



PAN AFRICAN SANCTUARY ALLIANCE

2005 MANAGEMENT WORKSHOP REPORT



**4-8 June 2005
Mount Kenya Safari Lodge, Nanyuki, Kenya**

Hosted by

Pan African Sanctuary Alliance / Sweetwaters Chimpanzee Sanctuary

Photos provided by Tacugama Chimpanzee Sanctuary – Sierra Leone (cover), PASA member sanctuaries, and Doug Cress.

A contribution of the World Conservation Union, Species Survival Commission, Conservation Breeding Specialist Group (CBSG) and Primate Specialist Group (PSG).

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Prepared by participants in the PASA 2005 Management Workshop, Mount Kenya, Kenya, 4th – 8th June 2005

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Additional copies of the *Pan African Sanctuary Alliance (PASA) 2005 Workshop Report* can be ordered through the IUCN/SSC Conservation Breeding Specialist Group, 12101 Johnny Cake Ridge Road, Apple Valley, MN 55124, USA. www.cbsg.org.

Pan African Sanctuary Alliance (PASA)

2005 Management Workshop

Sixth Meeting
4-8 June 2005
Mount Kenya Safari Lodge, Kenya

Participating Sanctuaries:

CERCOPAN, Nigeria
Chimfunshi Wildlife Orphanage, Zambia
Chimpanzee Conservation Centre, Guinea
Chimpanzee Rehabilitation Association, Gambia
HELP Congo, Congo
Limbe Wildlife Center, Cameroon
Ngamba Island Chimpanzee Sanctuary, Uganda
Pandrillus, Nigeria
Projet Protection des Gorilles (PPG) Congo, Congo
Sanaga-Yong Chimpanzee Rescue Center, Cameroon
Lola ya Bonobo, Democratic Republic of Congo
Sweetwaters Chimpanzee Sanctuary, Kenya
Tacugama Chimpanzee Sanctuary, Sierra Leone
Tchimpounga Chimpanzee Rehabilitation Centre, Congo
CWAF – Cameroon

PASA Supporters:

International Fund for Animal Welfare (IFAW)
Arcus Foundation
Columbus Zoo
Humane Society of the U.S. (HSUS) - International
Kenya Airways
Dewar Wildlife Trust
Disney Wildlife Conservation Fund
Busch Gardens Conservation Fund
Zoological Society of London
Kenya Wildlife Service
Oakland Zoo
International Primate Protection League (IPPL)
WILD Foundation
Sierra Club

Hosted By:

**Pan African Sanctuary Alliance / Sweetwaters Chimpanzee
Sanctuary**

Pan African Sanctuary Alliance (PASA)

2005 Workshop Report

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-The Bili Chimpanzees: Latest Developments	
- Chimpanzee Smuggling	
- DRC gorilla advertising campaign	

Pan African Sanctuary Alliance (PASA)

2005 Workshop Report

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Pan African Sanctuary Alliance (PASA)

2005 Workshop Report



Section 1

Executive Summary

EXECUTIVE SUMMARY

History and Executive Summary

The Pan African Sanctuary Alliance (PASA) consolidated its position as a leader among the international sanctuary community in 2004-05, helping its members enjoy an unprecedented level of support and influence. Fifteen of the 16 PASA member sanctuaries attended the PASA 2005 Management Workshop in Kenya, and the mutual respect and coordination shared by the organizations is a key to PASA's overall strength.

PASA was created five years ago to unite the African sanctuaries that had emerged as a response to the deforestation, bushmeat, human encroachment and disease that was decimating wild primate populations. Begun on purely welfare grounds as many as 35 years before, some of the sanctuaries are now far beyond capacity with no let-up in sight. PASA sanctuaries have seen staggering rises in the number of orphaned chimpanzees, gorillas, bonobos, drills and other endangered primates since 1990, and the sanctuaries are stretched well beyond their limits.

Chimpanzees, for instance, have increased at PASA sanctuaries by 59 percent since 2000, while gorillas (a 36 percent rise) and bonobos (a 300 percent rise) continue to arrive in overwhelming numbers.

With that in mind, PASA placed greater emphasis over the past 12 months on conservation education and outreach, and began to work more aggressively in regions and countries where member sanctuaries do not exist to stem the tide. PASA also worked to investigate and expose illegal trade routes from West Africa to the Middle East, create a conservation advertising campaign for the eastern Democratic Republic of Congo, strengthen relationships with zoos in the United States, lobby South Africa for the return of four infant gorillas to Cameroon, release a French-language version of the PASA Veterinary Healthcare manual, and attend conferences and workshops in the United States, Sweden, Taiwan, Italy, Germany and South Africa, and rescue primates in need throughout Africa.

PASA maintained the schedule of international workshops begun in 2002, when the annual meeting was split into three disciplines: Education, Veterinary Healthcare, and Management. The PASA 2005 Education Workshop was staged March 7-12 in Entebbe, Uganda; the PASA 2005 Veterinary Healthcare Workshop was held April 3-9 in Limbe, Cameroon; and the PASA 2005 Management Workshop was staged June 4-8 in Mount Kenya.

Although PASA committed in 2004 to professionalizing its day-to-day operations, the organization remains all-volunteer. However, the addition of a business operations director strengthened PASA's financial accountability and permitted the secretariat and other officers to focus more on issues such as fund-raising, international relations, and long-range planning.

PASA maintained its focus on reintroduction programs for all eligible sanctuaries, believing that reintroduction is the best way for sanctuaries to actively promote conservation in range countries. PASA's experience and commitment to primate reintroduction makes it a leader in the field, and more than half of the members are currently engaged in some aspect of reintroduction programs. In addition, PASA will stage a Reintroduction Summit in April 2006 in The Netherlands to assess and examine all aspects of the topic, in order that future reintroduction programs will have the latest technology, experience, and resources at their disposal.

PASA considered applications for membership from two organizations in South Africa – The Vervet Foundation and the CARE baboon sanctuary – but decided to table both as “Applying Members” for one more year until PASA could undergo a management review process in 2006.

PASA also voted to change its name to “Pan African Sanctuary Alliance” from the former “Sanctuaries,” a decision that has more to do with good grammar than anything else.

While PASA’s rapid growth is encouraging, there is little doubt that it has evolved far from its original design. In fact, PASA’s transformation through its first five years has probably been too fast, and the workload now outstrips the capacity of the volunteers and advisors who handle the day-to-day operations. That is why the PASA managers voted in Kenya to use the PASA 2006 Management Workshop as a strategic retreat, and allow the key personnel to examine all aspects of the organizations – from the mission statement right through the chain of command – in order to produce a more effective organization that best reflects the accomplishments and the aspirations of the sanctuaries in the 21st century.

PASA OPERATIONS BUDGET 2005

ITEM	PROJECTED COST	ACTUAL COST
2005 Education Workshop (Uganda)	\$23,000	\$13,025
2005 Veterinary Healthcare Workshop (Cameroon)	\$25,000	\$18,386
2005 Management Workshop (Kenya)	\$35,150	\$34,148
Audit and Report	\$2,500	\$2,500
Travel	\$5,000	\$0
Brochures / Printing	\$2,000	\$930
Postage/Bank fees/Office Supplies/Dues	\$500	\$2,364
Emergency Relief	\$10,000	\$1,120
Medical Supplies	\$5,000	\$1,409
Education Grants	\$7,000	\$7,000
Reintroduction Projects	\$0	\$1,565
Conferences / workshops / fees	\$3,500	\$4,636
Salary	\$0	\$0
TOTAL	\$118,650	\$87,083

PASA 2005 MANAGEMENT WORKSHOP

Overview

The Pan African Sanctuary Alliance (PASA) looked back proudly on five years of mutual respect and unprecedented cooperation among its members at the PASA 2005 Management Workshop in Kenya, but also focused on what lies ahead for African sanctuaries in the future. What began as an earnest attempt to find common ground among the primate sanctuaries in Africa has quickly grown into a powerful organization that handles areas of funding, crisis management, confiscation, government relations, transfer, capacity building, education and veterinary training, and a host of other responsibilities that were never envisioned.

The PASA 2005 Management Workshop was held June 4-8 and marked a return to the Mount Kenya Safari Lodge in Nanyuki, Kenya, for the first time since 2002. PASA member sanctuaries from the following countries attended the workshop: Uganda, Kenya, Zambia, Nigeria, the Republic of Congo, the Democratic Republic of Congo, Guinea, Sierra Leone, Gambia, and Cameroon. In addition, delegates from Rwanda, Canada, The Netherlands, Germany, the United States, Great Britain, France, and Australia also attended.

The primary themes of the PASA 2005 Management Workshop were:

- Reintroduction
- Genetics
- Disease control
- Illegal trade
- International relations

Each of these topics was discussed in-depth, both in 45-minute presentations and in sidebar discussions. Other presentations included reports on the PASA 2005 Education Workshop and the PASA 2005 Veterinary Healthcare Workshop, the ongoing bushmeat crisis, the GRASP Intergovernmental meeting, the new PASA website, a proposed plan to rescue chimpanzees from Angola, a mysterious great ape species in the central DRC, and PASA education initiatives with zoos.

A new format was unveiled at the PASA 2005 Management Workshop in Kenya, where by the PASA Advisory Board met for a full day (June 4), the PASA managers met for the next day after that (June 5), and then three days of presentations (June 6-7-8) came next. This schedule – which was suggested at the PASA 2004 Management Workshop in South Africa – was a departure from the usual working groups that dominated previous meetings, and was proposed so that the managers' closed-door meeting would have sufficient time and energy to tackle its agenda.

As is customary, PASA offered French-English translation in all of its presentations, debates and publications.

Agenda

The PASA 2005 management Workshop was designed to spur debate and creative solutions to issues surrounding reintroduction, including disease transmission, funding, sub-species identification, environmental impact and sustainability, and community involvement.

Reintroduction: PASA has made reintroduction a priority for eligible member sanctuaries, and is among the leaders in the relatively unknown field. Presentations were made on PASA reintroduction programs with gorillas in Congo (PPG-Congo) and monkeys in Nigeria (CERCOPAN), along with updates from conferences in Europe and Asia that featured reintroduction as major themes.

In addition, a presentation was made for the Reintroduction Summit, which will be held at the Apenheul Primate Park in Apeldoorn, The Netherlands, in April 2006. This summit will offer PASA the opportunity to meet with its top reintroduction experts, advisors and scientific personnel for several days of intense review and planning. It is felt that the technology, science, ecology and politics of reintroduction has changed so much over the past decade that a thorough study of the practice needed to be undertaken before proceeding further.

Genetics: PASA sanctuaries are asked to follow IUCN guidelines wherever possible for the care and welfare of primates and other animals, a policy that extends to the separate housing of chimpanzee sub-species, when possible. But a presentation by Anne Fischer of the Max Planck Institute in Germany challenged the notion that chimpanzee sub-species are all that distinguishable. In fact, based upon a genetic study, scientists at the Max Planck Institute found that the discernible difference between chimpanzee sub-species from the East, West or Central regions of Africa is sometimes impossible to detect.

Disease Control: The PASA 2005 Veterinary Healthcare Workshop in Cameroon was dominated by presentations concerning disease transmission and control, and PASA's vital role at the dividing line between wild primate populations and human communities. These topics were repeated for the benefit of the managers in Kenya, with an emphasis on both preventing deadly disease outbreaks and finding a way to allow PASA sanctuaries to serve as outposts of detection.

Illegal Trade: A private investigation that was sponsored, in part, by PASA was discussed at length, both through a full presentation and later in meetings with the PASA managers. A well-established black-market trade route from Nigeria through Sudan and Kenya and out to the Middle East remains viable, more than a decade after it was first disclosed, and recent evidence was presented.

International Relations: As PASA grows in both size and stature, its need for improved international relations grows too. A presentation was made to lay out the current realities and priorities of the Convention on International Trade in Endangered Species (CITES), and national and regional problems were discussed too.

Goals

PASA remains committed to its primary goals of primate conservation and welfare, mixed with a desire to improve local capacity in fields such as education, veterinary healthcare, and management. The PASA 2005 Management Workshop discussed many of these topics in-depth, and teams were selected to focus on particular projects with respect to fund-raising, implementation, and oversight.

PASA also made a commitment to the 2006 International Primatological Society workshop, which will be staged in Entebbe, Uganda, next June 24-28. PASA voted to combine its traditional management and education workshops into the IPS agenda next year, and propose symposia that would allow PASA to present its work and its personnel to the widest possible audience.

PASA managers also voted to stage the PASA 2006 Veterinary Healthcare Workshop in Sierra Leone next March, and agreed to stage the PASA Reintroduction Summit in The Netherlands in April 2006.

The PASA Advisory Board was unanimously re-elected for the first time in PASA history.

Advisory Board

The PASA Advisory Board met for a full day in Kenya to discuss topics such as new members, increased funding and fund-raising opportunities, crises in non-PASA member countries, PASA finances, and a complete review of PASA's policies and protocol.

The PASA Advisory Board agreed that a management retreat was required, and voted to recommend that the PASA 2006 Management Workshop be converted into a review session that is organized by a professional facilitator. The proposal was put to the PASA managers for approval.

Output

All donors, advisors and supporters will receive the PASA 2005 Workshop Report, which includes sections on the PASA 2005 Education Workshop that was staged in Uganda and the PASA 2005 Veterinary Healthcare Workshop that was staged in Cameroon. Copies will be made available in both printed and CD formats, and will also be available to download online through www.cbsg.org.

Budget

The itemized budget is included in this report. The total preliminary cost of the PASA 2005 Management Workshop is \$34,148, which included airfare and hotel expenses for one representative of each PASA sanctuary, along with PASA Advisory Board members and special presenters and some invited guests.

The PASA 2005 Management Workshop was funded primarily through grants from the International Fund for Animal Welfare (IFAW), the Arcus Foundation, the Dewar Wildlife Trust, the Columbus Zoo, the Humane Society International, the WILD Foundation, the Kenya Wildlife Service, and the Sierra Club. In addition, a sponsorship arrangement with

Kenya Airways allowed PASA delegates to purchase tickets at reduced fares for all three workshops in 2005.

The Sweetwaters Chimpanzee Sanctuary, led by its director, Anne Olivecrona, was responsible for many of the local arrangements and logistics in planning and staging the workshop.

PASA 2005 MANAGEMENT WORKSHOP

BUDGET

ITEM	PROJECTED COST	ACTUAL COST
Airfare – PASA sanctuary managers	\$15,000	\$15,410
Airfare – PASA advisory board	\$7,000	\$3,978
Hotel & Accommodation (meals, tea & coffee, etc.) / Mt. Kenya	\$8,000	\$10,927
Hotel & Accommodation / Nairobi	\$800	\$886
Transportation / Nairobi / Mt. Kenya	\$1,000	\$970
Visas	\$850	\$490
Conference Audio-Visual Rental	\$500	\$787
Conference Hall rental	\$500	\$0
Translation	\$500	\$250
Printing	\$350	\$300
Telephone	\$300	\$150
Cocktail Reception	\$350	\$0
TOTAL	\$35,150	\$34,148

Primates in Sanctuaries in Africa

PASA Members

PASA Sanctuary / Country	No. in Sanctuary May 1999	No. in Sanctuary May 2000	No. in Sanctuary May 2001	No. in Sanctuary June 2002	No. in Sanctuary June 2003	No. in Sanctuary June 2004	No. in Sanctuary June 2005
Limbe (Cameroon)	20 - C	21 - C 7 - G	28 - C 6 - G	27 - C 7 - G	35 - C 12 - G 13 - D 2 - M	36 - C 12 - G 30 - D 8 - M 8 - BA 25 - GU 13 - MG 7 - V	42 - C 11 - G 37 - D 9 - M 8 - BA 15 - GU 12 - MG 13 - MO
Sanaga-Yong (Cameroon)		10 - C	15 - C	18 - C	33 - C	43 - C	47 - C
CWAF / Mefou (Cameroon)		25 - C 6 - G	37 - C 3 - G	37 - C	52 - C	40 - C 11 - G 6 - D 7 - M 20 - BA 8 - MG 20 - GU 25 - MO	51 - C 13 - G 7 - D 8 - M 24 - BA 4 - MG 9 - GU 48 - MO
Lola ya Bonobo (DRC)		10 - BO	20 - BO	22 - BO	24 - BO	38 - BO	44 - BO
PPG Congo (Congo)		20 - G	19 - G	20 - G 4 - BO	23 - G 3 - BO	23 - G	22 - G
HELP Congo (Congo)		42 - C	41 - C	41 - C	50 - C	35 - C	41 - C
Tchimpounga (Congo)		76 - C	80 - C	100 - C 1 - G	117 - C	116 - C 3 - M	118 - C 5 - M 2 - GU
PPG Gabon (Gabon)		17 - G	16 - G	16 - G	15 - G	23 - G	23 - G
Chimpanzee Rehabilitation Ctr. (Gambia)		55 - C	59 - C	61 - C	65 - C	69 - C	76 - C
Chimpanzee Conservation Center (Guinea)			30 - C	31 - C	33 - C	36 - C	40 - C
Sweetwaters (Kenya)		25 - C	25 - C	25 - C	34 - C	35 - C	44 - C
Pandrillus (Nigeria)	16 - C	16 - C	21 - C	22 - C	22 - C 174 - D	25 - C 202 - D	26 - C 242 - D
Tacugama (Sierra Leone)		32 - C	40 - C	55 - C	64 - C	68 - C	78 - C
Kitwe Point (Tanzania)*	3 - C	3 - C	3 - C	3 - C	0 - C	0 - C	0 - C
Ngamba Island (Uganda)	22 - C	26 - C	33 - C	36 - C	39 - C	39 - C	39 - C

Chimfunshi (Zambia)	68 - C	76 - C	83 - C	94 - C	101 - C	105 - C	109 - C 7 - BA
CERCOPAN (Nigeria)						36 - MG 64 - GU	43 - MG 73 - GU
PASA Totals	129 - C	407 - C 50 - G 10 - BO	495 - C 44 - G 20 - BO	550 - C 44 - G 26 - BO	645 - C 50 - G 27 - BO 187 - D 2 - M	647 - C 69 - G 38 - BO 238 - D 18 - M 28 - BA 57 - MG 109 - GU 25 - MO	711 - C 69 - G 44 - BO 286 - D 22 - M 39 - BA 59 - MG 99 - GU 61 - MO

* Kitwe Point sanctuary closed in 2003

Non-PASA Members

Non-PASA Sanctuary / Country	No. in Sanctuary May 1999	No. in Sanctuary May 2000	No. in Sanctuary May 2001	No. in Sanctuary June 2002	No. in Sanctuary June 2003	No. in Sanctuary June 2004	No. in Sanctuary June 2005
Sodepal (Gabon)		15 - C	15 - C	15 - C			8 - C 40 - M
Evaro (Gabon)							2 - G
Lwiro (DRC)		2 - C	5 - C	7 - C	12 - C	16 - C 1 - BO 4 - BA 16 - MO	18 - C 3 - BA 1 - MA 14 - MO
CARE (S. Africa)						357 - BA 6 - GU	402 - BA 6 - MO
The Vervet Foundation (S. Africa)						628 - V	648 - V
Port Gentil (Gabon)		10 - G	10 - G	16 - G	14 - G	13 - G	3 - C 2 - G
Petit Evengue (Gabon)							7 - G
Pongo Songo (Cameroon)							12 - C
Riverside Wildlife Ctr. (S. Africa)							677 - V
Vilab II (Liberia)						76 - C	80 - C
Non-PASA Sanctuary Totals		17 - C 10 - G	20 - C 10 - G	22 - C 16 - G	12 - C 14 - G	92 - C 13 - G 1 - BO 361 - BA 628 - V 6 - GU 16 - MO	121 - C 11 - G 40 - M 405 - BA 1,325 - V 1 - MG 20 - MO

