different ways, while all sharing a passion for understanding primates. However, as in a village, bringing people with diverse views, needs and wants together is a sometimes daunting task. Because generations of interdisciplinary exchange was one of the goals of the ASP founders, I am taking steps to examine how well we meet that goal and what can be done to foster interdisciplinary activities.

As a first step in this process, I have established an Ad Hoc Committee on Disciplinary Representation. After nominations from the ASP board of directors and the AJP editorial board, I invited 16 individuals to join this committee and was delighted when fifteen agreed to participate. With everyone's busy schedule, acceptance of this invi-

tation can be taken as a commitment to the society and this process. The committee has representation from active ASP members as well as well-known primatologists who are not active ASP members. The membership is as follows:

- Karen Bales
- Joe Erwin
- Paul Garber
- Doree Fragaszy
- Dee Higley
- Katie Hinde
- Reinhold Hutz
- Keith Mansfield
- Jane Phillips-Conroy
- Jeff Rogers
- Steve Schapiro
- David Glenn Smith
- Bob Sussman
- Janette Wallis
- Mary Zelinski

Randy Kyes and I will serve, *ex officio*, as president and president-elect. The committee will meet in the fall of 2007 and receive the following charge:

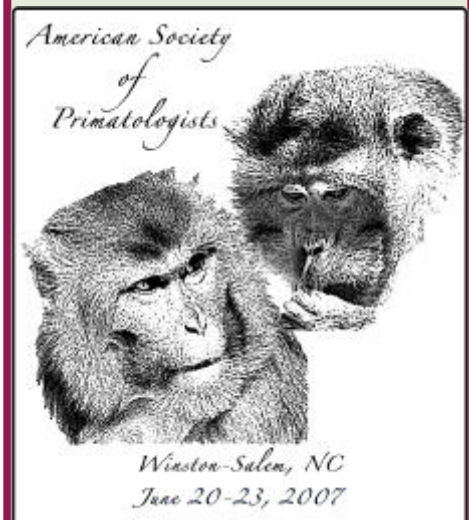
1. Explore the essential tension present in the society, stemming from the confluence of conservation, ecology, psychology and biomedical approaches to primate study.
2. Make recommendations regarding the role of multi-disciplinary and interdisciplinary activities in a healthy, future ASP.

ASP members can expect to receive various inquiries from committee members over the next year regarding their views on these topics. I hope that all members will participate in this effort to strengthen the society. In the meantime, if you have questions or comments, I would be happy to listen.

Suzette Tardiff
ASP President

Don't Forget to Register for ASP 2007

Last day to register online or by mail is June 1



On-site registration will be available June 20-23

Letter from the Program Committee:

Well the meeting is set and the program will be mailed shortly. Thanks to everyone on the program committee, the local hosts, and the membership that has worked so hard to generate such an impressive meeting.

This year our invited guest speakers include:

Keynote address:

Tetsuro Matsuzawa

“The Chimpanzee Mind: Studies in the Field and Laboratory”

Featured speaker:

Mark Batzer

“Mobile Elements and Primate Genomic Variation”

Featured speaker:

Jay Kaplan

“What Monkeys Can Teach Us About the Role of Behavior and Evolution in Women’s Health”

And the Past President’s Address by

Jeffrey A. French

“The Study of ‘Beautiful-haired’ Monkeys: Twenty-five Years of Research at the Adaptation: Mechanism Interface”

In addition to several great poster and paper sessions, there are several symposia and workshops that you might choose to participate in. These include:

Education Workshop

Presented by the ASP Education Committee and Wake Forest University

Moderator: C. N. Ross

***Macaca fascicularis* Workshop**

Resolving Macaque/Human Conflicts

Moderator: M. D. Gumert

Outstanding Mentor Symposium Honoring Chuck Snowdon

Organizer: A. Savage

**Self-Injury in Macaques Symposium
Behavior, Pharmacology and Neurobiology**

Organizer: C. Bethea

Symposium

Contributions of a Macaque Model of Women's Health

Organizer: C. Shively

**Socially-mediated Learning in Groups of Primates Symposium
Models and Methods**

Organizer: J. Crast

**Statistics for Primatologists Workshop
Analyses of Longitudinal Data Using Multilevel Modeling**

Moderator: G. Sackett

**Symposium Integrating Science into the Behavioral Management of Nonhuman Primates:
Two Decades of Progress**

Organizer: M. Bloomsmith

Past Student Award Winners Symposium 1980-2000

Organizer: C. N. Ross

Cooperative Breeding in Nonhuman Primates Symposium**A Broader Approach**

Organizers: T. E. Ziegler and S. Tecot

And finally,
NAPS

Please join us for the first Nocturnes and Primates Session (NAPS) at ASP. We have organized a meet and greet session at one of Winston-Salem's fine food and watering holes for nocturnes. Younger or newer members of ASP will have an opportunity to interact in a semi-structured setting with ASP Silverbacks (male and female alike), or if you prefer, established Alpha, Beta, and Gamma, members of the society. The meet and greet portion of NAPS will take place this year on Thursday evening, June 21 after the poster sessions. If you would like to contribute to any of the evening's entertainment with a trivia question, a scavenger hunt challenge, or interesting anecdote relative to primatology or primatologists, please send them to Jim Weed at weedj@mail.nih.gov. If you think you would like to participate in NAPS activities and you own a digital camera, please bring it with you to Winston-Salem and bring it with you to the evening's events so you can document your progress through the NAPS activities.

See you all in Winston-Salem!
Matthew Novak, Program Chair

ASP CONSERVATION FUND MATCHING CHALLENGE

BIODA Co., Ltd. of Mauritius has made a challenge to the American Society of Primatologists. They are willing to match every contribution to the ASP Conservation Fund, dollar for dollar, up to a maximum of \$8,000. The challenge runs until our national meeting, June 20-23, 2007. So, if you contribute \$50 to the ASP Conservation Fund, BIODA will match that \$50, making your contribution worth \$100 to ASP. The ASP Conservation Fund supports the Conservation Small Grants program and a variety of other conservation-related awards and programs. Please give generously in response to this challenge to increase the impact of ASP in primate conservation.

Checks can be sent to the ASP Treasurer at the address below. Please make checks out to the American Society of Primatologists.

Karen L. Bales, ASP Treasurer
Department of Psychology
University of California
One Shields Ave
Davis, CA 95616

Alternatively, and preferably, contributions can be made at the ASP membership website:
<http://www.asp.org/society/membership/MembersOnly/selectloginoptions.cfm>.

Only current ASP members and those joining ASP can contribute at the website at this time. Please do so, so we don't let this challenge to go waste.

BIODA is committed to supporting primate conservation in general, and especially the conservation goals and initiatives of the American Society of Primatologists. Thanks to them for the matching challenges and to you for your generosity.

Kim Phillips
Mike Reid
Co-Chairs of the ASP Conservation Committee



Meeting Site & Accommodations 30th Annual Meeting Winston-Salem, NC 20-23 June 2007

The 30th Annual ASP meeting will be hosted by Wake Forest University. Dr. Allyson Bennet is the Chair of the local arrangements committee. The meeting, including all scientific sessions, will be held at the Marriot in downtown Winston-Salem, NC.

Winston-Salem is nestled in the foothills of the Blue Ridge Mountains and is known as the North Carolina City of the Arts. It is the home to the North Carolina School of the Arts, the Reynolda House Museum of American Art, Southeast Center for Contemporary Art, and numerous galleries in the downtown area. Winston-Salem is also home to the Winston-Salem Opera and several theater and dance troupes that perform at the Steven's Center for the Performing Arts and other venues close to downtown. Winston-Salem is located in the heart of North Carolina wine country with 18 wineries within an hour drive of downtown. Downtown Winston-Salem boasts numerous restaurants, bars, live music venues, and art galleries within easy walking distance of the Benton Convention Center and host hotels.

Salem, NC was originally settled by the Movarians. This heritage is kept alive in Historic Bethabara Park and in the Old Salem historical site. The Old Salem historical park is close to downtown and has active archeological sites, workshops, and shops as well as many living exhibits portraying life in a Movarian village.

Winston-Salem in June tends to have temperatures in the mid 80s to low 90s with high humidity. Dress is casual and light clothing is advisable. The meeting will be informal. Be prepared for temperatures that range from hot outdoor temperatures to air-conditioning in all conference buildings.