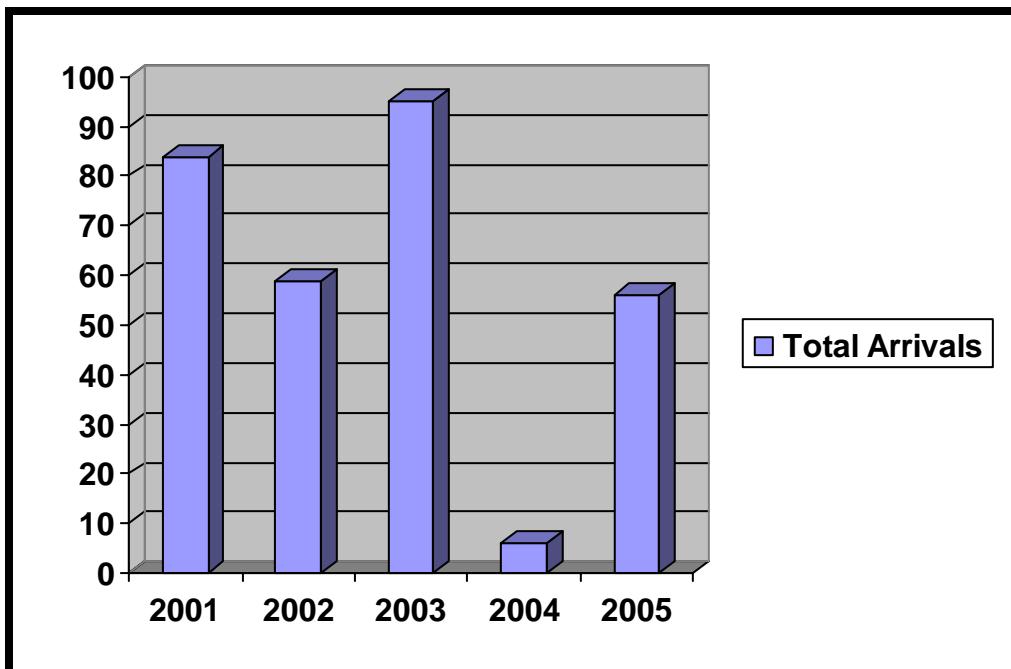
Combined Totals

Combined PASA & Non-PASA Sanctuary Totals	129 - C	424 - C 60 - G 10 - BO	515 - C 54 - G 20 - BO	572 - C 60 - G 26 - BO	657 - C 64 - G 27 - BO 187 - D 2 - M	739 - C 82 - G 39 - BO 238 - D 18 - M 389 - BA 57 - MG 115 - GU 628 - V 41 - MO	832 - C 80 - G 44 - BO 286 - D 62 - M 444 - BA 60 - MG 99 - GU 1,325 - V 81 - MO
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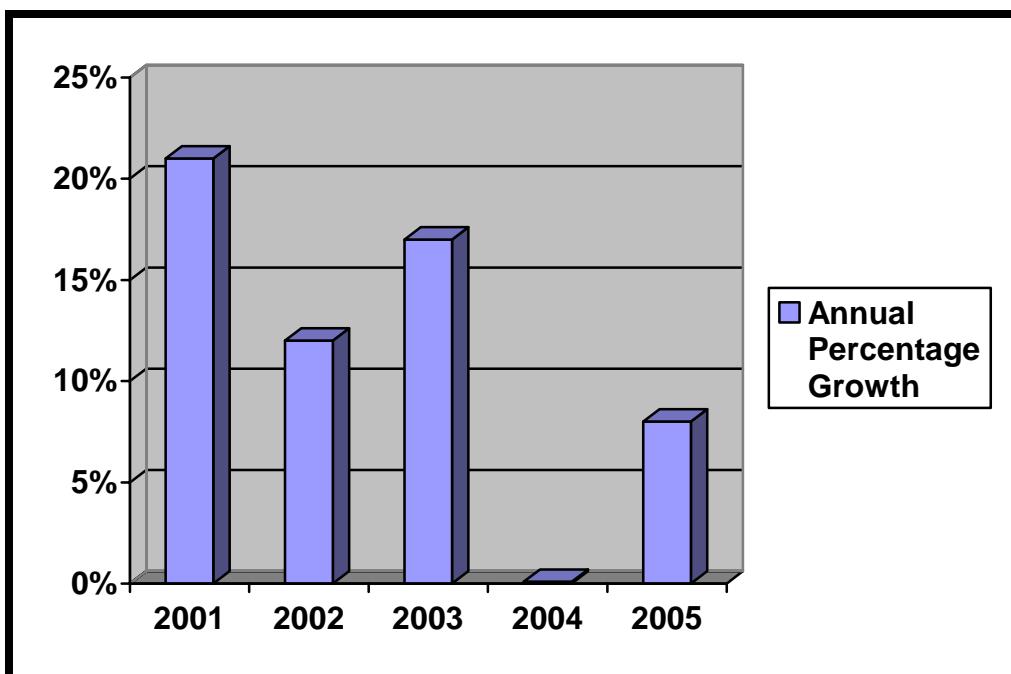
KEY

C – Chimpanzee; G – Gorilla; BO – Bonobo; D – Drill; M – Mandrill; BA – Baboon; V – Vervet; MG – Mangabey; GU – Guenon; MO – Monkey (not specified)

Chimpanzee Arrivals at PASA Sanctuaries 2001-2005



Chimpanzee Population Growth at PASA Sanctuaries 2001-2005



Pan African Sanctuary Alliance (PASA)

2005 Workshop Report



Section 2

**Letter of Invitation
Agenda
Participants Contact List**



PASA
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Los Angeles, CA 90035 USA

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June 4, 2005

Dear PASA managers, advisors and supporters,

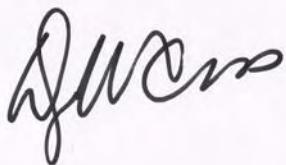
Welcome to the Pan African Sanctuary Alliance (PASA) 2005 Management Workshop at the Mount Kenya Safari Club in Nanyuki, Kenya.

PASA has grown dramatically since it was founded in 2000 and the organization now stands as a model for the international sanctuary movement. But that is only because the members believe in the organization and are willing to work together for the benefit of all.

Sanctuaries in Africa are in a process of change in Africa, evolving from welfare institutions into organizations that place an emphasis on conservation, education, government relations, and research, in addition to the highest level of primate care possible. But by embracing that change, the sanctuaries have allowed PASA to extend its reach further than any of us could have imagined.

There is much hard work to do, but PASA and its members are accustomed to hard work. PASA's members include some of the oldest permanent conservation organizations in Africa, and we are committed to securing the future of primates on this continent.

Good luck.



Doug Cress
Secretariat

PASA



□

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4 Juin, 2005

Chers directeurs, conseillers et défenseurs de PASA,

Bievenue a l'attelier de gestion 2005 de l' Alliance Pan Africaine des Sanctuaires (PASA) en le Mount Kenya Safari Club en Nanyuki, Kenya.

PASA s'est développé nettement depuis qu'il a été fondé en 2000 et l'organisation se tient maintenant comme modèle pour le mouvement international de sanctuaire. Mais c'est seulement parce que les membres croient en organisation et est disposé à travailler ensemble au profit de tous.

Les sanctuaires en Afrique sont dans un processus de changement de l'Afrique, se transformant des établissements d'assistance sociale en les organismes qui mettent un accent sur la conservation, l'éducation, les relations de gouvernement, et la recherche, en plus du niveau le plus élevé du soin de primat possible. Mais en embrassant ce changement, les sanctuaires ont permis à PASA de prolonger son extension plus loin que n'importe lequel d'entre nous pourrait avoir imaginé.

Il y a beaucoup de travail dur à faire, mais PASA et ses membres sont accoutumés au travail dur. Les membres de PASA incluent certains des organismes permanents les plus anciens de conservation en Afrique, et nous sommes commis à fixer le futur des primats sur ce continent.

Bon chance !

Doug Cress
Secretariat

PASA



PASA 2005 Management Workshop

Mount Kenya Safari Club

June 4-8, 2005

Agenda

Saturday June 4

Noon – 6 p.m.

PASA Advisory Board Meeting (closed)

Sunday June 5

9 a.m. – 4 p.m.

PASA Manager's meeting (closed)

5:30 p.m.

PASA cocktail reception (Mt. Kenya Safari Club Trophy Lounge)



Monday June 6

9 a.m. – Noon
Sweetwaters Chimpanzee Sanctuary visit

Noon- 1 p.m.
Lunch

1 p.m.
PASA member updates (5 minutes each)

CERCOPAN
Chimfunshi Wildlife Orphanage (Sheila Siddle)
Limbe Wildlife Center (Felix Lankester)
Tacugama Chimpanzee Sanctuary (Bala Amarasekaran)
Pandrillus (Peter Jenkins)
PPG-Congo (Christelle Chamberlan)
Tchimpounga Chimpanzee Rehabilitation Centre (Ken Cameron)
HELP-Congo (Aliette Jamart)
Sweetwaters Chimpanzee Sanctuary (Annie Olivecrona)
Ngamba Island Chimpanzee Sanctuary (Richard Ssuna / Lilly Ajarova)
Lola ya Bonobo (Claudine Andre)
Chimpanzee Rehabilitation Association (Stella Marsden)
Sanaga-Yong Chimpanzee Rescue Center (Sheri Speede)
Cameroon Wildlife Aid Fund (Rachel Hogan)

3 p.m. – Coffee / Tea break

3:15
GRASP (Daniel Malonza / Matthew Woods)
Chimpanzee Smuggling (Jason Mier)

Tuesday June 7

9 a.m.
Evolutionary genetics (Anne Fischer)
CITES relations (Chris Wolf)

10:30 – Coffee / Tea break

10:45
PPG reintroduction (Christelle Chamberlan)
PASA website (Doug Cress)

Noon – Lunch

1 p.m.
PASA Education (Barb Cartwright)
PASA Veterinary (Wayne Boardman)
Bushmeat / WSPA review (Garry Richardson)

3:00 p.m. – Coffee / Tea break

3:15 p.m.

Education suitcases (Beth Armstrong)
Bili Ape (Karl Ammann)

Wednesday, June 8

9 a.m.

CBSG Workshop / Taipie (David Lucas)
CERCOPAN reintroduction (Zena Tooze)

10:30 a.m. – Coffee / Tea

10:45 a.m.

GAHMU / disease issues (Wayne Boardman)
Reintroduction Summit (Norm Rosen)

Noon – Lunch

1 p.m.

Kenya Wildlife Service investigations (Julius Kimani) (cancelled)

3:00 p.m. – Coffee / Tea

3:45

DRC gorilla advertising campaign (Doug Cress)
Wrap-up

**PASA 2005 MANAGEMENT WORKSHOP
CONTACT LIST**

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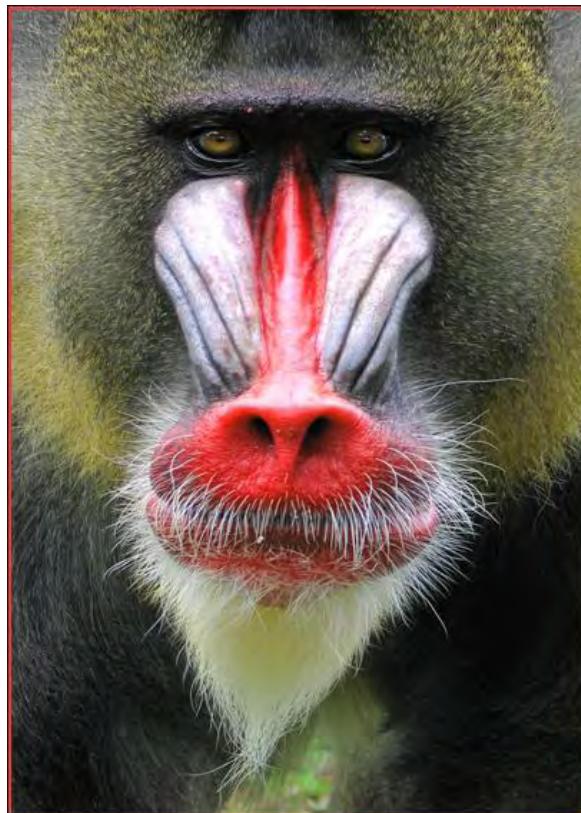
<p>Anne Fischer Max Plank-Institute for Evolutionary Anthropology Deutscher Platz 6 04103 Leipzig Germany 49.341.3550.529 (v) 49.341.3550.555 (f) afischer@eva.mpg.de</p>	<p>Shirley Glyn Help-Congo 58 6th Avenue Parktown North Johannesburg 2193 South Africa 27 (0) 828818004 (v) 27 117887142 (f) glyn@iafrica.ca</p>	<p>Benoit Goossens HELP Congo Cardiff University BEPG – Cardiff School of Biosciences Cardiff University PO Box 915 Cathays Park Cardiff CF10 3TL United Kingdom 44 2920 875073 (v) 44 2920 874305 goosensbr@cardiff.ac.uk</p>
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Pan African Sanctuary Alliance (PASA)

2005 Workshop Report



Section 3

**Advisory Board Meeting
Managers' Meeting**



PASA 2005 PASA Advisory Board

Saturday, June 4
Mount Kenya Safari Club

Agenda

- Budget / Finances
- PASA management / growth / professionalization
- New members
- Crisis Fund
- Outside chimpanzee issues (Angola, South Africa, DRC, etc.)
- Press conference (June 9 / Nairobi)
- Reintroduction Summit
- Business plan / management structure
- Evacuation / health crisis plans
- 2006 workshop sites, formats



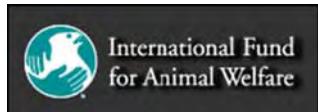


PASA 2005 Managers' Meeting

Sunday, June 5
Mount Kenya Safari Club

Agenda

- Budget / Finances / Banking
- Membership Dues
- Annual Report (CD, paper)
- Annual Financial Statements
- PASA management / professionalization / growth
- New Members
- Local Financial / Personal Impact Statements (investment, employment, etc.)
- Reintroduction Summit (committee)
- Evacuation / Crisis Manual (committee)
- Non-Member Activities (DRC, Angola, Cameroon)
- Umhloti Sanctuary
- Smuggling Press Conference
- 2006 Workshop Sites
- Angolan chimpanzee rescue
- Other Items



Pan African Sanctuary Alliance (PASA)

2005 Workshop Report



Section 4

Guest Speaker Presentations

Ape “Subspecies”???

A Genetic Perspective

Anne Fischer and Svante Pääbo

Max Planck Institute for Evolutionary Anthropology
Leipzig, Germany

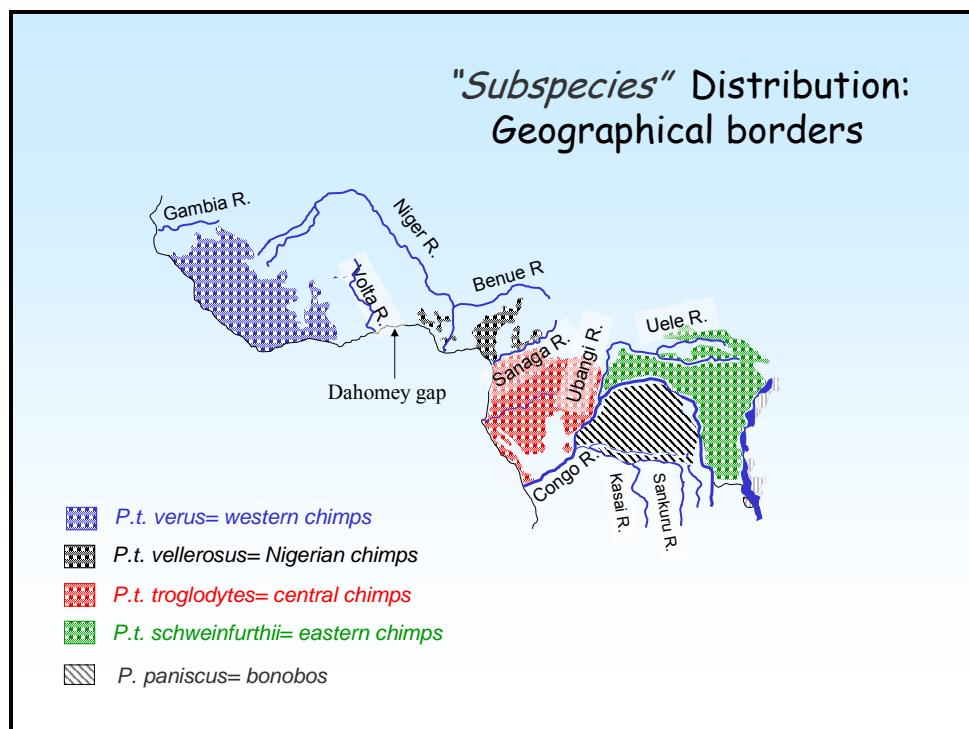
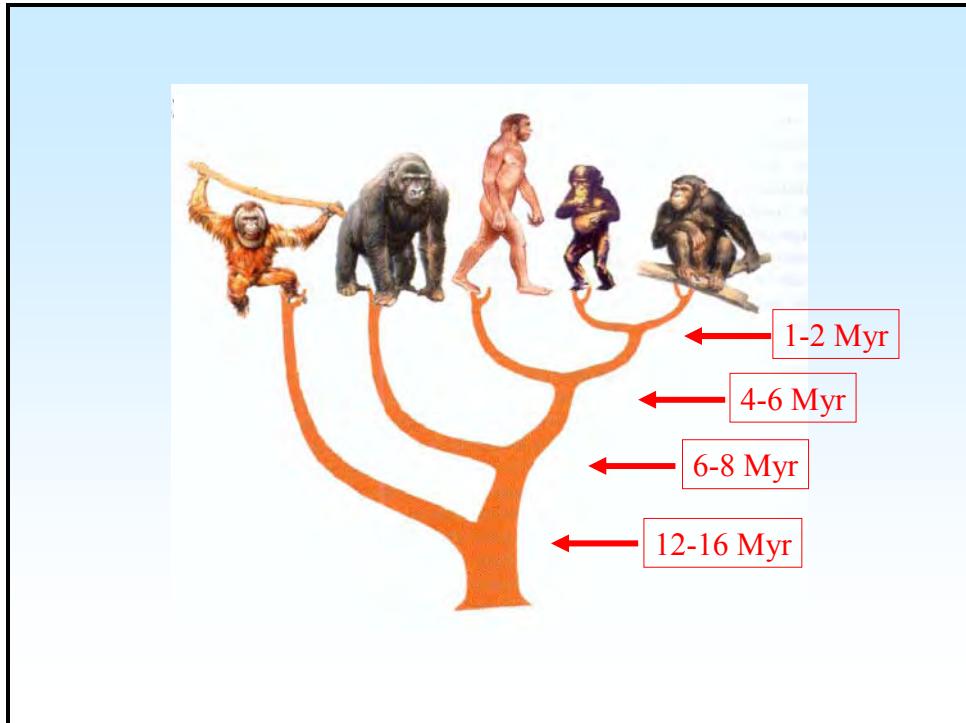
Ape “Subspecies”???

A Genetic Perspective

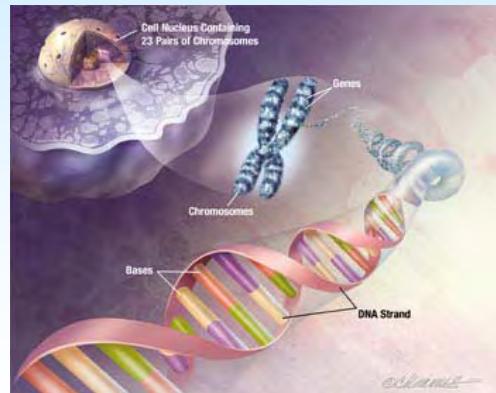
Anne Fischer

Outline

- Introduction
- What do different parts of the genome tell us?
- Importance of the sampling strategy
- Conclusions



Chromosomes, DNA and nucleotides



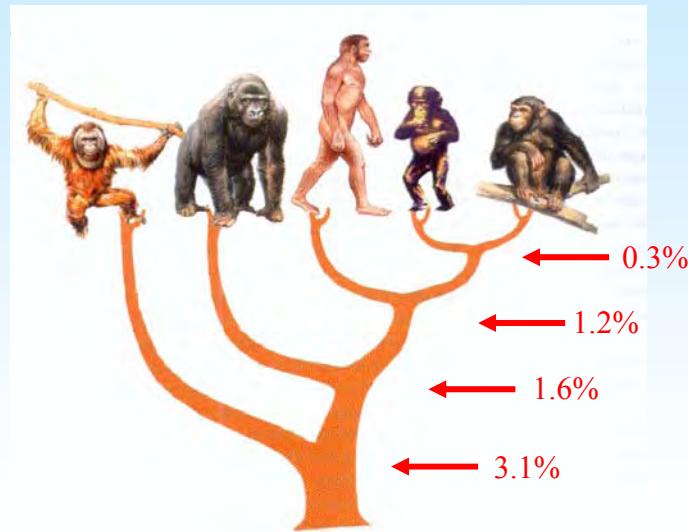
Comparing species: DNA Divergence

Genome size : 3 billion nucleotides

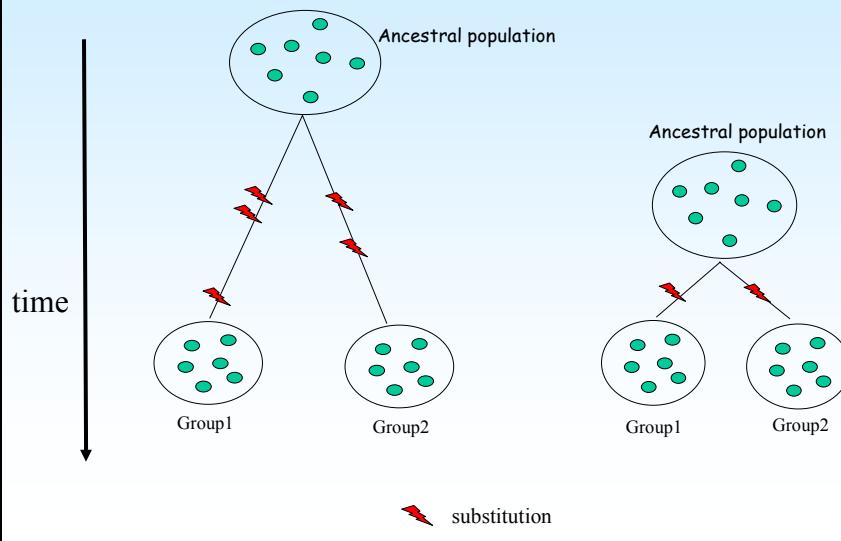
	Sequence
Human	<code>ACGTCGTGTACTG</code>
Chimpanzee	<code>ACGTAGTGTACTG</code>

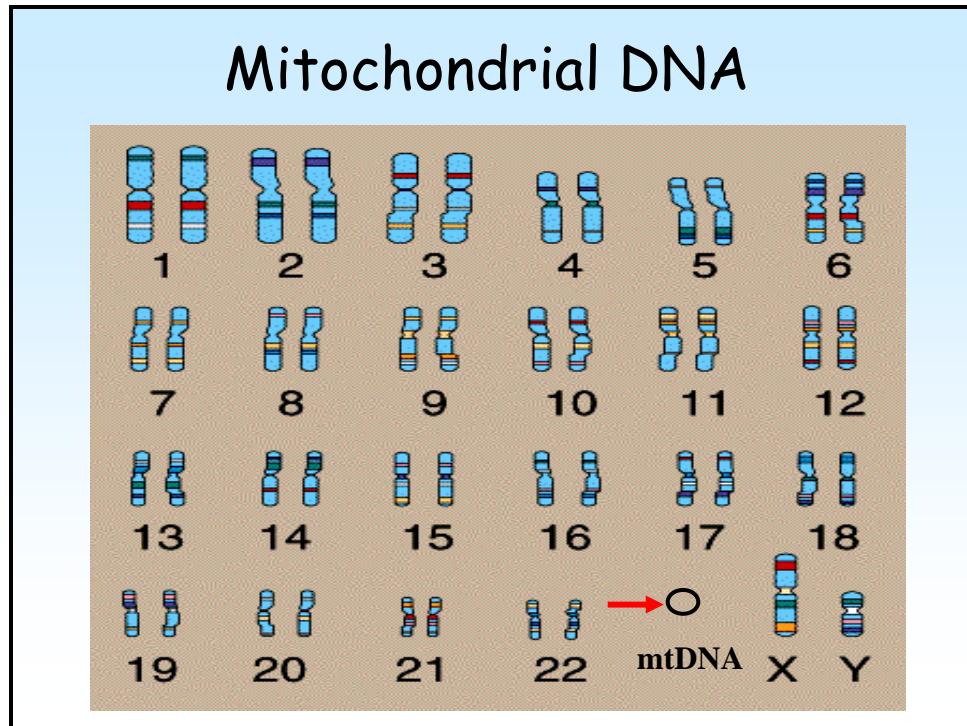
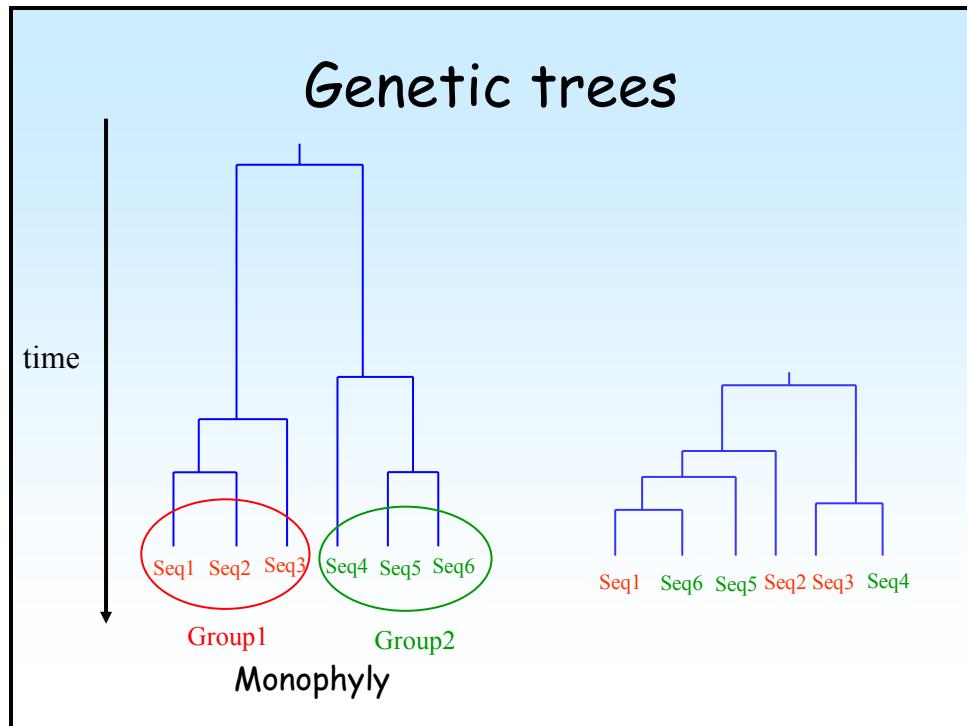
The diagram illustrates the sequence divergence between the human and chimpanzee genomes. The human sequence is `ACGTCGTGTACTG`. The chimpanzee sequence is identical up to the fourth position, then differs at one nucleotide (the fifth position), and then continues with the same sequence. Arrows point from the text "one substitution" and "one nucleotide" to the differing positions in the chimpanzee sequence.

DNA divergence



Separation of populations: the importance of time

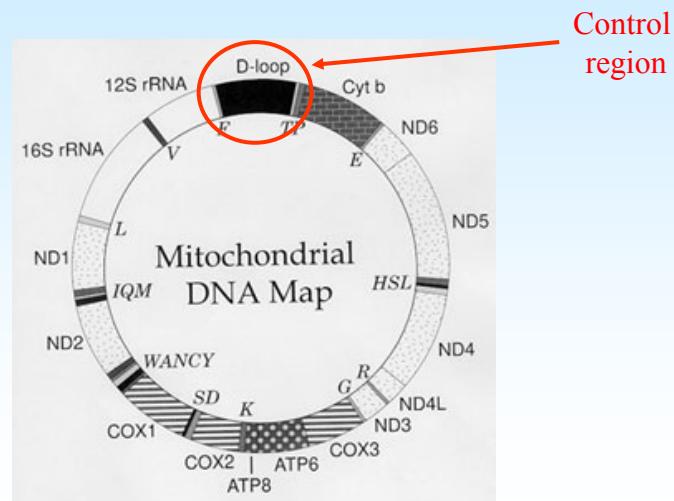




Mitochondrial DNA

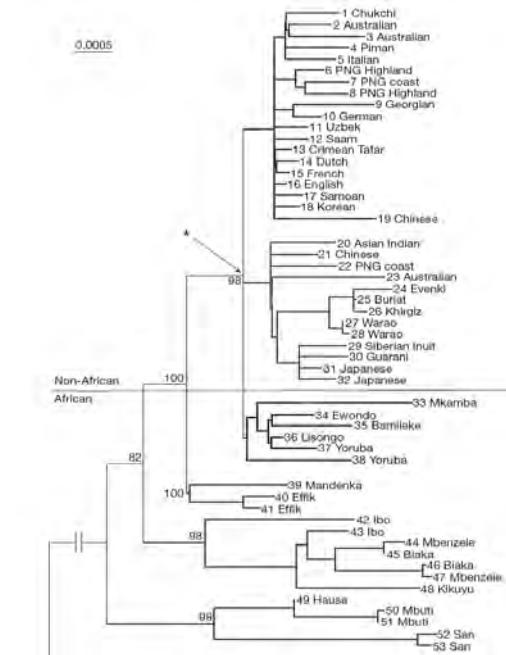
- 16,600 nucleotides
- Multiple copies per cell
- High substitution rate: evolves faster than other parts of the genome
- Maternally inherited

Mitochondrial DNA



Human mtDNA

Ingman *et al.*, Nature (2000)



Chimpanzee mtDNA control region

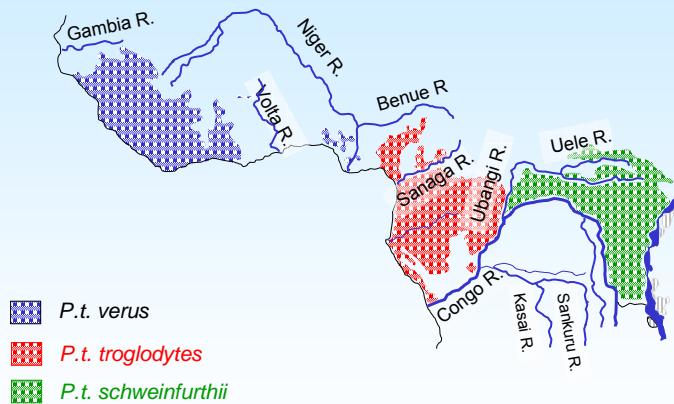
Eastern chimpanzees

Central chimpanzees

Western chimpanzees

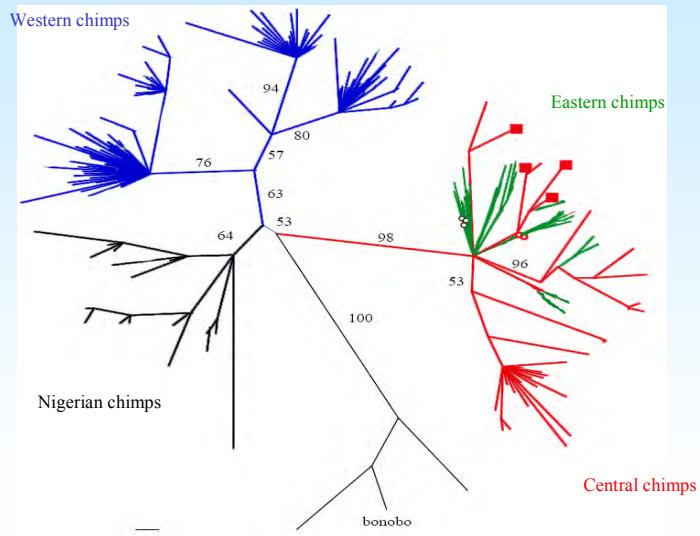
Morin *et al.*, Science 1994

"Subspecies" Distribution

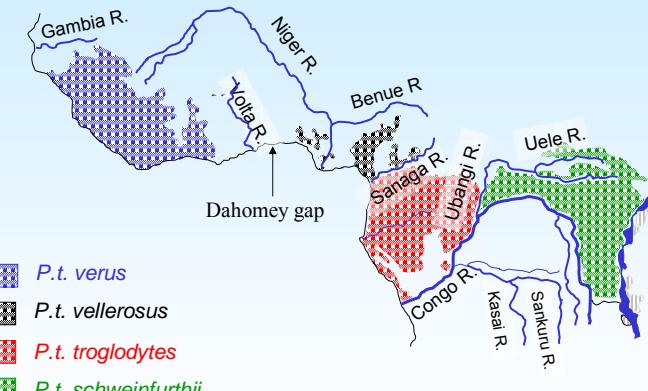


According to Morin *et al.*, 1994

Including Nigerian chimpanzees

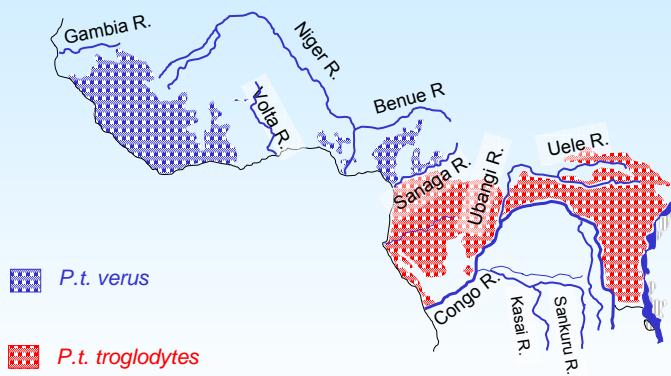


"Subspecies" Distribution



According to Gagneux *et al.*, Phil. Trans. R. Soc. London, 2001

"Subspecies" Distribution



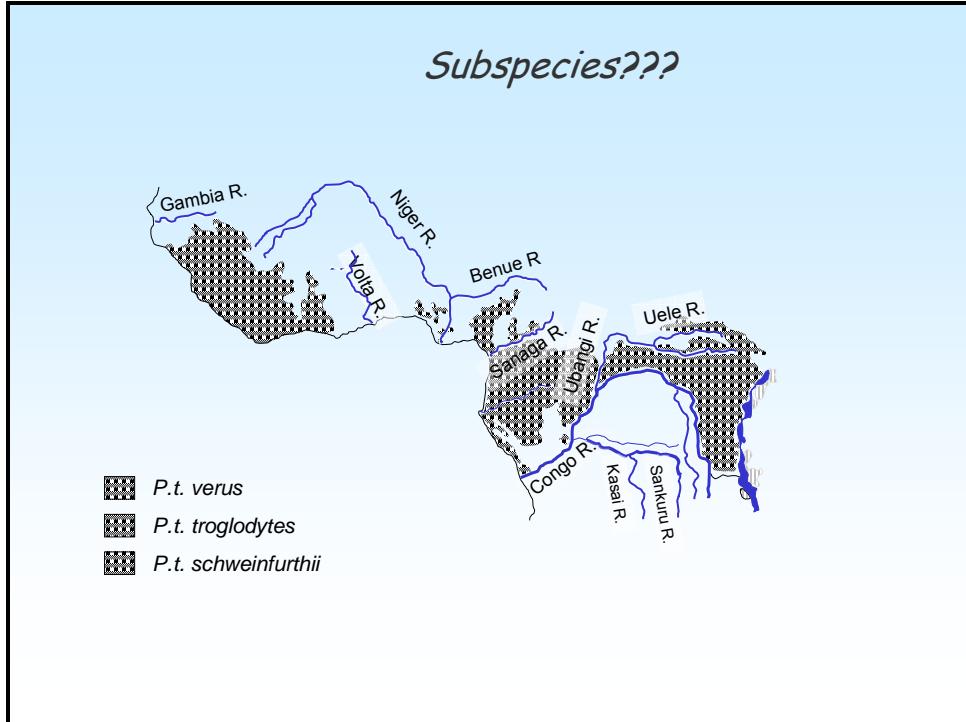
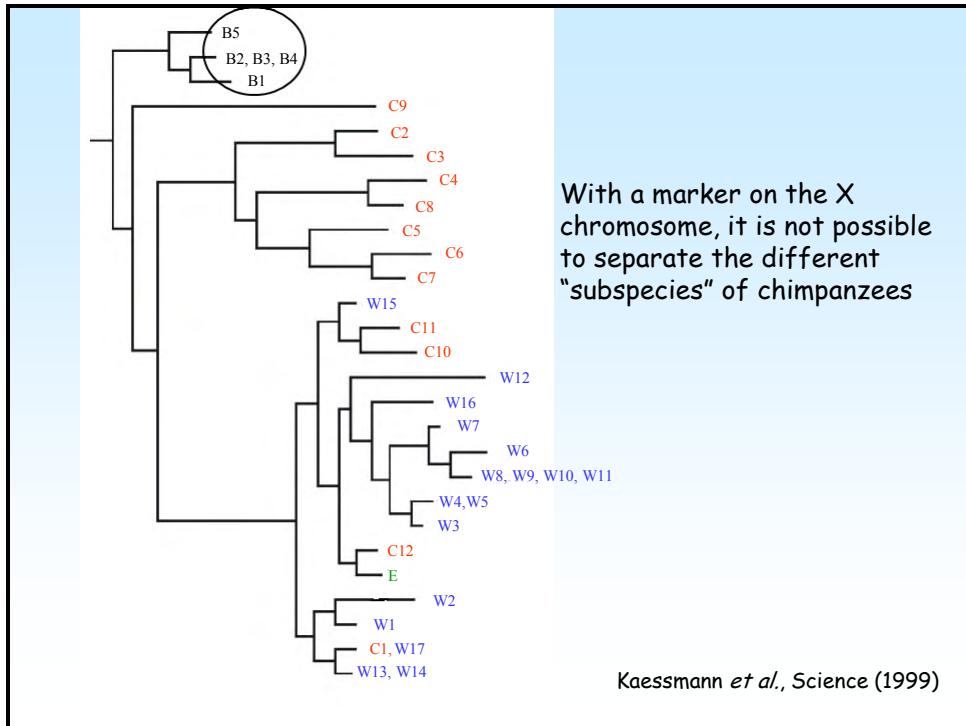
According to Gagneux *et al.*, Phil. Trans. R. Soc. London, 2001

What does mitochondrial DNA tell us?

- More structure in chimpanzees than in human
- No differentiation between eastern and central chimpanzees possible

But...

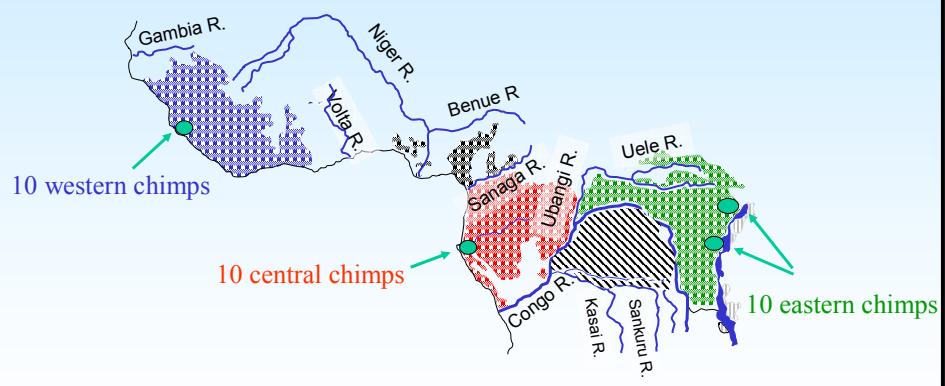
- Mitochondrial genome is 0.0005% of our genome
- Maternal inheritance of mitochondrial DNA
- Different substitution rates compared to other parts of the genome



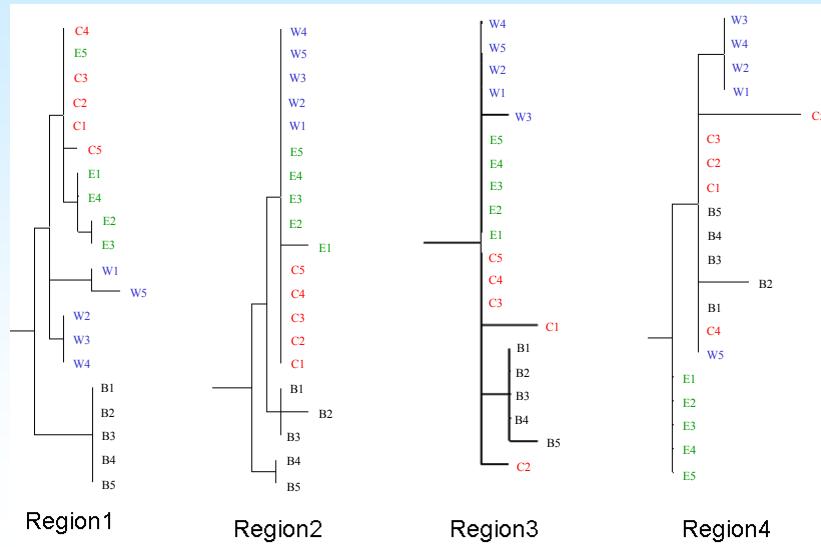
X-chromosome

- No distinction between subspecies based on this part of the genome
- Is this picture specific to the X-chromosome?

Samples used



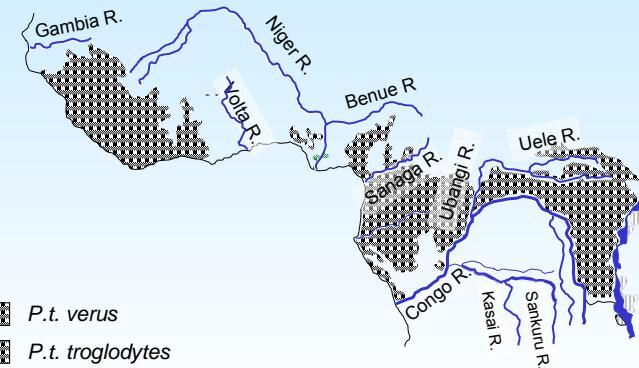
Example of trees from 4 different segments



26 Genetic trees

- None of the trees show monophyly for any of the subspecies
- 30% of the trees only show monophyly for bonobos
- Human would always be monophylic

Subspecies???