Preliminary Outline of Meeting Schedule

Tuesday, 19 June 2007: Pre-conference Education Workshop presented by the ASP Education Committee and Wake Forest University.

Wednesday, 20 June 2007: Pre-conference Education Workshop presented by the ASP Education Committee and Wake Forest University. Standing committee meetings begin at 1:00 pm and the opening reception will be held at the Marriott at 6 pm.

Thursday, 21 June 2007: The scientific meeting will open at 8:00 am with the 2007 Keynote Address and will continue until 3:15 pm. There will be an invited address at 3:30 followed by a poster session from 5-7 pm. The first ASP NAPS (Nocturnes and Primates Session) will follow the poster session.

Friday, 22 June 2007: The morning will open with an invited speaker at 8:00 am followed by scientific papers until 3:15 pm. The Past President's address will be held at 3:30 followed by a poster session from 5-7 pm.

Saturday, 23 June 2007: The scientific meetings will start at 8:30 am and run until 12:45 pm. Tours of the Wake Forest University Primate Center will be available at 12:45. The traditional closing banquet, followed by music dancing, will be held from 6 pm-1 am at Grand Pavilion, Embassy Suites.

The registration fee includes access to all the sessions, coffee breaks, afternoon breaks, opening reception, closing banquet, poster session refreshments, and abstract booklet and program.

Name badges will be required for all sessions and social activities.

ASP Silent Auction for Primate Conservation:

Information regarding mailing items will be forthcoming in future ASP bulletins and on the ASP web page. Items to be auctioned for the conservation fund are donated. Please bring "primate" related memorabilia to donate for the auction. Additional information will be available at the Registration/Information Desk.

Getting to Winston-Salem

Air travel: The closest airport to the meeting is the Piedmont Triad International Airport (GSO) in Greensboro, about ½ hour outside of Winston-Salem. The Piedmont Triad International Airport is served by American Eagle, Continental Express, Delta and Delta Commuters, Northwest, United and United Express, US Airways and US Airways Commuters. Both the Raleigh and Charlotte airports are located about a 1 ½ hour drive from Winston-Salem. Taxis,

limousines, and shuttle service are all offered from the Piedmont Triad International Airport to downtown Winston-Salem. Taxi fare is approximately \$39. Shuttle service is approximately \$27. For those who choose to drive, there are several rental car companies at GSO. Downtown hotels are conveniently accessed off business I-40 in downtown Winston-Salem. Paid parking is available at hotels.

Train travel: Winston-Salem is served by Amtrak through connecting bus service from Greensboro or High Point. Please see Amtrak's website for more details. The bus station is at 100 W 5 th St. in downtown, just 4 blocks from the hotels and convention center.

Bus travel: Call (800) 231-2222 or <http://www.greyhound.com> for fare and schedule information. The Greyhound Station is located at 100 W 5 th St. in downtown, just 4 blocks from the hotels and convention center.

Travel by Car: Winston-Salem is located off I-40 and business I-40. Business I-40 leads directly into downtown. For other specific driving directions, see Map Quest or GoogleMaps. Paid parking is available at hotels.

Housing:

Special rates have been arranged for those attending the conference at the conference hotels, the Embassy Suites and the Winston-Salem Marriot, which are both attached to the Benton Convention Center.

Embassy Suites Hotel: \$143.00 1.336.724.2300, 460 North Cherry

Winston-Salem Marriot: \$123.00 1.336.725.3500, 425 North Cherry

In order to ensure that the meeting is a financial as well as scientific success, we ask that attendees stay at the conference hotels. *The cutoff date for guaranteed ASP rates is May 29, so be sure to book now.*

Winston-Salem Area Attractions:

Old Salem Historic Site: Old Salem is a restoration of the Moravian community called Salem that was started in 1766. Renowned for its high level of authenticity, the non-profit organization named Old Salem began its work in earnest in 1950. The historic site is home to shops, workshops, the Old Salem Toy Museum, and the Old Salem Gardens and horticulture restoration project.