Shared sequences

If population separated a long time ago

ACGTCGTGTACTG
ACGTAGTGTACTG

ACGTCGTGTACTG
ACGTAGTGTCTG

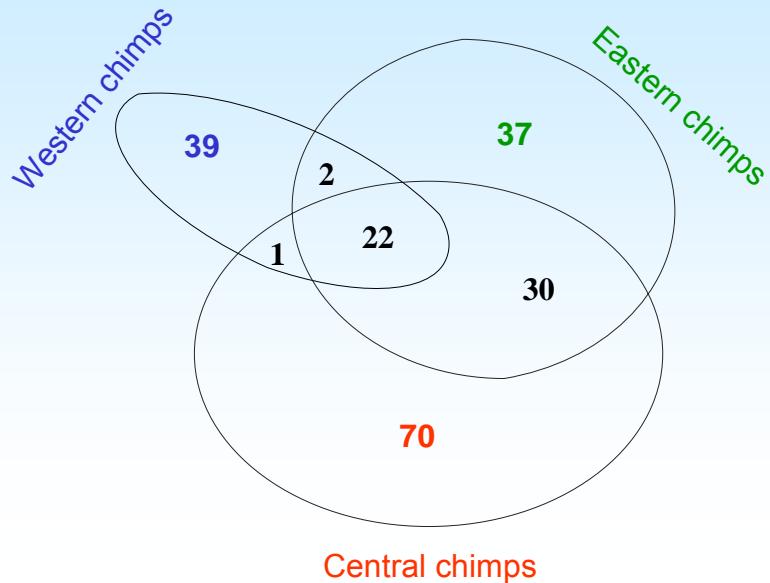
Group 1

ACGTCGTGTATTG
ACGTAGTGTATTG

ACGTCGTGTATTG
AAGTCGTGTTTG

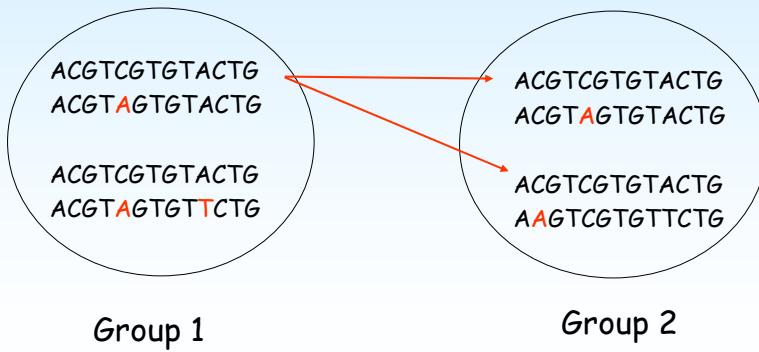
Group 2

Shared sequences

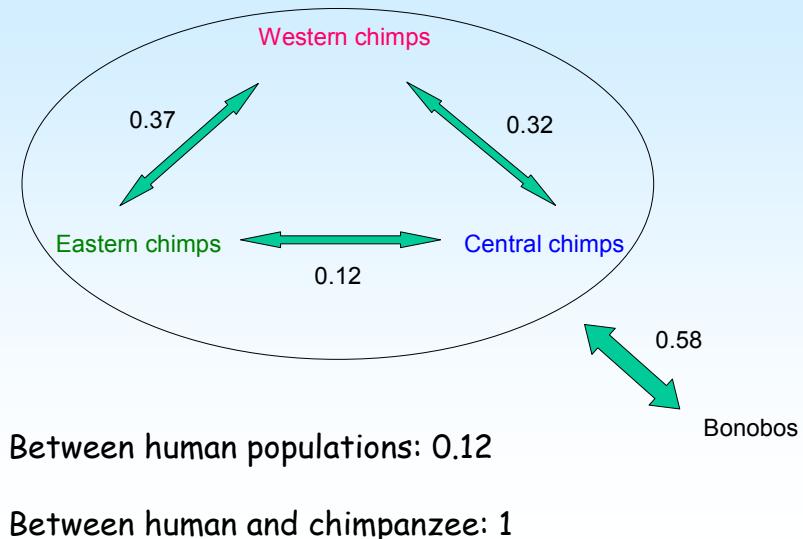


Shared sequences

If only a short amount of time since the separation



Genetic differentiation

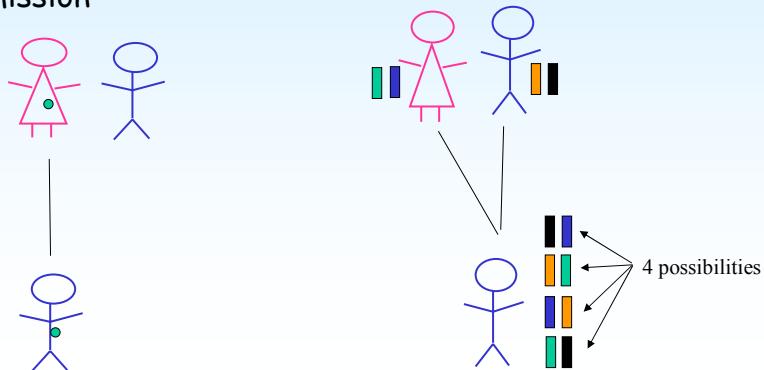


Summary

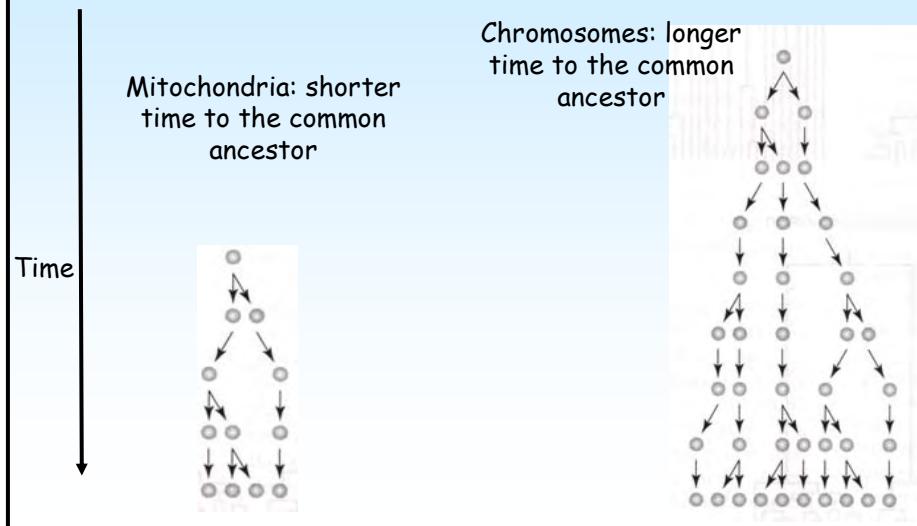
- No distinction possible between the “subspecies”
- Not enough time for genetic data to separate them

Why does mitochondrial DNA give another picture?

- Mitochondria: only one possibility for transmission
- Chromosomes:



Different time depth for different parts of the genome

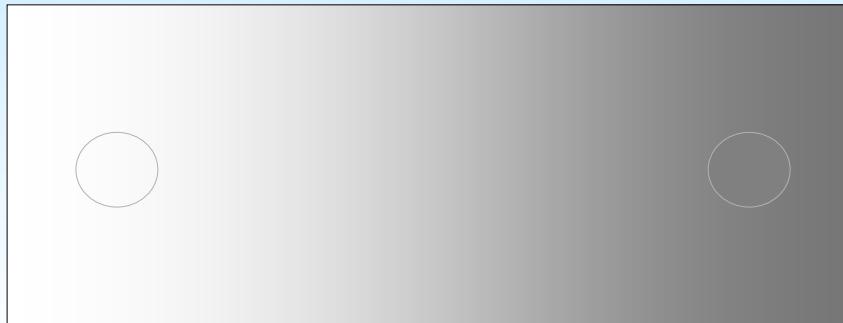


Influence of sampling strategy

Gradients



Gradients of genetic diversity



Conclusion I

- Different parts of the genome give different pictures
- mtDNA: appears first in terms of monophyly
- Other markers: no support for grouping in “subspecies”

Conclusion II

- More structure in chimpanzees than in humans
- Genetics cannot really be used to define subspecies
- More Samples needed: including Nigerian chimps

Acknowledgements

People from the Max-Plank Institute:

Olaf Thalmann
Jonas Eriksson
Susan Ptak
Wolfi Enard
Michael Hofreiter
and
Svante Pääbo



Samples:

Ann Olivecrona and Karl Amman for eastern chimpanzee samples
BPRC (Netherlands) for western chimpanzee samples
Jean Wickings (Gabon) for central chimpanzee samples

PASA EDUCATION WORKSHOPS



Chimfunshi, May 2003



Limbe, May 2004



Ngamba Island, March 2005

3 years of learning, sharing and building

PASA Education Workshops

Barb Cartwright

Why Focus On Education?

- (Out of 11 sanctuaries informally surveyed)
- 155,000 visitors annually
- 60,000 local community visitors
- 95,000 tourists
- Just over 50% are adults
- 93 schools per month
- We deliver educational programs in 14 different languages!
- On average 4.4 people per sanctuary are doing education (7 being the high – 1 being the low)

Three-Year program Evaluation

Overall Evaluation

1. 100% indicated that the workshop improved their skills as educators with 80% indicating a marked improvement to a high degree
2. 100% indicated that their confidence as educators had increased with 40% to a high degree.

3. 100% indicated that they had used their learnings back at their sanctuaries, with 90% indicating to a greater degree.
4. 100% indicated that the content of the PASA workshops was relevant and useful at their sanctuary with over 80% indicating that it was useful to a higher degree.
5. 100% indicated that the materials they received were useful with 80% of respondents indicating useful to a high degree.

Key Areas of Learning

1. ADDIE: educational program design tool.
2. Program evaluation skills.
3. The fact that there are many other dedicated people out there.
4. How to gear your program to different age groups and target audiences.
5. Leadership!
6. How to organize and implement community outreach programs.
7. Networking!
8. Learning styles and application to educational programming.
9. Working together with other sanctuaries to fight against extinction, habitat loss and the bushmeat crisis.

PASA 2005 Education Workshop

Ngamba Island Chimpanzee Sanctuary, Uganda

March 7-12, 2005

- 17 participants from 11 member sanctuaries, two non-member sanctuaries, and two local NGO's

Guest speakers included:

- Kathy Lehnhardt and Kathleen Gross, Disney's Animal Kingdom
- Dr. Peter Apel, Jane Goodall Institute Uganda
- Justine Nabakabya from the Uganda Wildlife Authority
- We visited two schools and one community conservation site.
- The workshop focused on sharing best practices among the education officers with most sessions taught by sanctuary education officers.
- Each sanctuary presented an educational activity in order to build the repertoire of activities available to each sanctuary.
- Other topics included evaluation, case studies, education and conservation theory, communication skills and follow up on programs and workshops designed during the 2004 workshop.
- Participants received 3 new educational resources that were started at the 2004 workshop!

PASA 2005 Education Workshop Results

1. Best practices shared, with knowledge and skill base augmented
2. Learning from 2003/2004 was deepen and broaden
3. Bushmeat programs were launched/funded in 8 sanctuaries
4. New resources were distributed
5. Goals for the PASA Education Committee 2005/2006 were defined
6. Education Officer network

Goals for 2005-2006

1. Design and deliver 2006 workshop (Barb Cartwright, Jerry Akaparwa, Jeta Fewoh and Abel Goussiene)
2. Produce a Best Practices Manual (Isaac Mujaasi, Wilson Ateh, Torjia Karimu)
3. Create a prototype communication plan for sanctuaries (Torjia Karimu, Jerry Akaparwa, Issac Mujassi, Wilson Ateh)
4. E-newsletter – July, October, January and April (Isaac Mujaasi)
5. Collect totems, stories, taboos, artwork and poems to create a resource for sanctuaries (Barb Cartwright)

 Disney's Animal Kingdom

EDUCATION COMMITTEE GRANTS

BACKGROUND

- From late 2003 to December 2004 – thru a staff grant system, Disney has given \$35,000 to fund annual workshop, professional training and sanctuary programs.
- A total of 12 sanctuaries have participated in this program, 4 have received all three rounds of funding (\$3,200 each), 4 have received two rounds of funding (\$2,000 each).
- Representatives from Disney trained sanctuary education officers in the skills of pre and post evaluation.
- A total of 4,287 visitors were evaluated as part of a conservation education evaluation program at sanctuaries.

DISNEY EVALUATION RESULTS

- 1. Data demonstrates that the educators are doing an excellent job of delivering their key messages.**
- 2. The data shows that people do learn from participating in education programs at sanctuaries.**
- 3. Participants are evaluated for knowledge, attitude and behaviour change. The data shows that sanctuary educators are making an impact in all three areas but notes the least amount of change is in attitude and behaviour change. This is a common problem in all forms of education – the 2006 workshop will focus on new resources to address the issue.**
- 4. There is a perception that it is good to keep primates as pets or in captivity post visit. Educators must emphasize that while the animals are now safe, they would better off living in the wild.**
- 5. Report on the systematic evaluation of conservation education programs.**

Environmental Education Tools

Posters and Suitcases

Environmental Education Tools **Posters and Suitcases**

Beth Armstrong

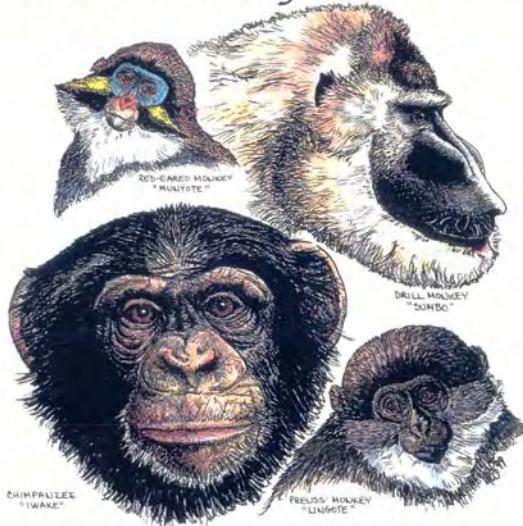
Suggestions

- Ideally posters and suitcases should be incorporated into a research project your institution already supports.
- If there is not an education component, find a NGO or sanctuary that may be doing conservation education outreach within that particular country.

Why Education Materials?

- It is part of a holistic conservation approach when partnered with research funding
- Relatively small sums of money are needed
- Requires working with your field contact i.e. builds relationships
- Zoos have people and infrastructure in place to offset costs – artists, educators, volunteers, color copiers, lamination machines

Limbe Wildlife Centre



LET US JOIN HANDS TO HELP THE
ENDANGERED PRIMATES OF SOUTHWEST
CAMEROON TO SURVIVE!

MINISTRY OF THE
ENVIRONMENT AND
FORESTRY
(MINEF)



LIMBE WILDLIFE CENTER
(LWC)

Model Formula

- Develop a piece of artwork using species that the field contact has chosen
- Simple conservation message (decided by the field contact)
- Conservation message in local and country language as well as English
- Include all appropriate logos of institutions involved

Conservation Images

One piece of artwork can be used for:

- Color poster
- Black & white poster
- Postcards
- Stickers
- Buttons
- T-shirts
- Soccer uniforms

Suitcases

Contents include

- Animal Puppets
- Books

- Maps
- Posters
- Binoculars
- Games
- Puzzles
- ZooBooks
- Field Guides
- Crayons, colored pencils
- Scissors, glue
- Construction paper
- Animal stamps
- Disposable camera
- Animal themed cloth
- Teacher's Binder

Cheetah Conservation Fund

- Posters
- Stickers
- Postcards
- Buttons
- 3 Suitcases



Projects

- Snare Removal Project (Zimbabwe)
- Peruvian Centre for Cetacean Research (CEPEC) (Peru)
- Club Ebobo: Nouabale Ndoki National Park, Republic of Congo
- Limbe Wildlife Centre (Cameroon)

Suitcase

Funding sources

- Individual donors
- Ft. Hayes Interact Club, Columbus Ohio Rotary Club
- BZ Teen Volunteers
- BZ Keeper Staff
- BZ Conservation Fund



PASA Website Project



PASA Website Project

Doug Cress

PASA Website History

- Original website created in 2002
- Managed by Carol Keys
- www.panafriicanprimates.org

New PASA Website

- Joint project between PASA and Hofstra University
- Managed by Wendy Mills
- Cost: Free

PASA Website

- Went On-Line May 27, 2005
- Designed to provide accurate, accessible information regarding PASA and its members

PASA Website Features

- Home Page
- Sanctuary Map
- Sanctuary Pages
- News
- Education
- Veterinary Healthcare
- Donations
- Volunteer
- Links

Sanctuary Pages

- Each PASA member has its own home page with its logo, contact information, history, volunteer information, and animals

PASA Website Pages

- Veterinary Healthcare
- Information on workshops
- Recent articles
- Vet manual
- Wish list

PASA Website Pages

- Education
- Information on workshops
- Education initiatives, data, reports
- History

PASA Website Pages

- Sponsors & Donations
- Links to all sponsors & logos
- PayPal on-line donation link
- Physical address

PASA Website Pages

- Volunteers
- Guide to all PASA members that accept volunteers
- Contact information

PASA Website Features

www.panafricanprimates.org

PASA Veterinary Workshops Overview and Future Direction....

Wayne Boardman, Eric Dubuis, Jonathan Sleeman,
Steve Unwin and Ken Cameron and many more.....



PASA Veterinary Workshops Overview & Future Direction

Wayne Boardman

History

- CBSG workshops in
 - Entebbe, Uganda 2000
 - Limbe, Cameroon 2001
 - Nanyuki, Kenya 2002
- **PASA workshops in**
 - Entebbe, Uganda 2003
 - Pointe Noire, Congo 2004
 - Limbe, Cameroon 2005

Plan

- Decision was made to have a series of three veterinary workshops in different countries with the basic aims of
 - Improving the knowledge base of staff in sanctuaries in primate medicine
 - Improving and standardising health care procedures in sanctuaries
 - developing capacity in African veterinarians and technicians and other staff

What has been accomplished

- **Production of**
 - PASA Veterinary Manual and
 - PASA Primate Drug Formulary
 - in English and French
- **Entebbe, 2003 - Steve Unwin, Jonathan Sleeman, WB - 24**
 - Respiratory diseases
 - Tuberculosis in Primates
 - Occupational health
 - Preventative medicine
 - Wound management
 - Procedures after confiscation
 - Nutrition
 - Contraception
 - Record keeping
 - Health checks
 - Veterinary aspects of handraising
 - 2 days of practicals on anaesthesia, health examination, diagnostic sampling in Chimps and haematology and parasitology
 - Case Reports
- **Pointe Noire, 2004 – SU, JS, WB and Ken Cameron - 32**
 - More involvement in case reports
 - Malaria in primates
 - Emergency medicine
 - Diseases of the Liver
 - Environmental enrichment
 - Dermatology
 - Fluid therapy
 - Surgical techniques
 - Neonatal problems
 - Ebola disease
 - Update on Ebola outbreak in Congo/Gabon
 - Case presentations
 - Practical sessions - clinical procedures on chimpanzees

Review after Congo meeting

- Following the PASA Veterinary Workshop in Congo – JS, SU and WB discussed whether the workshops were fulfilling the aims

Conclusions

- Turnover of veterinary related staff continues to occur
- Some increase in African veterinarians and technicians working within sanctuaries but not enough
- Not all sanctuaries participate – sanctuaries need to be encouraged to come
- Still work to be done to develop minimum standards of health care in sanctuaries
- Facilities and equipment continue to be needed
- Obtaining diagnostically useful information is proving very difficult
- Difficult to provide sufficient training one week per year....

Darwin Initiative Application

- Considered the need to employ a veterinarian to train interns yearly, in sanctuaries with a base in the UK.
- Monica Brett and Doug wrote application for a Darwin grant, DEFRA in UK £295K over 3.5 years
- Detailed application was commended but we missed out

Limbe, 2005 – Steve Unwin, KC, WB, RG - 40

- Decided in addition to standard procedures, case reports and information on diseases to add
 - Disease risk assessment for reintroduction – Dominic Travis
 - Disease investigation of viruses, bacteria in sanctuaries using non invasive techniques and new diagnostic tests – Fabian Leendertz
 - Combine with WCS workshop ie MGVP
 - Case presentations
 - Emergency medicine
 - Non invasive monitoring
 - Laboratory techniques
- Parasitology
- Haematology
 - Nutrition
 - Employee Health programmes
 - Enteric diseases
 - Veterinary aspects of reintroduction
 - Practicals in anaesthesia and clinical procedures in monkeys, post mortem techniques in monkeys, parasitology and haematology

Evaluation

- Difficult to assess the effectiveness of the programme
 - Its grown in numbers participating
 - There are more veterinarians in sanctuaries
 - There are more African veterinarians in sanctuaries
 - The knowledge base has grown
 - We network about issues because we are friends and colleagues

Brainstorm - Future needs

- At Limbe this year
- Aim was to discuss what are the future veterinary needs.
 - The veterinary workshops should continue annually. One group feels the workshops should be shorter, more focused on certain topics and could be combined with other workshops ie. manager's workshop – this was not universally agreed upon
 - Workshops could be focused on sanctuaries which needs the most assistance (not necessarily those in or near the easiest facilities).