Historic Bethabara Park: A National Historic Landmark, this 1753 site of the German-speaking, Protestant settlement nestles in a picturesque, wooded 175-acre wildlife preserve with 126 species of area birds. The museum features a unique, restored and furnished 1788 church, archaeological ruins, Visitor Center with introductory video, exhibits and tours with costumed guides, as well as a reconstructed village, a French and Indian War fort and colonial and medical gardens. Explore the nature trails to the mill site, stroll the boardwalk over the beaver pond and spot otters, mink, foxes, deer and woodchucks or picnic overlooking the village.

Museum of Anthropology, Wake Forest University: The purposes of the Museum are to educate people about anthropology; encourage public awareness of and responsibility towards anthropological resources; to protect, preserve, manage the anthropological collections of the University; and enhance the instructional and research programs of the Wake Forest University Department of Anthropology.

The Reynolda House Museum of American Art and Reynolda Village: Reynolda House Museum of American Art displays a premiere collection of American art ranging from the colonial period to the present. Built in 1917 by Katharine Smith Reynolds and her husband Richard Joshua Reynolds, founder of the R. J. Reynolds Tobacco Company, the house originally occupied the center of a 1,067-acre estate. It opened to the public as an institution dedicated to the arts and education in 1965. Today, a large portion of Reynolda can be explored on foot. In addition to the house, twenty-eight of the original thirty buildings remain. To the west lie the restored formal gardens, noted for their Japanese cryptomeria and weeping cherry trees. The sixteen-acre lake behind the house has reverted to wetlands, which provide a home for a variety of wildlife. Many of the buildings in the village are now occupied by shops and restaurants. A short walk across the dam leads from the village to Wake Forest University built on land donated to the college by Mary and Charlie Babcock.



Bridge at Reynolda Gardens; Photo credit: Jessica Henderson

Southeast Center for Contemporary Art: The mission of the Southeast Center for Contemporary Art is to educate and involve audiences in the art of our time. SECCA presents and interprets contemporary art of the United States

with programs encompassing the issues engaging artists today.

The Duke Lemur Center, located in Durham, NC (approximately 75 miles east of Winston-Salem, NC), houses the worlds largest captive strepsirrhine colony both in terms of genera represented (12) and total number of individuals

(227). Our unique facility allows many of these animals to free-range in Natural Habitat Enclosures in the Duke Forest when weather permits. We currently have a very active research program, with projects being conducted in areas of animal cognition, behavior, reproductive ecology, hibernation, and improved husbandry, to name a few. We request that any ASP attendees who would like to visit the Center contact the tour program and mention your ASP affiliation so that we can organize tours that cater more specifically to the scientific community.

ASP Message Board:

You may post messages pertaining to the conference that can be viewed by all conference registrants and sign up to receive automatic emails whenever a new message is posted. Messages are categorized under headings such as "Roommate wanted", "Ride wanted", "Announcements", etc.

To reach the message board, login to the Members Only section and click on "View Conference Message Board". (<http://www.asp.org/membersonly/login/login.cfm>). To sign up to receive the emails, click on the link to "Automatic email sign-up" at the top of the message board page.



Artwork by Joel Ito

Jukebox for Conservation

Where can you hear Justin Timberlake, Pink Floyd, the Chicken Dance, Madonna, Belle & Sebastian, Son Volt, the Electric Slide, Jefferson Airplane, the Clash, and polka music all in the same place and help raise funds for conservation? At the ASP 2007 closing banquet Jukebox for Conservation. Hear your favorite song played for only a dollar, if you don't like a song have it stopped for only \$5...more rules to come.....

Notes from the Education Committee

The education committee is looking forward to a fun-filled meeting at ASP this year. We are all happily anticipating judging student presentations, both oral and poster. We will be posting an edited version of "Giving a Good Scientific Presentation" on the internet shortly. Please encourage your students to look at this material if this is their first conference.

This year the education committee is hosting the first annual Past Student Award Winners Symposium, in which we have invited back past winners to update us on their career choices and research. We are delighted to have six speakers for this first symposium and look forward to holding this symposium again in the future. We are diligently tracking down people to participate in next year's symposium, if you have contact information for a past winner we would love to hear from them.

The education committee is also co-sponsoring a pre-conference workshop for local teachers, grade 6-12, with The Center of Excellence for Research, Teaching and Learning (CERTL) at Wake Forest University School of Medicine. This workshop will be held June 19-20 prior to ASP.

We hope to see you in Winston-Salem, NC.

Corinna Ross
ASP Education Committee Chair

Final Report for the American Society of Primatologists Grant

Small Grant Recipient

Meredith L. Bastian Dept. of Biological Anthropology & Anatomy, Duke University PO Box 90383 Durham, NC 27708

THE EFFECTS OF GEOGRAPHY AND GENETIC DISTANCE ON CULTURAL VARIATION IN WILD ORANGUTANS (*PONGO PYGMAEUS WURMBII*)

Among non-human mammals, orangutans exhibit one of the most extensive and flexible repertoires of socially mediated behavior. Recent comparative studies suggest that wild orangutans, like chimpanzees, exhibit considerable geographic variation in various behaviors that is consistent with a cultural interpretation. Yet rarely have possible alternative explanations for behavioral variation documented across populations been tested empirically. This study tests predictions derived from a cultural interpretation for behavioral variation among wild orangutans against ecological and genetic alternatives based on transmission via individual rather than social learning. The aim of this project is to determine the extent to which each of the following measures best predicts the observed patterns of behavioral variation within and between the wild orangutan populations of Tuanan and Sungai Lading, two research sites located in broadly similar habitats but separated physically by an impassible river barrier: 1) opportunities for social interaction based on association, 2) ecological differences between populations creating the same pattern without social learning, and 3) genetic predispositions for particular behaviors.

The exceptionally high estimated density of orangutans at both Tuanan (> 4 individuals/km²) and Sungai Lading (> 7 indiv./km²) offers a unique opportunity to rigorously test the strength of a cultural interpretation for behavioral variation based on opportunities for social learning through close association. The Sungai Lading study area was chosen based on a combination of high nest densities visible

during both air and ground surveys conducted in early 2005 and its broad habitat similarity to the Tuanan study area. The data collected included detailed observations of orangutan social activities, diet, patch residence times, range use, feeding rates, mother-offspring distances, and general association at varying distances (<2m, 2-10m, 10-50m) using standard instantaneous *ad libitum* focal-animal sampling techniques. Tree phenology and vegetative plots were also monitored at both sites to determine the relative abundance of potential orangutan foods and video footage of orangutan food processing was recorded to aid in descriptions of individual feeding techniques for each food species.

Multiple fecal samples have been collected for nearly all orangutans followed at both sites, which are currently being analyzed using mitochondrial DNA and human microsatellites to determine levels of maternal relatedness and pairwise coefficients of relatedness within and between sites. Preliminary examination of proximity data collected during orangutan parties (congregations of multiple independent orangutans within 50m) indicates that the orangutans of Tuanan and Sungai Lading have preferred associates, although results of genetic analyses to confirm uncertainties of orangutan identity are required before formal conclusions about the relationships among patterns of association, genetic relatedness, and behavioral repertoires can be made. At this stage it is clear that at least some innovative behavioral variants exhibited by orangutans at Sungai Lading are not exhibited by Tuanan orangutans, as well as some behaviors documented at

Tuanan that have not been observed at Sungai Lading.

Initial comparisons of species consumed by orangutans at Tuanan and Sungai Lading indicate that these populations exhibit local food cultures. In some cases orangutans at one site consume foods that are present but not consumed at the other site, and in other cases different items of the same food species are consumed at each site. The greatest variation in food items between sites appears to be between the fallback rather than preferred food items, suggesting that fallback foods comprise the most flexible part of orangutan diets.



In an effort to save trees and money, the ASP Bulletins are going paperless.

Do you have photos or drawings of your favorite primates (including those at the 2007 meeting) you'd like to share in the next Bulletin? Send them to Kris Coleman at colemank@ohsu.edu

Conservation Update

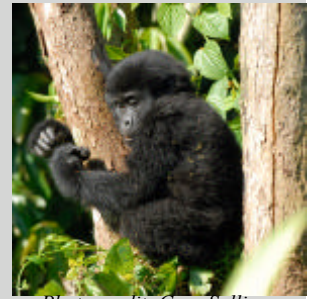


Photo credit: Garv Sullivan

Conservation Committee to Award 9 Conservation Small Grants for 2007!