Brainstorm - Future needs

- Add PASA Veterinary Workshop materials to the website and provide access to more information ie DVD's, CD's

- Gathering data on equipment needs for sanctuaries
- Obtain and distribute equipment
- Participants in this 2005 workshop to provide a an updated needs list before the end of this conference.
 - Establish minimum standards veterinary procedures.
 - quarantine
 - necropsy
 - collecting and banking of biological samples
 - employee health programs
 - biosafety procedures.
- Develop a means for sanctuaries to distribute information and scientific articles.
- via website if possible
- via people who have access to scientific articles
- Reference list of useful papers on website
- Provide lectures on more targeted or specific issues,
- Provide updates on previous lectures
- Lectures to prepare for the practical labs
- That it becomes obligatory for each veterinarian attending the workshop to prepare and present at least one medical case report.
- Formation of a committee or workshop to address the many questions of the veterinary aspects of reintroduction including all appropriate disciplines (veterinary, biology, ecology, epidemiology)
- Assistance in obtaining CITES permits – operating procedure
- Lobby zoos and other institutions for support of PASA sanctuaries.
- Create reliable and effective ways to communicate with PASA members, particularly to help in emergency situations.
- Standardize preventive health medicine protocols
- Standardize data collection for all sanctuaries
- Some sanctuaries could mentor others who are less well equipped and who have less experienced personnel

Where next?

- Sierra Leone – 2006??? – PASA member vets to now coordinate within Africa????
- Equipment requirements to be gathered and distributed
- Disease surveillance of primates in sanctuaries as best practice and for future release
- Link with Robert Koch Institute in Germany
- CITES permits
- Review Darwin Initiative application and resubmit
- Doug and myself met with DEFRA staff to discuss the application and how we can apply for it again and to let them know about PASA
- Result maybe support for the Primate Reintroduction workshop in October/November 2005.
- Standardise quarantine procedures in sanctuaries

- Maybe need to consider differentiation between sanctuaries with future aims of release vs sanctuaries who will not release in the future
- Standardise collection and storage of biological samples for diagnostic purposes
- Scientific committee to be considered to evaluate research projects
- Communication via website
- Rapid response capability for disease outbreaks
- PASA Veterinary Manual – 2nd edition - referenced

Veterinary Contributors

- Jonathan Sleeman
- Ken Cameron
- Steve Unwin
- Jo Fielder
- Eric Dubuis
- Chiseller Colin
- Nick de Souza
- Catherine Sourmail
- Richard Ssuna
- Peter Apell
- Carmen Vidal
- Sandrine Mahe
- Dominic Travis
- Rosa Garriga

PASA, GAHMU and Disease Investigation

Fabian Leendertz and Wayne Boardman



PASA, GAHMU and Disease Investigation

Fabian Leendertz and Wayne Boardman

What is GAHMU?

- GAHMU means the Great Ape Health Monitoring Unit
- It's a virtual international unit which is in the conceptual stage at the moment
- Opportunity for PASA to be a part of international disease investigation and surveillance of primate diseases
- Opportunity for PASA to utilise the skills and diagnostic capability for disease outbreaks and disease surveillance as part of reintroduction preparation.

Origins of GAHMU

- Several disease outbreaks in Tai Forest, Cote D'Ivoire which had decimated Christophe Boesch's chimpanzee study group
- He employed a vet Fabian Leendertz to investigate the outbreaks
- Most recent outbreak was caused by Anthrax
- March 2004: Workshop convened in Leipzig to bring together field researchers, field vets, epidemiologists, laboratories. PASA attended
- Great Ape Health Monitoring Unit (GAHMU)
 - Linking field people to vets and labs!!
 - "Task force": Immediate support of field sites (treatment and necropsies), labs performing fast screenings for pathogens
 - Perform a screening on various pathogens in "non-invasive samples"
 - In the long-term linkage to ecological changes and human health

Great Ape Task Force

- support field projects in case of outbreaks
 - practical support (necropsies, treatments)
 - advice via email, phone...
 - provide necropsy protocols
- Screening of necropsy samples for pathogens

Screening by GAHMU at Robert Koch Institute

- *Specific* screening for relevant pathogens:
Anthrax, Yersinia pestis, Francisella tularensis, Ebola, Lassa, Orthopox, Adenoviruses, EMCV, Influenza, Parainfluenza, Measles, Rubella, Enteroviruses (Polio etc.), Herpes, Hepatitis A,B,Cand toxins.
- *Broad* systems: 16Sr DNA -> all bacteria (but low sensitivity)
“generic PCR systems” (e.g. all Herpes viruses)
- *Forwarding* DNA/samples to other laboratories with different panel/systems.

Non-invasive study

- Screening faeces samples from wild great apes for various pathogens
- Creation of baseline data on pathogen prevalence in wild apes
- Comparative study of pathogens among different species, habitats, regions

Tests offered

- Antibodies for STLV in faeces
- Antibodies for SIV in faeces
- Antibodies for Foamy virus in faeces
- Description of bacterial community in faeces
- Electron microscopy for viruses in faeces
- Parasitology (classic and genetic)
- Other diseases are under investigation (Ebola, Anthrax)

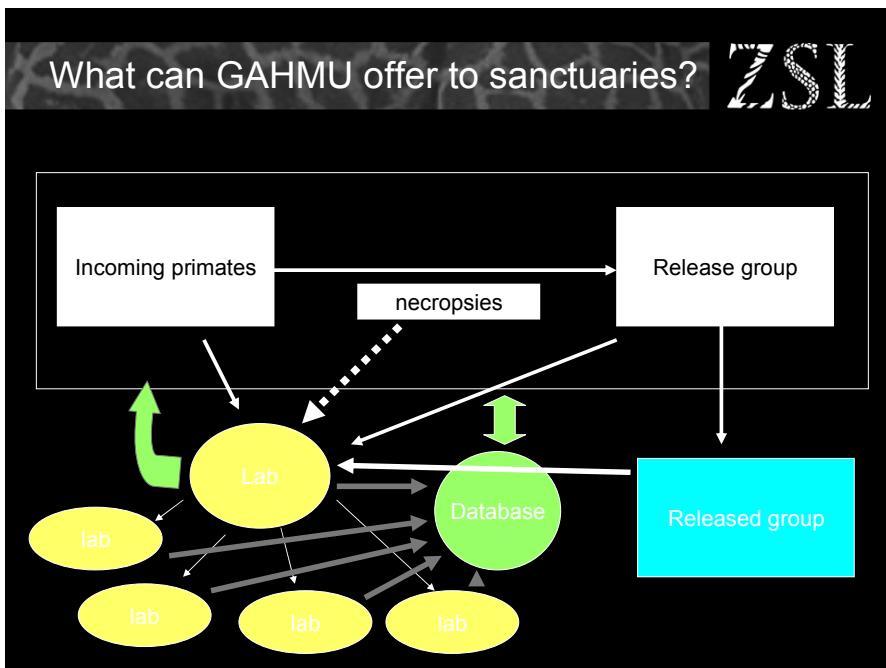
What can GAHMU offer to sanctuaries (Pt. 1)?

- Screening for various pathogens
- Blood samples from healthy apes (collected from incoming apes (incoming quarantine) or during routine health checks or other interventions)
 - screening for SIV, STLV, other Retroviruses, Herpes, Hepatitis A,B,C, Plasmodium, others
 - Samples from apes before release (“reintroduction quarantine”)
 - relevant human pathogens (Respiratory pathogens, Human Herpes Viruses, others)
 - same pathogens tested when incoming (SIV, STLV, other Retroviruses, Herpes, Hepatitis A,B,C, Plasmodium others)

--Necropsy samples

- Histology (Formalin fixed tissues)
- Serology and PCR for all relevant pathogens (according to symptoms)

- **NB:** Screening will be done by a **network of laboratories**, interested labs will be welcome (for example existing co-operations of specific pathogens...)



What can GAHMU offer to sanctuaries (Pt. 2)?

- Provide import permits
- Provide letters giving background information
- Provide agreement
- Provide material for sample collection and preservation

What are the results used for?

- Assessment of the risk of reintroduction
- Assessment of the risk of interspecies transmission from humans to apes
- Gaining knowledge on „natural pathogens“ in apes
- Study pathology of apes
- Study potential of recombination of different virus strains
- Establishing non-invasive methods

=> All results feed into the “Great Ape Disease Database” and serve for risk assessment analyses.

What do sanctuaries need to do?

- Collect samples
- Preserve sample according to standardised protocol which is being finalised
- Apply for CITES and export permits – work with GAHMU
- Provide background information on clinical and pathological findings (report, photos..)
- To further establish non invasive methods - collect faeces using different preservatives (upon request)

Sample collection and conservation

- **Blood:**
 - filter paper (DNA/RNA and Antibodies)
 - "Pax Gene" or others
 - Blood smear
- **Tissue:**
 - 10% buffered formaldehyde (Histology)
 - RNA-later (DNA/RNA)
 - 10% Glycerol (Culture)
 - Frozen?
 - Others

Further benefits

In case of disease outbreaks...

- provide information
- support by linking to people who have experienced similar problems
- "worst case scenario": direct support by an experienced vet. ("Task force")
- Fabian has helped Estelle investigate causes of death in her group of chimps

Possible basis for an agreement

- Results will be communicated immediately to the responsible sanctuary
- Results will be confidential upon agreement
- All results will be on database (access only for sanctuary ... to be discussed)
- Necropsy samples have priority
- Sanctuary will be informed which other analyses will be conducted which had been agreed upon before

Summary

- PASA to develop linkage with Robert Koch Institute and participate in GAHMU
 - Access to research and disease investigation laboratories and personnel
 - Sample collection and necropsies are the basis for learning about diseases in wild great apes
 - For PASA, diagnostic tests useful for disease surveillance
 - in quarantine

- as part of reintroduction process
- In disease outbreaks
- Broader knowledge necessary about:
 - the “normal” prevalence of viruses, bacteria, fungi and parasites,
 - pathogens and pathogen transmission.

Summary

- Detailed history of the animals including behavioural and ecological produces a deeper understanding of laboratory results.
- Further analyses will also include the search for new pathogens.
- Creation of a database of disease surveillance
- Creation of “sample pool” for specific further screenings
- Capacity building within the area (improvement of local laboratories, training of local veterinarians, improvement of human health etc.)

CITES:

What is it, and why does it keep following me?

Christine Wolf
Wildlife Protection Program Manager,
Humane Society International

CITES PRESENTATION

**By Christine Wolf
Humane Society of the United States (HSUS) – International**

Convention on International Trade in Endangered Species (CITES)

- Drafted in Washington D.C. and enacted in 1974 with 8 signatory nations
- Now has 167 signatories
- Regulates *international* trade in species listed on its appendices
- Allows NGOs to participate in meetings as observers (speak when recognized by chair and provide written material on items under consideration)

CITES Appendices

- Appendix I – Most restrictive. Species are endangered and trade is strictly controlled. An export permit from the species' origin country and an import permit from the destination country are required.
- Appendix II – Less restrictive. Species are threatened and trade is often controlled through issuance of export quotas. Only an import permit is required.

- Appendix III – Least restrictive. Species are listed by countries mainly interested in tracking trade from their ports. Data collection mechanism.
African nations that are
not CITES Parties

Angola

Cape Verde

Western Sahara

CITES and Primates

All known primate species are listed on the CITES appendices.

All great apes are on Appendix I
(no trade for commercial purposes)

What effect does CITES have on sanctuaries?

CITES is often problematic for sanctuaries because:

- Difficulty moving listed species between countries, especially in emergency situations
- Continuing issues with CITES authorities not sending confiscated animals to appropriate sanctuaries (Taiping Four, Cairo airport staff drowning gorillas...)
- Current primate-related measures pending within CITES
- Resolution: “Conservation of and Trade in Great Apes”
- Resolution: “Rescue of Dependent Apes from Conflict Situations”

CITES Resolution: Conservation of and Trade in Great Apes

Encourages CITES Parties to:

- Become partners in the Great Ape Survival Program (GrASP) of the United Nations.
- Donor countries should match U.K.’s contribution to GrASP.
- Implement national legislation prohibiting trade in great apes, and enforce such legislation.

Resolution was introduced at last CITES Conference of the Parties, November 2004.

Parties decided to refer the resolution to the CITES Animals Committee (a technical subgroup of the treaty) for consideration.

Resolutions

Animals Committee met last month and amended resolution to include:

- Creation of a Great Ape Enforcement Task Force.
- Establishment of a DNA database to aid in law enforcement endeavors
- Development of a list of sanctuaries able to care for confiscated great apes. List to be maintained by CITES Secretariat.

Animals Committee adopted the newly worded resolution.

Standing Committee must agree to it when they meet in 3 weeks

Funding is being sought for the operation of the Great Ape Enforcement Task Force.

Task Force will operate similar to Lusaka Agreement Task Force.

Rescue of Dependent Apes From Conflict Situations

Resolution was introduced by Kenyan delegation at CITES Conference of the Parties in 2002.

Asked for special exceptions to be made by the CITES Secretariat on the issue of permits when animals required evacuation from conflict areas and/or there was no functional government in place to issue the permits.

Resolution was watered down during debate due to resistance from Ugandan and Egyptian delegates who felt it infringed on Parties' sovereignty.

Final wording "encourages Parties to advise Secretariat of cases when special exceptions would have been beneficial".

What next?

- Sanctuaries should have more involvement in CITES policy process
- Participate in Conferences of the Parties (external funding can be found)

- Share info on seizures and CITES-related law enforcement efforts with NGOs like Humane Society International (many CITES parties do not submit reports on seizures at all, or the reports are inadequate)
- PASA is a member of the Species Survival Network (SSN), an umbrella organization of animal protection NGOs that participate as observers in CITES. SSN can represent PASA's interests at CITES meetings if properly informed of problems.
- Sanctuaries that have working relationships with their national CITES authorities should continue to lobby them for change

CITES can be frustrating, but can also be used to our advantage.

Never stop reaching for the goal



Great Apes Survival Project (GRASP)

Matthew Woods and Daniel Molonza

GRASP Mission

"To halt the decline in great ape populations by ensuring that all those who have something to contribute have the opportunity to do so."

GRASP Partnership

Registered as WSSD Type II Partnership

- UNEP and UNESCO
- Convention secretariats:
- CITES, CBD, CMS, WHC
- 23 great ape range states
- 31 NGOs and 8 supporting partners
- Donors (governments, foundations, business)

GRASP Highlights Since 2003

- Establishment of GRASP Interim Executive Committee with Uganda as the Chair
- Establishment of GRASP Interim Scientific Commission with membership from the IUCN/SSC Primate Specialist Group's Section on Great Apes (SGA) and the IPS
- GRASP Project Portfolio
- UNEP funding and policy work to address the July 2004 "Virunga Crisis"

GRASP, PASA & Sanctuaries

- The GRASP Partnership recognizes the contribution of sanctuaries to great ape conservation in the wild
- This is the third PASA workshop UNEP GRASP representatives will have attended. PASA was at the 2003 Paris PrepCom and will hopefully attend 2005 IGM
- GRASP has supported Pandrillus and the Orangutan Foundation (UK) with repatriation and rehabilitation projects
- GRASP and the PASA Secretariat have a close relationship
- Current GRASP fundraising assistance to PASA

Intergovernmental Meeting on Great Apes and 1st GRASP Council Meeting 5-9 Sept, 2005 (Grand Hotel, Kinshasa, DRC)

Objectives

- Bring together all stakeholders to discuss substantive issues relating to great apes and their conservation
- Raise global profile of situation facing apes and their habitat
- Get commitment from all stakeholders recognizing the importance of great apes and their habitat
- Present national and regional action plans to the international community
- Adopt key GRASP documents
- Secure significant financial support from donors

Expected Outputs

- High level declaration on importance of great apes
- Global great ape conservation strategy
- GRASP partnership workplan
- Rules for the organisation and management of GRASP partnership
- Establishment of GRASP Executive Committee
- Establishment of GRASP Scientific Commission
- Announcement of GRASP partner commitments
- Increased donor support

Participants

- High level dignitaries – Central African Heads of State, Ministers (UK and others), GRASP Patrons
- Range state representatives, from environment, forestry or tourism ministries and wildlife and parks departments
- Donor governments and other non-range state reps
- Regional initiatives, intergovernmental and UN bodies, donor institutions.
- Convention secretariats
- International and national NGO partners and non-partners
- The great ape scientific community
- Private sector, including ecotourism and timber companies
- Local community representatives

GRASP & 2004 CITES Resolution

- Official title: Res. Conf. 13.4 Conservation of and trade in great apes
- Adopted at the 13th CITES Conference of the Parties in Bangkok, Thailand in November 2004
- Strengthened GRASP mandate
- International ape transfer provision watered-down at the last minute
- The UK government (Defra) has provided GBP20,000 for the implementation of activities to enforce the Resolution

The Resolution directs the Standing Committee to:

- Review the implementation of this Resolution at each of its regular meetings on the basis of the Secretariat's reports;
- Consider other measures such as technical missions, organized in cooperation with GRASP and other appropriate partnerships, followed by political missions if necessary; and
- Report at each meeting of the Conference of the Parties on the implementation of this Resolution, with any recommendations for further action

GRASP & CMS Article IV Agreement

- The GRASP Partnership in cooperation with CMS & the International Gorilla Conservation Programme (IGCP)
- Development of a legally-binding agreement between Rwanda, Uganda & DRC for the protection of the transboundary mountain gorilla of the Virungas
- Increased protection for the species and its habitat
- Example of GRASP work at the intergovernmental level
- Template for future Article IV agreements for other species

GRASP / EU Grant Awarded

- Proposal submitted by UNEP along with EU-based GRASP Partners in March 2004. Grant awarded May 2005
- Proposal entitled "Preservation of forest resources and improved livelihoods of forest peoples through conservation of great apes as flagship species"
- UNEP component – intergovernmental processes and meetings, documents, logistics, fundraising, servicing GRASP Partnership executive and scientific bodies
- Born Free Foundation component – TST support, provision of IT equipment across range states, workshops

Includes the following field level components:

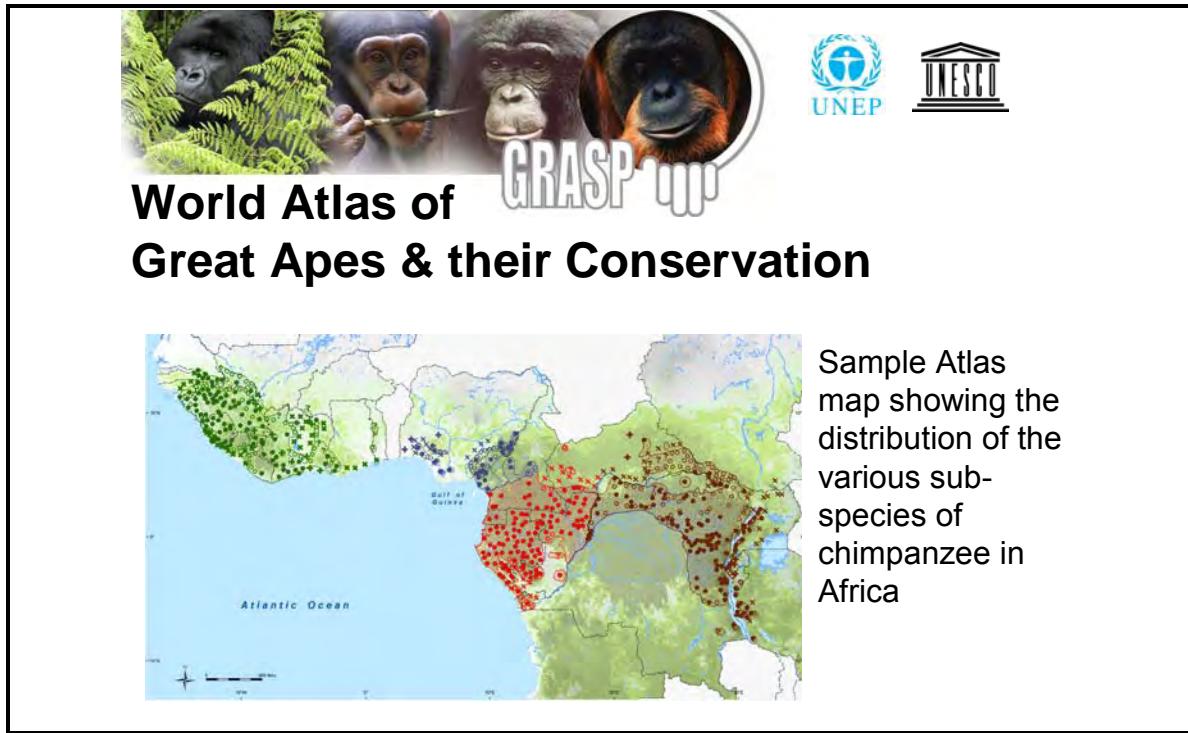
- Orangutan Foundation (UK) – Community conservation in Tanjung Puting National Park, Indonesia
- Wild Chimpanzee Foundation – Biomonitoring and wildlife department & community education in Ivory Coast
- Dian Fossey Gorilla Fund (Europe) – Community development for conservation around Mt. Tshiaberimu, DRC
- Bristol Zoo Gardens – Community engagement and sustainable use of forest resources in Cameroon

World Atlas of Great Apes & their Conservation

Coordinated by UNEP-WCMC

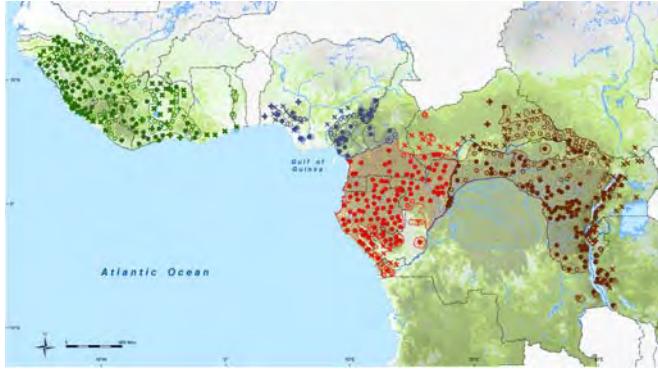
- To be launched in London, Paris and Kinshasa in September 2005

- Latest information on the ecology, species and country distribution and threats and conservation of the great apes
- Fundamental source of information for national and international planners



**World Atlas of
Great Apes & their Conservation**

Sample Atlas map showing the distribution of the various sub-species of chimpanzee in Africa



THE BUSHMEAT CRISIS

Garry Richardson

Regional Director -
Africa



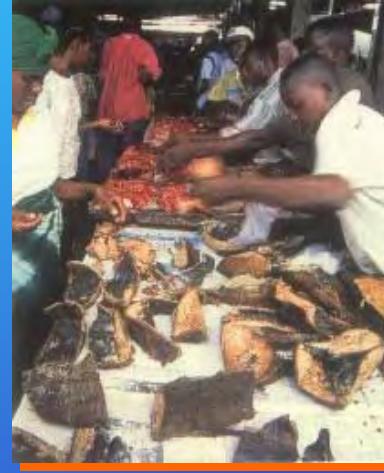
World Society for the Protection of Animals

The Bushmeat Crisis

Garry Richardson

The Bushmeat Crisis

- In 2000, WSPA published a new report highlighting the escalating trade in meat from wild animals (bushmeat) that is devastating rare species in Central Africa
- But the practice of poaching and snaring is rife throughout Africa, a problem that WSPA has been involved with in the past and is continuing to address in 2004.
- “The escalating bushmeat crisis is a growing scourge which threatens the very existence of Kenya’s wildlife heritage...”
(Daphne Sheldrick)



The Challenge....