The ASP Conservation Committee is pleased to announce that nine Conservation Small Grants were selected for funding for 2007, totaling \$11,000. These projects will advance our understanding of threatened and endangered primates and work to address issues in solving human-primate conflict. More information on these grants will be provided at the 30th Meeting of the American Society of Primatologists in Winston-Salem NC, June 20-23, 2007. The Co-chairs would like to take the opportunity to thank all the committee members for their hard work and dedication to getting these proposals evaluated at a very busy time of year for everybody.

Donate Auction Items for ASP Silent Auction for Conservation at the Upcoming 30th ASP Meetings in Winston-Salem, NC!

The ASP Conservation Committee would like to remind all members, their families, and friends of the upcoming annual ASP Silent Auction for Conservation at the 30th Meetings in Winston-Salem, NC. We would strongly encourage people to donate items ranging from the ever popular “primate” related memorabilia to interesting items collected in habitat countries, books, celebrity autographs or memorabilia (we all went to school with someone famous or know a friend who knows?!!) or the such.....

All donations are greatly appreciated! You can either bring your items for donation with you to Winston-Salem or if you do not have room or are unable to attend but still have items to donate they can be shipped to:

Dr. Allyson Bennett
 Wake Forest University School of Medicine
 Friedberg Campus
 2105 Welfare Road
 Winston-Salem, NC 27127

Thanks again for your continued support of the ASP Conservation Committee and Fund.

We look forward to seeing you all at the Silent Auction Tables in Winston-Salem!

Kimberley Phillips
 Michael J. C. Reid
 Conservation Committee Co-Chairs 2006-2008



ASP Conservation Grant Report

Report of two visits to Jaú National Park, studying golden-backed uacaris (*Cacajao melanocephalus ouakary*) and their habitat

Adrian Barnett, Centre for Research in Evolutionary Anthropology, School of Human & Life Sciences, Roehampton University UK

Bruna Bezerra, Bat Ecology and Bioacoustics Laboratory, School of Biological Sciences University of Bristol, England, UK

Eliana Andrade, Igapo Study Project, Rua Florianopolis, Petropolis, Manaus, AM, Brazil.

INTRODUCTION

Jaú National Park was visited twice in late 2006, once between 13 Oct. – 11 Nov. and again between 5 – 15 Dec. 2006. The purposes of the visits were to locate sites suitable for studies of the diet and habitat preferences of golden-backed uacaris (*Cacajao melanocephalus ouakary*), locate sites suitable for studies of the vocalizations and social ecology of golden-backed uacaris, attempt contact with uacaris and test proposed methods of field observation, identify plants used in the diets of uacaris and potential competitors (other monkeys, macaws and other large parrots), quantitatively assess fruit availability in various habitats, and undertake quantitative botany surveys using 0.5ha plots in a series of habitat types.

METHODS

Zoology: When animals were encountered, the groups were observed and the following noted: 1) the species, group size and composition, presence of young, group spread, inter-individual distances, habitat type, forest strata used; 2) duration and type of notable behaviours including any aggressive or social interactions as well as how food items were processed and the time taken and interval between items, and 3) vocalizations including social context of the call when possible. After the group moved on, the ground was searched to provide diet item specimens for measurement and analysis. For every tree in which feeding was observed, the DBH and canopy height and width were measured. Distance between feeding trees were measured as well as the distance of such trees to the

river (or to the nearest body of igapó). Diet items were analysed for characteristics including species, item type, size, weight, presence of defenses (e.g., spines, ants), and penetrability (for some fruits). To aid future work on competition within the hard-seed predator guild, a running list of parrots was kept. As an estimate of possible predation intensity a similar list was made for the raptors observed.

Botany: All fruiting, budding, newly leafing and flowering trees were noted. Fruits and flowers found on the ground were collected and identified. In addition, to provide a quantitative basis of comparative fruit availability, three 100-minute walking surveys were made in each habitat type and all fruits and flowers encountered in that time collected and identified. Three 0.5 ha (250x20m) quadrats were set up for quantitative analysis. Located variously in igapó, restinga (hummock igapó) and capoeira (secondary forest), each was centered on a tree in which uacaris had been seen feeding.

RESULTS

Zoology: Over 178 hours were spent searching for monkeys, resulting in 10 hours of visual contacts. These varied in duration from 3 sec to 153 min (total, 609 min; a contact ratio of 5.68%). Of the contact time, 70.44% was in unflooded igapó, 25.77% in capoeira and 47.29% in terra firme. None occurred in capinarana. The species seen were: *Alouatta seniculus* (2 visual, 4 auditory contacts), *Cacajao melanocephalus ouakary* (11 visual, 4 auditory contacts), *Cebus apella* (3 visual and 2

auditory contacts), *Saimiri sciureus* (mixed group of 6 with 8 *Cebus apella*). During this time 30 primate food items were recorded (25 for *Cacajao*, 4 for *Cebus* and 1 for *Alouatta*). All were weighed, measured and, where appropriate, the location of bite marks of the surface recorded. No contacts were made with the four other primates known to be in the northern part of the park (*Aotus* sp., *Cebus albifrons*, *Pithecia chrysocephala* and *Saguinus midas*: see Barnett et al., 2002), though feeding signs were seen for *C. albifrons*. Data on primate groups, including sizes, group spreads and inter-individual distances are presented in Table 1.

Botany: Three 0.5ha quadrats were sampled: one in igapó, one in restinga and a 30-year old secondary forest (capoeira). A total of 110 tree, vine and palm species in 28 families were registered. The igapó quadrat had 22 unique species, and shared two with capoeira and 1 with restinga. The capoeira quadrat had 24 unique species, and shared 11 with restinga. There were 51 unique species in the restinga quadrat. No sampled species was common to all three habitats.

DISCUSSION & CONCLUSION

Observations of greatest interest behaviourally include the feeding while suspended from the ankles, a behaviour observed quite frequently in the white uacari *C. calvus calvus* (see Walker & Ayres 1996), but never before observed in adult *C. melanocephalus* (though Jean-Philippe Boubli, pers. comm., has observed this behaviour in playing infant *C. m. melanocephalus*). On all oc-

Table One: Primate Groups

Species	Habitat	Date	Stratum	Gp. Size	IID*	Gp. spread	Notes
<i>Alouatta</i>	Terre firme	10/XI/06	15m	2			infant on back of female
		15/XII/06	canopy, 23m	3	0-3m	6m	
<i>Cacajao</i>	Igapó	19/X/06 am	canopy, 15m	5			
		20/X/06 am	canopy, 15m	1			
		20/X/06 am	canopy, 15m	1			
		21/X/06 am	canopy, 15m	1			
		21/X/06 am	canopy, 15m	3			
		22/X/06 am	canopy, 10m?	-			
		06/XII/06am	canopy, 21m	3-4			
		07/XII/06am	canopy, 12-21m	3	10 body lengths	30 body lengths	3-6 others in calling range
08/XII/06am	canopy, 21m	3					
13/XII/06am	rivermargin, 10m	2					
<i>Cacajao</i>	Terra firme	10/XII/06am	canopy, 20m	22	3-15 body lengths	>150 body lengths	infant on back of female
<i>Cebus apella</i>	capoeira I	31/X/06 am 03/XI/06 am	upper & mid	8			1=mixed gp. with Saimiri
<i>Cebus apella</i>	Terra firme	15/XII/06am	upper & mid	4-6	1-2 body lengths	15 body lengths	infant on back of female
<i>Saimiri</i>	capoeira 2	25/X/06 am	8m	6			2=mixed gp. with Cebus
		31/X/06 am	mid only	6			

casions when feeding was observed, there was only ever one animal in each canopy, even when the tree was a very large one. Similarly, the large inter-individual distances within groups of uacaris, contrasted with those observed for the other three primates encountered during our visits (see Table 1). One consequence of the more dispersed nature of an uacari foraging group is that, at any one time, individuals feeding simultaneously may be ingesting completely different species.