WSPA
World Society for the Protection of Animals





Projet Protections des Gorilles (PPG) – Congo Gorilla Reintroduction

Christelle Chamberlan

John Aspinall Mission

... s'est engagée à œuvrer avec des partenaires locaux, pour la conservation des espèces menacées en général, et des gorilles en particulier...

PPG - Congo History

- 1987 à 1997: Orphelinat au zoo de Brazzaville
- depuis 1994: Lesio-Louna
- depuis 2003: sud-ouest Lefini

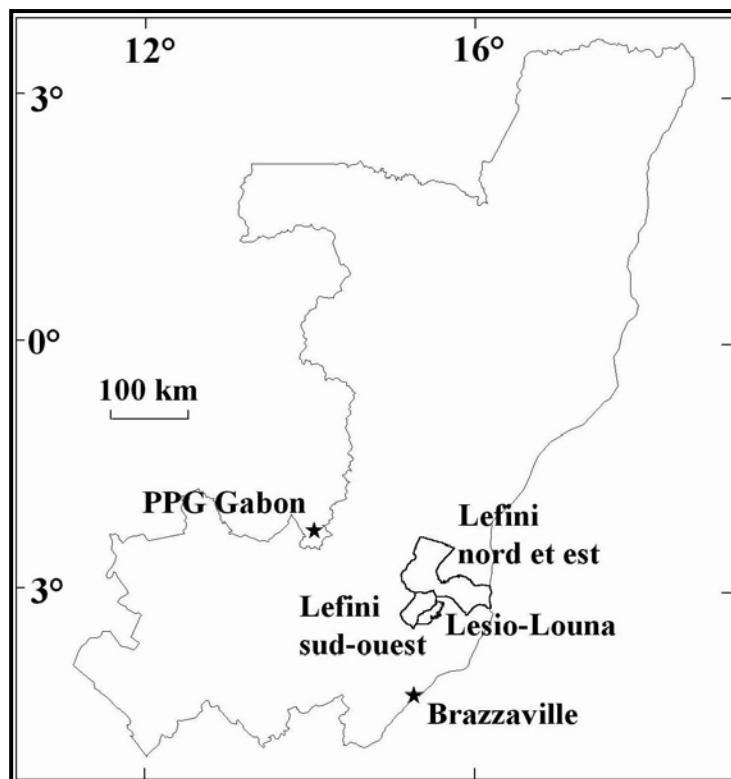
Orphelinat au zoo de BZV

- 71 gorilles orphelins accueillis entre 1989 & 1997
- 12 bonobos orphelins
- nuit en cage
- activités journalières dans petite forêt non clôturée
- problèmes:
 - surpopulation
 - contact rapproché avec population urbaine

- taux élevés de maladie et mortalité
- évasions directement en plein centre ville
 - fermé définitivement à cause de guerre civile en 1997

Réserve Lesio-Louna

- créée en 1993
- statut promu en 1999
- 140 km au nord de Brazzaville
- superficie: 500 km²
- collines de savane, galeries forestières & escarpements



Lesio-Louna: Pré-relâcher

- activités journalières dans vaste forêt non clôturée
- nuit en cage
- apport alimentaire: lait & fruits/légumes
- contact humain et supervision rapprochés
- soins médicaux et vaccinations (ROR & DTPolio)
- groupes établis
- liberté de mouvements (mais influencés en cas de nécessité)
 - contact humain et supervision réduits

- soins médicaux si nécessaire
- activités anti-braconnage



Lesio-Louna: Relâchés

	Date	Mâles	Femelles	Total
Groupe 1	Avr 1996	2	1	3
Groupe 2	Mai 1996	3	0	3
Groupe 3	Déc 1998	3	4	7
Groupe 4	Juin 2001	4	5	9
Total		12	10	22

Lesio-Louna: Résultats

22 gorilles relâchés:

- 1 ♀ disparue
- 3 morts:
 - 1 ♂ adulte après évènement stressant
 - 1 ♂ & 1 ♀ après attaques par gorilles plus âgés
 - 4 ♂ adultes remis en cage
 - 14 transférés au sud-ouest
Lefini (6 ♂, 8 ♀)

DONC ... 81,8 % de survie

MAIS ... en 2005, plus aucun gorille relâché à Lesio-Louna

Lesio-Louna: Pourquoi cela n'a-t-il pas marché?

Pas de barrière naturelle efficace entre gorilles relâchés et activité humaine

Sud-ouest Lefini – la seconde tentative

Une analyse des préparatifs et résultats initiaux de la réintroduction de gorilles à la Réserve de la Lefini, avec référence aux directives en matière de réintroductions de primates non-humains édictées par l'IUCN.

Directives UICN (2002)

- But du programme de réintroduction

- Principe de précaution
- Planification de la réintroduction
 - Habitat & Site de relâcher
 - Socio-écologie & comportement de l'espèce
 - Exigences socio-économiques, financières & légales
 - Stock de relâcher & Evaluation génétique
 - Transmission de maladies & Exigences vétérinaires
 - Santé & Dépistage du personnel
- Exécution des Transport & Relâcher
- Suivi post-relâcher

... le **but principal du programme de réintroduction** est de rétablir, dans la nature, une population de gorilles de l'Ouest viable et indépendante

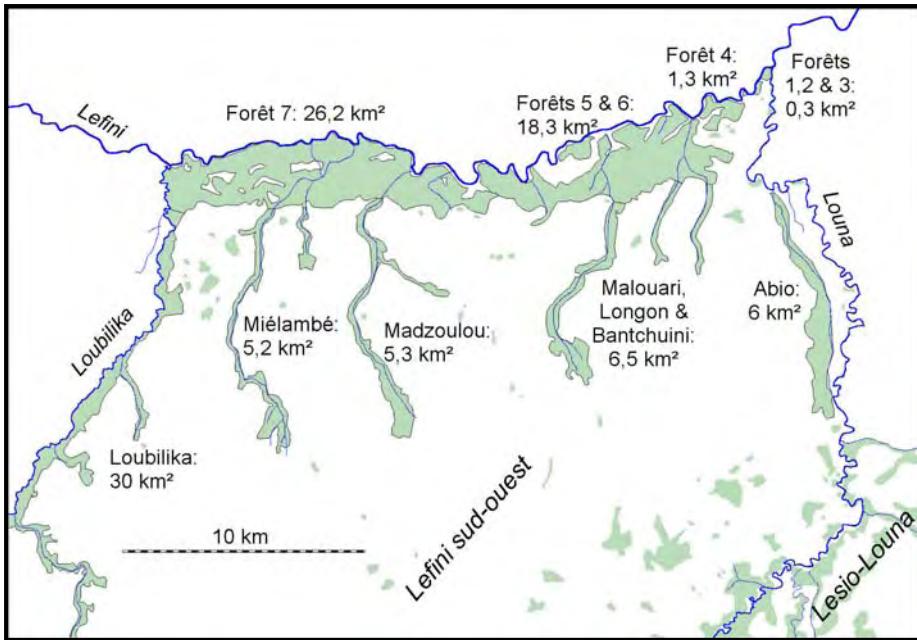
Principe de précaution

JAF est consciente des risques encourus en réintroduisant des gorilles orphelins dans la nature, tant pour les individus relâchés que pour les populations sauvages de l'espèce ...

- JAF s'est engagée à long terme pour entreprendre le programme en accord avec les directives relatives à la conservation, et pour assurer le bien-être des individus relâchés.
 - Les sites de relâcher ont été sélectionnés dans des zones sans aucune population sauvage.

Site de relâcher: Sud-ouest Lefini

- adjacent à Lesio-Louna
- superficie: 1.200 km²
- au sein de l'aire de répartition historique de l'espèce
- grands singes entièrement exterminés
- barrières naturelles (3 larges rivières & vaste étendue de savane)
- 47 km² de forêt le long de la Lefini + 53 km² associés



Socio-écologie & comportement de l'espèce (littérature révisée en 2002)

- Les groupes stables comprennent généralement un mâle adulte, plusieurs femelles adultes (moyenne = 3,0), et un nombre variable d'immatures (Parnell 2002).
- Les mâles non-dominants quittent habituellement leur groupe à l'âge de 14-15 ans (Tutin 1996).
 - A Nouabalé-Ndoki, les estimations de densité étaient de l'ordre de 2,3 à 2,6 individus/km² (Kuroda et al. 1996).
 - A la Lopé, un groupe avait un domaine vital d'environ 10 km², mais a couvert un secteur de 21 km² sur une période de 10 ans (Tutin 1996).
 - Il y a un chevauchement considérable entre les domaines vitaux de groupes différents (Tutin 1996).
 - Les groupes se déplacent davantage en période d'abondance des fruits (Tutin 1996).

Exigences socio-économiques, financières & légales

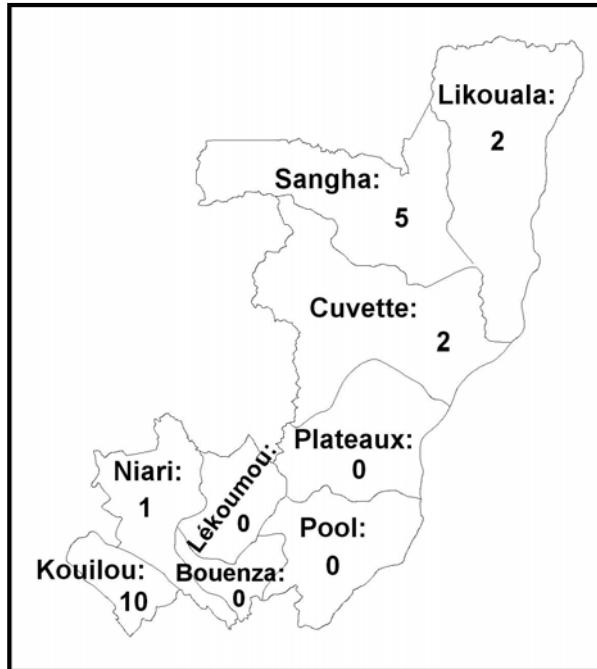
- engagement financier et technique à long terme de la Fondation John Aspinall
- partenariat entre JAF & le Gouvernement congolais
- site de relâcher au sein d'une aire légalement protégée (depuis 1951)
- barrières écologiques minimisant les risques de conflits humains-faune
- études socio-économiques
- compensation des propriétaires traditionnels par le Gouvernement
- programme de sensibilisation / conscientisation vaste et continu
- développement communautaire & activités alternatives prévus

Stock de relâcher & Evaluation génétique

- tous orphelins originaires du

et confisqués au Congo - donc ...

- ... tous de la même sous-espèce (*Gorilla gorilla gorilla*)
- étude génétique envisagée



Transmission de maladies & Exigences vétérinaires

- avant le relâcher:
 - vaccinations (ROR & DTPolio, auparavant Hep B)
 - divers tests médicaux (TB, VIH, Hep B) & traitements
- au relâcher:
 - examen complet
 - suppléments vitaminiques
 - médication contre vers intestinaux et parasites externes

Santé & Dépistage du personnel

- avec le projet depuis de nombreuses années
- tests médicaux informels
- vermifuge tous les trois mois
- vaccinations contre DTPolio & Hep B
- autres vaccinations envisagées (typhoïde, Hep A, ROR)

Exécution des Transport & Relâcher

Groupe 1:

- 18 Jan 2003
- 5 adultes en cage (2 ♂, 3 ♀)
- fléchage avec fusil Dan-Inject
- transport par camion & bateau

Groupe 2:

- 8 Sep 2004
- 9 sub-adultes & juvéniles en liberté (4 ♂, 5 ♀)
- medetomidine orale + ketamine ou zoletil en IM
- transport par pirogues

Suivi post-relâcher: Méthode

- recherche journalière de signes de présence directs ou indirects (traces, selles, battements de poitrine, contact visuel, ...) par équipes de 4
- réseau de pistes créé en forêt, mais principalement patrouilles en savane ou sur la rivière (sécurité)
- pas de système de collier-émetteur développé (pour gorilles)
- plusieurs endroits-clé pour contact visuel
- patrouilles anti-bracconnage

Suivi post-relâcher: Résultats

- survie: 107 % ...
- 13 Avr 2004: 1er enfant né d'un gorille réintroduit (Djembo, 17 ans)

Suivi post-relâcher: Résultats

- utilisation de l'espace vital similaire aux gorilles sauvages
- tension accrue après naissance
- ♂2 est devenu graduellement solitaire
- ♂2 a rencontré et s'est joint au Grp 2, Déc 2004
- ♂1 soudainement solitaire, Fév 2005

Conclusion

- gorilles relâchés bien adaptés au site
- comportement similaire à celui des gorilles sauvages

Problèmes irrésolus

1. viabilité génétique d'une population constituée d'un petit nombre d'individus
réabilités
2. capacité de la zone à contenir les déplacements importants de mâles solitaires
(et que faire de ces mâles solitaires)
3. impact de la présence humaine, surtout celle des visiteurs, sur le comportement des gorilles relâchés



CERCOPAN Reintroduction Program

Zena Tooze

Outline

- Brief Overview of CERCOPAN
- Primate Rehabilitation & Steps toward Release
- Community Partnerships
- What next for CERCOPAN

CERCOPAN

Centre for Education, Research, and Conservation of Primates and Nature

Mission Statement

'CERCOPAN seeks to conserve rainforest biodiversity and ensure the sustainable use of natural resources through education, research, primate rehabilitation and forest protection.'

Overview

- Forest centre ('Rhoko') Iko Esai forest (est. 1999)

Brief Overview

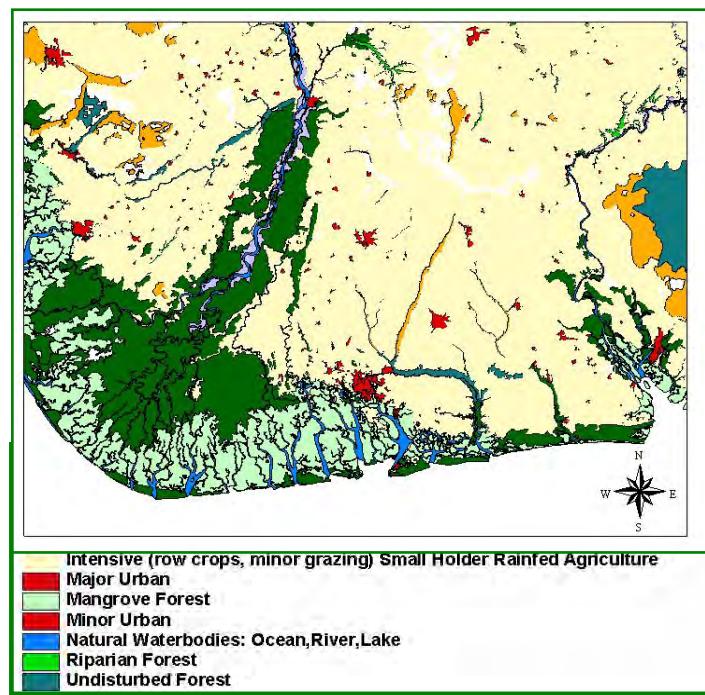
- 30 national staff and 4 full-time volunteers
- Rhoko site officially opened to students and visitors March 2003

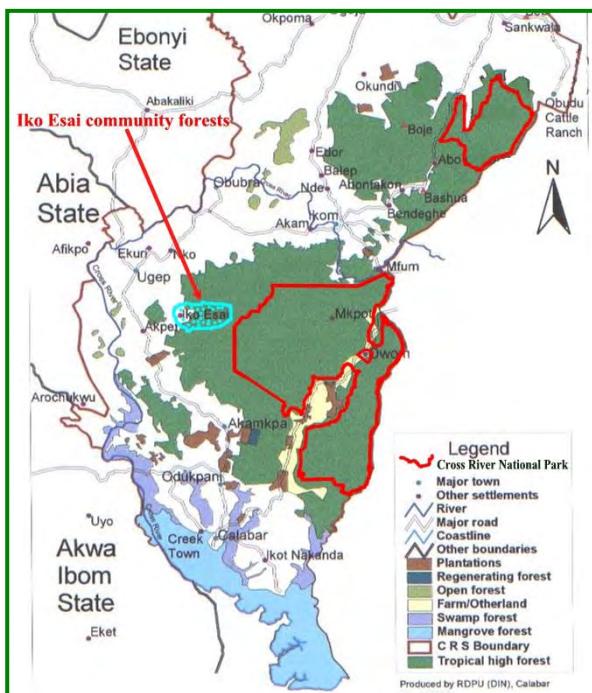
Principal Areas of Work

- Primate rescue and rehabilitation
- Community partnerships
- Forest conservation
- Research
- Environmental Education

Forest Conservation

- Cross River State rainforest is one a biodiversity 'hotspot'
- < 8 % Nigeria's tropical high forest remains.
- CERCOPAN protects > 3,000 hectares of forest on the borders of the CRNP





Research

- Since 1996
- Centres at Calabar and Rhoko
- > 12,000 visitors every year
- > 4,000 secondary school students
- Developed region specific materials
- Practical field courses in biology and conservation

Research

Since 2001 have been conducting biodiversity research at the forest site, compiling species lists for:

- Birds (>200)
- Butterflies (>?)
- Reptiles & amphibians (47)
- Trees (179)

Environmental Education

- Since 1996
- Centres at Calabar and Rhoko
- > 12,000 visitors every year
- > 4,000 secondary school students
- Developed region specific materials

Outreach includes:

- radio and television
- school conservation clubs
- 40 secondary schools, 10 primary schools

- Practical field courses in biology and conservation
- In 2004 > 45 university students at Rhoko for field courses and on attachment

Calabar Botanic Gardens & Conservation Centre

- CERCOPAN is working with the Forestry Commission, Iroko Foundation (UK) and Kew Gardens (UK) on this project
- Primary goals include plant conservation and education; the gardens will provide the only green space in Calabar
- CERCOPAN will move its HQ here, including new office, vet facilities and Environmental Education Centre

Primate Rescue & Rehabilitation

CERCOPAN ultimate goal is to conserve primate biodiversity

- restoring primate communities
 - captive breeding
 - Orphans arrive as a result of the bush meat trade
 - Via donations or confiscations by officials – but never purchased.
 - Veterinary protocols established since 1996 includes 3-month quarantine
- Tests
1. Faecal culture and microscopy
 2. Blood
 3. TB test
 4. Virology (SIV/HIV, STLV/HTLV, HepA/B, Ebola, Foamy virus)
 - Annual TB testing and health checks

Reintroduction/Restocking?

- Established as rescue & education centre → realized the process of reintroduction was long, arduous, expensive & controversial....
- However, considered essential as an ultimate goal – even for non-globally endangered species
- Must then ask- Is this goal compatible with international guidelines?

Consider...

- Low densities of all primates
- Primate communities are endangered
- Prospect of a future 'empty forest' syndrome
- Importance for education - primates belong in the forest, not in enclosures.
- Impact of placing real 'value' on wildlife and primates
- YES

Steps taken towards Reintroduction/Restocking (Phase 1)

- Followed quarantine protocols (Adapted from those developed by J. Lewis (IZVG) for Pandrillus)
- Identified area of forest and potential host community (1998)
- Established temporary camp at site (1999)

Steps taken towards Reintroduction/Restocking (Phase 2)

- Sourced dedicated funding for community, forest protection & research programmes
 - IUCN (2000, 2002), CIDA (2002)
- Began to establish solid relationship with host community
 - Ongoing since 1999
 - Full time staff member
 - Weekly meetings with council
 - Separate meetings with women, youth
 - Informal discussions in market square
 - Permanent base in village
- Signed agreement with Iko Esai (September 2000)

Steps taken towards Reintroduction/Restocking (Phase 3)

- Established EE programme in rural area (2000)
- Demarcated Core protected area (400 hectares) (2000)
- Conducted primate surveys, baseline biodiversity research (since 2000)
- Established protection for Core Area (2001)
- Sourced funding for forest enclosure
 - Start construction May 2002
- Chose primates to move to forest site
 - First mangabeys
 - Chose group with stable male leadership (12)
 - Added females and offspring from second group (6)
 - 8 captive born (2 generations), 10 wild born
 - Then monas
 - Chose typical social group
 - Dominant adult male, his two offspring (1 male and 1 female), 3 adult females, second adult male as accepted member of group
 - 2 captive born, 5 wild born
- Retested and health checked prior to move to forest satellite (An Pas)
- Moved to comfortable satellite enclosure for period of time
 - Train local primate care staff (Oct-Dec 2003)
 - Experienced staff from HQ
 - Welcome celebration in community – attended by senior government official (CRSFC & State Tourism)
- Entered forest enclosure Feb/May 2003
- Started behavioural monitoring and research immediately
- Special note initially to height, feeding data
- Kept simple as staff recently trained

Current Work Towards Release (Phase 3)

Gearing up research

- November 2004 brought volunteer exp. in primate field res.
 1. Tag and identify all trees > 10 cm DBH (CRSFC)
 2. Monitor tree condition/damage monthly
 3. Tag same species outside enclosure
 4. More detailed study of feeding ecology
 5. More detailed training of staff

How are they doing? (One Year Later...)

Mangabeys

- Subordinate female tale fungal infection
→ healed within 2 months
- Challenge to male leadership June/July
- Three infants born June/July
→ possible infanticide
- Recently 2 births → successful
- Using all enclosure, highest trees

Monas

- Massive tumbu fly infection
 - Healed with no intervention
- Dominant male disappeared after 2 months
 - recovered body → fall?
- Son took over leadership
→ No breeding – Social?
- After few months
 - chased second adult male out
 - now in satellite with second male
- Using all enclosure, highest trees
- 1 escape – recovered easily
 - →adjustments to fence

Community Partnerships

Reintroduction or restocking programme must involve communities

To be successful, programmes must:

- address forest conservation
- integrated with community education
- offer **tangible** benefits

Development of CERCOPAN & Iko Esai Partnership

- In November 1998 began searching for a possible forest site and host community in CRS, using specific criteria
- Access
- Max. distance from Calabar
- Large community forest
- Water source
- Willing & interested community with strong leadership

Were there problems along the way?

- Took long time to build up trust → rumours and suspicion
-but most serious problem
- Unsustainable logging into designated protected area
- Destroyed access roads
- Success – logging curtailed, a land use management plan earmarks over 12,000 hectares of community forest for conservation

CERCOPAN & Iko Esai Agreement

Agreement signed between CERCOPAN & Iko Esai (2000)

- 99 year agreement

CERCOPAN

- Assistance with development of LUMP
- Quarterly payments into CCD Fund
- Training of CCDC members
- 70% employment to community
- Assistance with road maintenance
- Assistance sourcing other funds for CCD Fund

Iko Esai

- No exploitation of any kind in Core Area
- No roads, logging or farming in Research Area
- Commitment to sustainable use of entire forest
- Ensure road accessible year round

Tangible benefits accrued to community over the past 5 years include

- CCD Fund, established by CERCOPAN, used to repair vital access bridge, build LG zonal office, take care of community affairs
- Employment and training - agreement stipulates that 70% of CERCOPAN staff come from Iko Esai
- Improved village water supply through partnering with international NGO 'Concern Universal'
- Organized vaccinations during measles epidemic
- Organized free cataract surgery
- Developed small-scale ecotourism with direct \$\$ benefits
- Provided micro-credit training

Community Partnership: What next for CERCOPAN?

- Dedicate staff member and budget to community liaison and education - CLO (not from Iko Esai) spent 4 days a week in Iko Esai in first 4 years
- Start early and take your time! > 1 year to come to final version of agreement
- Don't expect smooth journey –'bumpy, winding road' along the way - perseverance important
- Look for possible NGO partnerships to assist
- Develop and maintain a close and cordial relationship with government whenever possible – communicate and involve
- Seeking funding for following programmes
- Research and release programme
- Advisory Board/source funding (??)

- Equipment & testing
- Develop partnerships with university(s)
- PhD student(s) & Research Assistants
- Community Development
- Micro-credit/ microenterprise developments
- Work in sustainable agriculture
- VSO and developing ENGO partnerships
- Ecotourism development
- Improved infrastructure, marketing, RSR
- Develop MOU with CRNP



PASA WORKSHOP | KENYA | 2005 | REINTRODUCTION PRESENTATION

CBSG Workshop / PASA Reintroduction

David Lucas

PASA 2004 Reintroduction Working group

1.1.1 Goals

- Re-examine assumptions in light of HELP-Congo presentation
- Determine where the gaps are in implementation requirements
- Program audit

1.1.2 Policy Statements:

1. Re-introduction is a potential option, not a requirement
2. Sanctuary-specific and joint programs are appropriate if feasible
3. Programs must comply with IUCN Guidelines
4. Programs must make a positive contribution to the conservation of the species
5. PASA will not endorse programs undertaken solely as a management tool

1.1.3 Areas of planning for which resources or personnel have not been identified, and for which help may be required:

- a) Conservation Justification - 20% of sanctuaries
- b) Veterinary Screening and Preparation - 40%
- c) Site Selection - 70%

- d) Ecological Evaluation - 70%
- e) Release-animal Suitability / Selection - 40%
- f) Finance - 60%
- g) Community Awareness and Sensitization - 50%
- h) Post-release Monitoring - 100%
- i) How will we measure success? - 40%

1.1.4 Sanctuaries that would consider a joint reintroduction program

Yes - 80% No - 6.5% Maybe - 13.5%

CBSG Conference Presentation

Background of PASA

Why Was PASA Established?

- Confluence of goals and objectives
- Best-practice protocols
- Forum for debate, exchange and policy planning
- Professionalism and greater representation

2.2.1 Secretariat and Advisory Board

2.2.2 Committees:

- a) Management
- b) Conservation
- c) Reintroduction
- d) Veterinary Healthcare
- e) Education

2.2.3 Main policy areas:

- a) conservation
- b) primate health
- c) captive breeding
- d) release and reintroduction
- e) staff development
- f) housing and husbandry
- g) staff health and safety
- h) animal acquisition
- i)

2.3 Operational Philosophy

PASA believes that the welfare conservation of the species is paramount, while taking into consideration the individual, and that holistic and long-term approaches shall be adopted as these challenges are addressed"

2.3.1 Sanctuary Mission Statement

"PASA sanctuaries are committed to providing the best possible facilities and care to African captive primates in Africa, while working towards the protection and conservation of the species in the wild"

2.3.2 Code of Conduct

2.3.3 Core Values and Principles

2.4 ANIMAL WELFARE & CONSERVATION

2.4.1 Rehabilitation

- Comprehensive veterinary screening
- Management of functional social groups
- Optimal husbandry standards

2.4.2 Conservation

1. Local Education

- Outreach programs
- On-site visits (schools, educators, public)
- Nature clubs
- Interpretive displays and keeper talks
- Workshops/seminars
- Radio, television broadcasts
- Ecology courses

2. Community Development

- Employment and training
- Building of schools, latrines, roads and bridges
- Small business development
- Sustainable agriculture
- Health education
- Reforestation
- Eco-tourism initiatives with local communities
- Logistics support to law enforcement agencies

3. Habitat Protection

- Establishment and reinforcement of wildlife sanctuaries and reserves
- Outreach programs to schools, villages and hunting camps
- Project presence in protected areas
- Employment of eco-guards
- Snare removal activities
- Reintroduction programs

4. Data Collection and Research

- Behaviour and ecology of released apes
- Survival rates and the adaptive potential of release stock

- Interactions with wild conspecifics
- Post-release reproduction and genetic analyses
- The distribution and densities of wild populations
- Surveys of native fauna and flora
- Threat assessments for wild populations
- Impacts on ecosystems, other wildlife and food resources
- Issues relating to local human populations and evaluations of strategies to address hunting, encroachment and protection.
- Behaviour and health of sanctuary apes

2.5 REINTRODUCTION AS A CONSERVATION TOOL

2.5.1 PASA Reintroduction Statement

“PASA members have as the ultimate goal of their conservation action, the conservation of species, the preservation of biodiversity, and the pursuit of animal welfare. PASA recognises the IUCN/SSC Guidelines for Non-human Primate Reintroductions (2002) as the most advanced and comprehensive approached available at this time.

PASA supports such conservation action where appropriate, and where programs can adequately fulfil the pre-conditions as defined by this document.”

2.5.2 Principle Aim

- To establish viable, self-sustaining populations

2.5.3 Objectives

- Habitat/system restoration and protection
- Maintenance/restoration of natural biodiversity
- Long-term economic benefits to local and national economies
- Promotion of conservation awareness
- Increase the genetic diversity of wild populations

2.6 WHY ARE PASA SANCTUARIES PURSUING RE-INTRODUCTION?

2.6.1 To Advance the Current State of Knowledge

- Collect and publish data
- Identify species and site-specific requirements
- Experimental approach to inform future efforts
- Model and replicate release strategies

- Streamline inputs to become cost-effective

2.6.2 To Address Root Causes

- Bushmeat and human demographic changes
- Habitat destruction and fragmentation

2.6.3 Welfare & Management

2.6.4 Capabilities

- **Success** of existing conservation programs
 - creation of protected areas
 - capacity building of national personnel
 - long-term project commitments
- Working **relationships** with all levels of governments, local NGO's & communities
- Efforts increasingly incorporated into local and national conservation **planning**

2.6.5 Proximity

- sanctuaries remain at the geographic heart of the primate conservation crisis

2.7 WHAT EXPERIENCE DOES PASA HAVE?

2.7.1 Habitat Ecologique et Liberte des Primates (HELP) Congo

RESULTS:

- 37 chimpanzees, in 6 groups, reintroduced back into the wild between 1996 and 2001
- Confirmed 62 percent survival rate
- Confirmed mortality of 14%
- Density increased from (0.3 - 0.7) to (1.3 - 1.5) individual/sq.km
- All chimpanzees were nutritionally independent immediately post-release
- 4 reintroduced female chimpanzees have given birth to five babies
 - One released male has fathered offspring post-release

Lessons Learned (HELP)

- Most vulnerable immediately following release

- To reduce stress and facilitate adaptation, chimpanzees should be released with familiar individuals
- Higher proportion of attacks on males by wild chimpanzees
- Radio collars have proven generally effective.
- No obvious sign of negative impact on food plants or fauna (7 years)
 - Relocation of human communities can be effective

2.7.2 Projet Protection des Gorilles (PPG - Congo / Gabon)

RESULTS (CONGO)

Site 1 (*Lesio-Louna*) - 23 released, 3 dead, 1 missing
 - 4 adult males recaptured, 1 female transferred

Site 2 (*Lefini*) - 14 released (transferred from Site 1), all surviving
 - 9 released in 2004, all surviving
 - reintroduced in 3 groups:

- Survival rate of at least 86.9%
- Confirmed mortality of 13%
 - One baby born post-release

RESULTS (GABON)

***La Mpissa* - 28 released, 23 surviving in 2 groups**

- Survival rate of 82%
- Group 2 comprising 3 wild-born (Gabon), and 6 captive born (UK)
 - Confirmed mortality of 19.2%

Lessons Learned (PPG)

- Vital to reduce human dependence at earliest opportunity
- Need for significant ecological barriers to human activities
- Post-release ranging behaviour and diet typical of wild populations
- Interactions between older and younger released groups can be aggressive

- Lone adult males range over a far greater area
- Presence of unfamiliar persons is stressful to released animals
- Persistent access rights to forest remains a difficult issue

2.7.3 Drill Rehabilitation and Breeding Centre, Nigeria

RESULTS

- 5 ecologically functional, medically screened, natural-sized, reproducing groups formed from orphaned animals
- Most successful captive breeding program for drills in the world
 - 85 live births (31:54)
 - Survival of full-term births is 87% and 100% are mother-reared
- Increased knowledge of drill biology, behaviour and reproduction
- Protected habitat (Afi Mountain Wildlife Sanctuary)
- Largest private employer in tribal area
- Community revenues from lease payments, animal food, ecotourism
 - Professional training in veterinary and wildlife medicine

2.8 WHAT IS THE FUTURE OF PASA RE-INTRODUCTIONS?

COUNTRY	SANCTUARY	SPECIES	TIME FRAME
Nigeria	Pandrillus	<i>Mandrillus leucophaeus</i>	1-2 years
Nigeria	CERCOPAN	<i>Cercocebus torquatus</i> <i>Cercopithecus mona</i>	1-2 years
Cameroon	Limbe Wildlife Centre	<i>Pan troglodytes troglodytes</i> <i>Pan troglodytes vellerosis</i> <i>Gorilla gorilla gorilla</i>	3-5 years
Cameroon	Cameroon Wildlife Aid Fund	<i>Pan troglodytes troglodytes</i> <i>Pan troglodytes vellerosis</i> <i>Gorilla gorilla gorilla</i>	1-2 years
Cameroon	Sanaga-Yong Chimpanzee Rescue Centre	<i>Pan troglodytes troglodytes</i>	3-5 years
Sierra Leone	Tacugama Chimpanzee Sanctuary	<i>Pan troglodytes verus</i>	3-5 years
Guinea	Chimpanzee Conservation Centre	<i>Pan troglodytes verus</i>	1-2 years
Congo	Tchimpounga Chimpanzee Sanctuary	<i>Pan troglodytes troglodytes</i>	1-2 years
DRC	Lola Ya Bonobo	<i>Pan paniscus</i>	3-5 years

PASA WORKSHOP | KENYA | 2005 | REINTRODUCTION PRESENTATION



2.8.1 The Next Five Years

- Building on the **ongoing monitoring** of current reintroductions
- **In-situ collaboration** with other sanctuaries/conservation projects
 - Sub-species
 - Personnel
 - Resources
 - Common stakeholders
- Continue exploring innovative **release scenarios** (eg. CERCOPAN)
 - Experimental mixed species group
 - Researching ways of restoring primate communities
- PASA release team to develop **national capacities** in:
 - Ecological assessment
 - Data collection and field techniques
 - Data analysis
 - Post-release monitoring strategies

CBSG Conference Outcomes

3.0.1 Key Reintroduction Issues

1. Lack of benchmarks for success (wild vs.captive-bred)
2. Sanctuaries not being able to adequately satisfy RSG Guidelines
3. Issue of what to do with surplus animals
4. The need for generic or project-specific eco-tourism Guidelines for reintroduced animals
5. Legitimacy/legal endorsement of a re-introduction project
6. More active engagement by the zoo community
7. What would trigger a zoo to become engaged?
8. How do we measure success?
9. When and how to evaluate
10. When to stop post-release monitoring

3.0.2 Key Working Group Topics

1. Stakeholders not knowing the Guidelines
2. Stakeholder knowing but not wanting to follow the guidelines
3. Stakeholders knowing the guidelines but unable to follow them

3.0.3 Concerns About PASA Reintroductions

1. Independent evaluation
2. Issues of surplus animals (management tool)
3. Capability of meeting IUCN requirements

Where to from here?

4.0.1 Do We Have The Capacity to do Reintroduction?

1. PASA – already operating beyond its capacity & scope
2. Sanctuaries – HELP/PPG, others?
 - Scientific, community & funding components identified as lacking by up to 70% of sanctuaries (PASA 2004)

4.0.2 Strategic Partnerships For Reintroduction - Opportunities

1. Zoo community (rehabilitation, captive breeding)
 - *World Conservation Strategy – reintroduction, field units, moral responsibility*
2. International Development Agencies (community development)
 - *CARE International, UNDP, NGO's*
3. Research Institutions (GIS, tracking technology)
 - *Universities, WCS, space agencies etc.*

4.0.3 Why PASA is an attractive partner - RMIT

- 19 well established projects in 15 African countries
- Wide range of expertise and capabilities
 - An extensive network of professionals
- Close working relationships with governments, local communities NGO's
 - A reputation as being the only organisation currently reintroducing African Great Apes

Making it happen

5.0.1 Funding

PHASE 1 – Short-term funding for data collection and planning

- Surveys and feasibility studies
- Darwin Initiative

PHASE 2 – Long-term secure funding for implementation and M&E

- Large holistic project or multiple components

(Reintroduction, Veterinary, Community Development, M&E, Education)

(Proposals generated for endorsement by managers/directors)

5.0.2 Pitching Reintroduction For Large Grants

Multiple outcomes projects (biophysical and social)

Improved natural resource management practices (BOS)

Ecosystem services concept

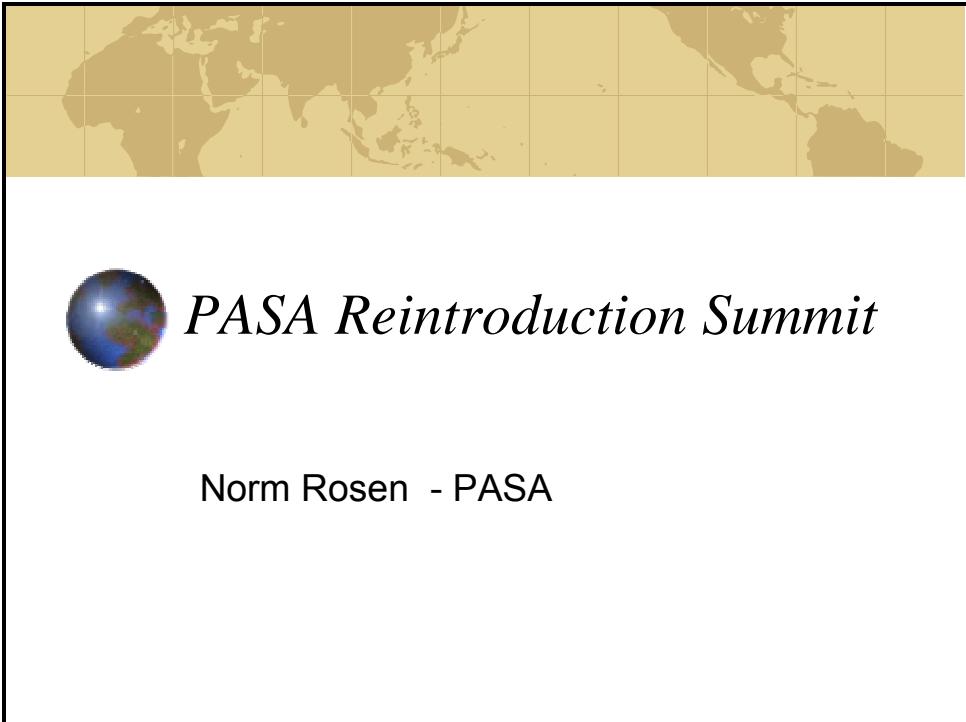
5.0.3 Organisational Development

1. Development of a generic Strategic Plan for PASA reintroductions
2. Clarify our conservation targets and approaches
 - Are single-species approaches enough to achieve conservation?
 - Are we trying to achieve multiple outcomes? What are they?
 - What are our spatial scales?
 - Do our conservation targets include humans?
 - Should we play a role in managing protected areas? Etc.
3. Outline a vision for reintroduction as a conservation tool, and a road map of how to get there
4. Identify projects and organisations that will help us achieve our goals
 - complementary rather than competitive

5.0.4 Development of an evaluation framework

- Define a successful reintroduction
- Determine appropriate indicators
- Build confidence with investors and partners
- Improve action learning across sanctuaries and develop reintroduction models

Great Ape Summit/Workshop



PASA Reintroduction Summit

Norm Rosen

Where Are Sanctuaries Going?