Encounters with large groups of uacaris in terra firme, the presence of small groups of uacaris on isolated igapó islands and the comparative dearth of fruits and flowers in the latter habitat, both confirms that the animals seasonally migrate into this habitat when the igapó is unflooded and that, as might be expected in a species with a putative fission-fusion sociality, group size might well be related to resource availability in this species (see Defler, 1999).

Flowers of macaricuia tree (*Eschweilera tenuifolia*) are a new diet item record for the golden-backed uacari. The species is exceedingly common at Jaú, where fallen examples of its large white flowers often carpeted the ground. It is of interest that i) the flowers were eaten only by uacaris isolated on an igapó island, where there were very few other fruits and that ii)

bird- or bat- pollinated flowers of tree species that lay directly in the path of various groups of feeding uacaris remained uninvestigated by them. The reason why the bird- and bat-pollinated flowers were ignored by uacaris at Jaú may lie with their pollination ecology: bird-pollinated flowers generally have abundant but relatively dilute nectar, while insect pollinated species tend to have nectar that is much richer in sugars (see Baker *et al.*, 1998). Hence, in times of fruit scarcity the uacaris may well be optimizing their choice of flowers for rapid energy intake. The use of young *Eschweilera* leaves by uacaris in times of fruit dearth was previously reported by Barnett *et al.* (2005). Similar patterns of resource use have been reported for *Varecia*, the most frugivorous of lemurs, by Wright *et al.* (2005). Interestingly, flowers are also seasonally important in the diet of another swamp forest specialist, the African cercopithecoid *Allenopithecus nigroviridis*. Here, the species involved is *Daniellia pynaertii* (Fab.: Caes.), a common species with abundant nectar. Related to a dearth of fleshy fruits, nectar-feeding in *Allenopithecus* is more intensive than in uacaris, occurring across 5 months and comprising between 20 and 50% of plant feeding records. It may be possible because the nectar of *Daniellia* has a higher-than-average lipid content (Gautier-Hion &

Maisels, 1994). Nevertheless, only the smaller *Allenopithecus* individuals (ie females and young) partake. Adult female *Allenopithecus* are about the same weight as adult uacaris (3.5 kg), while adult male *Allenopithecus* weigh about twice as much (Gautier-Hion & Maisels, 1994). Uacaris may therefore be at the energetic edge of resource-limited seasonal nectivory.

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Meetings

44th Annual Meeting of the Animal Behavior Society

July 21, 2007 - July 25, 2007

Location: Burlington Sheraton Hotel and Conference Center in Burlington, Vermont

Registration opens 15 March. Early registration is until 8 May.

Abstract Deadline: May 15, 2007*Web site:*<http://www.animalbehavior.org/ABS/Program/>**III Congreso Mexicano de Primatología**

October 24, 2007 - October 27, 2007

Location: Instituto de Investigaciones Antropológicas, UNAM, Mexico City, Mexico*Sponsor:* Asociación Mexicana de Primatología, AC; Instituto de Investigaciones Antropológicas, UNAM*Abstract Deadline:* July 31, 2007*Web site:* <http://www.amp-ac.org.mx>**Animal Training & Behavior through Positive Reinforcement- Further Challenging and Advanced Issues**

December 7, 2007 - December 9, 2007

Location: Munich, Germany

Three day seminar by Ken Ramirez.

Topics include operant conditioning, training situations and problem solving with positive reinforcement.

Web site:<http://www.clickerreiter.de/KenRamirez1.htm>**XXIIInd IPS Congress**

August 3, 2008 - August 8, 2008

Location: Edinburgh International Conference Centre in Edinburgh, Scotland*Web site:*<http://www.ips2008.co.uk/index.html>

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You will be responsible for: *Teaching and administration on the MSc in primate conservation, *Undertaking research leading to national and international publications, *Helping to develop income generation linked to the course (e.g. distance and e-learning delivery or launch of access and specialist courses)*Supervision of MSc projects in primate conservation in the field, in captivity or literature-based
Qualifications/Experience: Experience of postgraduate teaching in Higher Education or demonstrable teaching potential. Proven research record or demonstrable research potential. You should have:*PhD or equivalent qualification in a discipline relevant to primate conservation

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Email us to receive the new medical report form.

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Chimney Rock State Park
Photo credit: Jessica Henderson

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