- Primate Extinction Crisis
- Sanctuaries Faced With Serious Carrying Capacity Issues
- Reintroduction is the Next Step!

PASA's Solution: PASA Reintroduction Summit

- April 2006
- Location: Europe
- Attendees:
 - Primate Scientists
 - Vets
 - Conservationists
 - Potential Donors
 - Specialists in Reintroduction
 - Sanctuary Managers
 - PASA Ad Hoc Committee

Summit Format –
CBSG Working Groups

- **Subjects To Be Covered:**

- Feasibility Studies
- Overcoming Negative Attitudes About Great Ape Reintroduction
- Creating Local and National Incentives/Government Support
- Long Term Financial Support
- Monitoring Programs
- Primate Training of Survival Skills
- Protection
- Reviewing Past Reintroduction Projects
- Personnel Requirements
- Potential Tourism
- Addressing the Complexities of Reintroduction of Great Apes

Basic Principles of Reintroduction

- Identify Needs/Conduct Overall Assessment
- Define Aims and Objectives – timeline
- Establish Team
- Assess Release Sites, Socioeconomic, Legal and Financial Requirements
- Assess Suitability of Release Candidates and Develop Plans for Transport/Final Release
- Establish Post–Release Monitoring Strategy
- Document Project Outcomes on an Ongoing Basis

Results

- Action Plan for All Sanctuaries
- Create Funding Opportunities
- Develop Credibility to Enhance Conservation Support
- Sanctuaries Must Publish in Scientific Journals, Create Supportive PR, and Produce Videos

After the Summit, Each Sanctuary Needs to Initiate an Individualized Action Plan

Acknowledgements

- Wendy Mills – PASA
- David Lucas - PASA



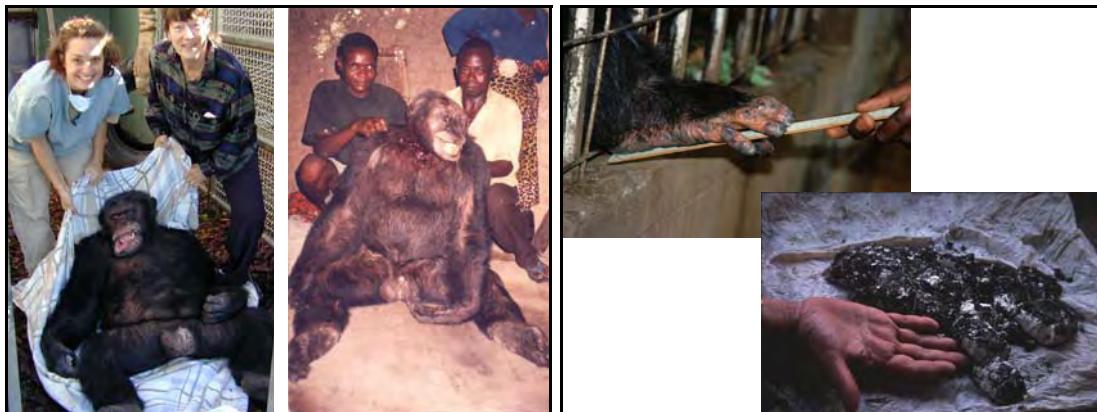
THE BILI CHIMPS

LATEST DEVELOPMENTS

The Bili Chimpanzees

Karl Ammann





(Note - chimpanzee is sedated
and being used for size comparison)





Chimpanzee Smuggling Investigation

Jason Mier
Nanyuki, Kenya

CHIMPANZEE CONFISCATION

- Done by KWS on January 28
- Confiscated four guenons and six chimpanzees, guenons now at Nairobi Orphanage
- One chimpanzee died in their care

INFORMATION CAN BE GATHERED FROM ANNIE OR KWS

THE CHIMPANZEES

- Sweetwaters was first notified about the chimpanzees on 19 February 2005, it was not Kenya Wildlife service that notified Sweetwaters. The chimpanzees arrived at Sweetwaters on 2 March 2005, this after Annie Olivecrona received a phone call from the Kenya Wildlife Service Vet Adeela around 18:00 on 1 March 2005. This was the first time Sweetwaters had heard from Kenya Wildlife Service regarding these chimpanzees.
- The five chimpanzees are named Edward, Julia, Jane, Romeo and Victoria
- When they arrived at Sweetwaters, all were very thin and had a lack of muscle mass. They were immediately put on a milk formula, as well as Cerelac and fruits and vegetables, and ate constantly the first few days after their arrival. Both Edward and Julia arrived dehydrated, both Edward and Jane arrived with a cold and were put on oral antibiotics, and Julia arrived dying of pneumonia and received antibiotic injections for a week.
- DNA work is being done by the Max Planck Institute in Liepzig Germany to determine their origin- Nigeria or Cameroon?





DRC Advertising & Awareness Campaign

Doug Cress

Outline

The Problem

- Border stations in the eastern Democratic Republic of Congo (DRC) still remain major venues for illegal smuggling of primates
- Recent confiscations included chimpanzees, gorillas and monkey
- More than 100 primates – including at least 52 chimpanzees – believed to be kept privately in Goma, DRC.

The Meeting

- Officials from regional and local DRC government, representatives of the DRC wildlife authority (ICCN), and major NGOs met at the Dian Fossey Gorilla Fund International (DFGFI) offices in Goma, DRC, on September 23 to try and broker conservation solutions.

The Agreement

- Among many proposals, PASA agreed to lead an advertising and awareness campaign for border guards, customs officials and military personnel in the Goma region to heighten security and emphasize illegal traffic

The Partners

- PASA is supported by the Bushmeat Crisis Task Force (BCTF), which accessed funding through three BCTF partners: Dewar Wildlife Trust, Columbus Zoo, and Wildlife Conservation Society. In addition, the American Society of Primatologists awarded a grant to assist the effort.

The Plan

- Working closely with the ICCN and CITES, PASA will produce posters and stickers that will be distributed to border stations, police offices, and customs houses that clearly state it is illegal to kill, hunt, sell, carry or otherwise traffic in great apes. In addition, a training session will be held with customs officials and border guards to underscore the program



Pan African Sanctuary Alliance

PASA 2005 Veterinary Healthcare Workshop



Section 5

April 3-9, 2005
Limbe Wildlife Center, Cameroon



Cover photo provided by Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT) / Jane Goodall Institute – Uganda.

A contribution of the World Conservation Union (IUCN), Species Survival Commission, Conservation Breeding Specialist Group (CBSG), and Primate Specialist Group (PSG).

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Prepared by participants in the PASA 2005 Veterinary Healthcare Workshop, Limbe, Cameroon, 3rd – 9th April 2005.

D. Cress, W. Boardman, S. Unwin, P. Joyner (Editors). Pan African Sanctuary Alliance (PASA). 2005. Pan African Sanctuary Alliance (PASA) 2005 Veterinary Healthcare Workshop Report.

Additional copies of the Pan African Sanctuary Alliance (PASA) 2005 Veterinary Healthcare Workshop Report can be ordered through PASA, P.O. Box 351651, Los Angeles, California 9003, USA. www.panaficanprimates.org

Pan African Sanctuary Alliance (PASA)

2005 Veterinary Healthcare Workshop

**Third Meeting
3-9 April 2005
Limbe Wildlife Center, Cameroon**

Participating Sanctuaries:

CERCOPAN, Nigeria
Chimpanzee Conservation Centre, Guinea
Chimpanzee Rehabilitation Association, Gambia
HELP Congo, Congo
Limbe Wildlife Center, Cameroon
Ngamba Island Chimpanzee Sanctuary, Uganda
Pandrillus, Nigeria
Projet Protection des Gorilles (PPG) Congo, Congo
Projet Protection des Gorilles (PPG) Gabon, Gabon
Sanaga-Yong Chimpanzee Rescue Center, Cameroon
Lola ya Bonobo, Democratic Republic of Congo
Tacugama Chimpanzee Sanctuary, Sierra Leone
Tchimpounga Chimpanzee Sanctuary, Congo
Cameroon Wildlife Aid Fund, Cameroon

PASA Supporters:

Busch Gardens Conservation Fund
Kenya Airways
Dewar Wildlife Trust
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Zoological Society of London
Chester Zoo
Wildlife Center of Virginia
Wildlife Conservation Society
International Primate Protection League (IPPL)

Hosted By:
Pan African Sanctuary Alliance / Limbe Wildlife Center

SECTION 1 **INTRODUCTION**

PASA 2005 VETERINARY HEALTHCARE WORKSHOP

Overview

The Pan African Sanctuary Alliance (PASA) looked back proudly on three years of mutual respect and unprecedented cooperation among its veterinary healthcare professionals at the PASA 2005 Veterinary Healthcare Workshop in Cameroon, but also focused on what lies ahead for African sanctuaries in the future. What began as an earnest attempt to promote capacity and raise up healthcare standards among the primate sanctuaries in Africa has quickly grown into a broad movement that encompasses a wide range of disciplines, including virology, reintroduction science, husbandry, and close collaboration with the Great Ape Health Monitoring Unit (GAHMU).

The PASA 2005 Veterinary Healthcare Workshop was held April 3-9 and PASA member sanctuaries from the following countries attended: Uganda, Nigeria, the Republic of Congo, the Democratic Republic of Congo, Guinea, Sierra Leone, Gambia, Gabon, and Cameroon. In addition, delegates from Rwanda, South Africa, Germany, Italy, the United States, Great Britain, France, and Australia also attended.

The primary themes of the PASA 2005 Veterinary Healthcare Workshop were:

- Risk Analysis for Reintroduction
- Genetics
- Disease control
- Practical laboratory techniques

As is customary, PASA offered French-English translation in all of its presentations, debates and publications.

Agenda

The PASA 2005 Veterinary Healthcare Workshop was designed to spur debate and creative solutions to issues surrounding reintroduction, including disease transmission, risk analysis, funding, sub-species identification, environmental impact and sustainability, and community involvement.

Reintroduction: PASA has made reintroduction a priority for eligible member sanctuaries, and is among the leaders in the relatively unknown field. Presentations were made focusing on risk analysis of reintroduction, including disease transmission, human / ape interaction, and pre-release and post-release protocol.

Genetics: PASA sanctuaries are asked to follow IUCN guidelines wherever possible for the care and welfare of primates and other animals, a policy that extends to the separate housing of chimpanzee sub-species, when possible. But some presentations challenged the notion that chimpanzee sub-species are either important or all that distinguishable.

Disease Control: The PASA 2005 Veterinary Healthcare Workshop was dominated by presentations concerning disease transmission and control, and PASA's vital role at the dividing line between wild primate populations and human communities. These topics emphasized the importance of both preventing deadly disease outbreaks and finding a way to allow PASA sanctuaries to serve as outposts of detection.

Goals

PASA remains committed to its primary goals of achieving the highest possible primate health and welfare, mixed with a desire to improve local capacity in all aspects of veterinary healthcare. The PASA 2005 Veterinary Healthcare Workshop discussed many of these topics in-depth, and teams were selected to focus on particular projects.

PASA also voted to stage the PASA 2006 Veterinary Healthcare Workshop in Sierra Leone next March, and agreed to stage the PASA Reintroduction Summit in The Netherlands in April 2006.

Output

All donors, advisors and supporters will receive the PASA 2005 Workshop Report, which includes sections on the PASA 2005 Education Workshop that was staged in Uganda and the PASA 2005 Veterinary Healthcare Workshop that was staged in Cameroon. Copies will be made available in both printed and CD formats, and will also be available to download online through PASA's website at www.panafricanprimates.org.

Budget

The itemized budget is included in this report. The total preliminary (*) cost of the PASA 2005 Veterinary Healthcare Workshop is \$32,321, which included airfare and hotel expenses for one representative of each PASA sanctuary, along with special presenters and some invited guests.

The PASA 2005 Veterinary Healthcare Workshop was funded primarily through grants from the Busch Gardens Conservation Fund, the Arcus Foundation, the Dewar Wildlife Trust, Kenya Airways, the Wildlife Center of Virginia, and the Wildlife Conservation Society, and with support from the Zoological Society of London and the Chester Zoo. The Limbe Wildlife Center, led by its director, Felix Lankester, his assistant, Sigal Costo, and their incredibly talented staff were responsible for many of the local arrangements and logistics in planning and staging the workshop.

PASA 2005 VETERINARY HEALTHCARE WORKSHOP

Preliminary* Budget

ITEM	PROJECTED COST	ACTUAL COST
Airfare (15 sanctuaries @ \$1,000 each)	\$15,000	\$8,825
Airfare (4 facilitators @ \$1,200 each)	\$4,800	\$5,094.65
Accommodation (20 double rooms x 7 nights @ \$45 each)	\$6,300	\$6,700
Transportation (Doula / Limbe)	\$500	\$470
Conference Hall rental	\$500	\$620
Translation	\$250	\$0
Medical supplies	\$500	\$385
Printing, photocopying	\$200	\$200
Ice-Breaker	\$500	\$440
TOTAL	\$28,550	\$22,734.65

***(Preliminary budget indicates that a final accounting may cause the numbers to rise slightly.)**

**PAN AFRICAN SANCTUARY ALLIANCE
PASA 2005 VETERINARY HEALTHCARE WORKSHOP
April 3-9, Limbe, Cameroon**

**Veterinary Aspects and Risk Analysis of Potential Primate Reintroductions
from PASA Sanctuaries**

AGENDA

Day 1

Orientation: Introduction to Risk Analysis for Reintroduction

9:30 a.m. Moderators: SU/FL

- Orientation and introductions (SU/ WB/ Limbe staff)
- Group activities
 - LWC walk round - everyone to note down deficiencies/ things/ animals needing attention, as a first impression? With discussion (3 hours)
 - Mock animal escape – procedures for both inside and outside facility (SU/ FL/ Limbe staff)
 - Allocation of times for speakers for case studies – PLEASE have all presentations ready for placing on computer as appropriate. Each case study presentation should be approx. 10 minutes, to allow 10-15 minute discussion afterwards

11:30 a.m – 12:30 p.m. Zoonotic diseases overview (Nathan Wolfe)

12:30 p.m. – 2 p.m. – Lunch

2 p.m. - 5 p.m. Moderator: WB

- Introduction to risk analysis for re – introductions PART 1. (Dominic Travis)
- Information on the Great Ape Health Monitoring Unit/ IUCN guidelines (Fabian Leendertz / WB)

7 p.m. – Ice breaker

Day 2

Lecture Sessions

8:30 a.m. – Moderator: WB

- Enteric bacteria (KC)
- Modes of disease transmission and combating them (ED)
- Staff health (KC)

- Discussion

12:30 – 2 p.m. – Lunch

2 p.m. – Moderator: WB

- Emergency medicine part 2 (SU)
- Therapeutics (WB)
- Socialisation and a guide to integration of primate groups (CV)
- Discussion

7p.m. – Dinner

Day 3

Veterinary Aspects of Reintroduction and Case Studies

9 a.m. – 12:30 p.m. Moderator: WB/ DT

- Veterinary aspects of reintroduction including risk analysis.

12.30 p.m. – 2 p.m. Lunch

2p.m. – 5 p.m. – Case Studies Part 1 Moderator: ED

7 p.m. – Dinner

Days 4-6

Practicals (3 Groups : 1 Angolophone, 2 Francophone)

9 a.m. – Start

12:30 p.m. – Lunch

7 p.m. – Dinner

A: Laboratory techniques (SU/ PJ/ John Hopkins team)

Blood and other fluid analysis

- 10 minutes on what looking for/ diseases of note
- 20 minutes on equipment, making blood smears, information on findings/ access to ISIS data etc/ checking quality of results
- Up to 2 hours on:
 - Making a good blood smear (follow up on malaria)
 - Estimated WBCC/ cell morphology

- Blood parasites
- Biochemistry – group discussion on interpreting lab findings
- Serology – group discussion on interpreting viral serology
- Urine sample and analysis
- Reproductive assessments

Faecal analysis

- 20 minute lecture update on what you can find in a pooh/ diseases of note/ nutritional info etc.
- 15 minutes running through equipment/ stains/ storage etc.
- Up to 2 hours on:
 - Faecal flotation and examination for worm eggs
 - Funnels for cestodes (Braemann)
 - Wet preps for protozoa
 - Diff Quik for blood cells

B. Surgical/ Procedural Techniques (FL / KC / ED / WB / CV / Limbe Staff)

30-minute orientation at the start of each session with jobs assigned to specific people, emergency procedures if things go wrong etc. (WB / FL / Limbe (Anglophone group), ED / CV / Limbe staff (Francophone groups)

- Quarantine procedures (non ape) – handling/ anaesthesia/ sample collection/ general health check/ etc.
- Specialist procedures – gastric/ tracheal lavage; depends on problems at Limbe at the time.

C. Think tanks

1. PASA's Future Direction (Scenario based / ½ day)
2. Nutrition and medication discussion, plus forage and feed identification (SU)

Practical Sessions			
Day	Group	Morning	Afternoon
1	1	Lab Techniques	Lab techniques
	2	Think tank	Nutrition
	3	Surgical procedures and techniques	
2	1	Think tank	Nutrition
	2	Surgical procedures and techniques	
	3	Lab Techniques	Lab techniques
3	1	Surgical procedures and techniques	
	2	Lab techniques	Lab techniques
	3	Think tank	Nutrition

Day 7

CASE STUDIES

8:30 a.m. - 12.30pm. Moderator: ED

- Case Studies Part 2

12:30 p.m. – 2 p.m. – Lunch

2 p.m. – 5 p.m. Wrap-Up

- Establishing minimum standards of vet care (1/2 day) (include developing a specific preventative health care plan and staff training). ALL – chaired by WB
- The future for veterinarian involvement in PASA – think tank (and beer at Pandrillus house). After Case studies/ Evening: All – ‘chaired’ by WB

7pm – Dinner

Pandrillus house BBQ

POST-CONFERENCE

Field trips

Yaounde (CWAF/ Pasteur institute) – 2 days
Beach (4 nice local beaches) – 1 day
Mount Cameroon (biodiversity hot spot) – 3-4 days
Kribi (beach/ pygmies) – 3-4 days
Belabo Chimp Sanctuary (Sherri Speede) – 2 days

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SECTION 2

PRESENTATIONS



Bacterial Enterocolitis in Nonhuman Primates

**Ken Cameron, DVM
Tchimpounga Chimpanzee Sanctuary / JGI**

**Priscilla Joyner, BVMS, MRCVS
The Wildlife Center of Virginia**

INTRODUCTION

- Diarrhea is the most common medical problem of captive nonhuman primates
- High morbidity and mortality may be seen in infants and new recruits
- ANTHROPOZOOSES: infection is usually secondary to human contact (immobilization), animal contact or mixing of similar or different species

ETIOLOGY

- Multifactorial etiology
- May include nutritional and psychogenic factors as well as infectious agents
- Bacterial agents associated with diarrhea
- *Shigella* sp., *Campylobacter* sp.– most common
- *Salmonella* sp.– uncommon
- *Klebsiella*, *Yersinia pseudotuberculosis*, *Y. enterocolitica*, *Aeromonas*, *Mycobacterium avium* and enteropathogenic serotypes of *Escherichia coli*

SHIGELLOSIS ETIOLOGY

- Short, nonmotile, nonencapsulated, nonsporulating gram negative rods
- Sensitive to heat, drying and disinfectants

SHIGELLOSIS ETIOLOGY

- Four major serological groups (A – D) containing over 40 serotypes
- Group A: *Shigella dysenteriae*
- Identified in humans and primates
- Group B: *S. flexneri*
- Most common isolate from primates
- Serotype 4 is most frequently isolated
- Group C (*S. boydii*) and Group D (*S. sonnei*)
- Common in humans

SHIGELLA EPIDEMIOLOGY

- Worldwide distribution
- Highly communicable enteroinvasive bacteria
- All primates are susceptible but some species may be more prone to infection
- Transmission is primarily fecal-oral route
- Humans and primates are the only known reservoirs
- Carrier status can exist and be as high as 56%

SHIGELLA PATHOGENESIS

- Acute inflammatory reaction of the intestinal tract
- Organisms penetrate intestinal epithelial cells & multiply intracellularly in submucosa or lamina propria
- Bacteremia is uncommon
- Antibody response does not provide immunity

SHIGELLA CLINICAL SIGNS

- Clinical signs include abdominal discomfort, tenesmus and frequent small volumes of stool containing blood and mucus
- Abortion and stillbirths have been associated with Shigellosis

SHIGELLA GROSS PATHOLOGY

- Colon is primary site of pathology
- Roughened, purulent or hemorrhagic luminal surface
- Petechial hemorrhages are frequently found on serosal surface of colon
- Enlarged mesenteric lymph nodes

CAMPYLOBACTERIOSIS

- *Campylobacter jejuni*
- First isolated from a nonhuman primate in 1979
- Currently the most frequently isolated species
- Other species
- *C. fetus*, *C. sputorum*, *C. laridis*

CAMPYLOBACTER ETIOLOGY

- Slender, curved microaerophilic gram negative motile bacilli
- Several methods exist for serotyping

CAMPYLOBACTER EPIDEMIOLOGY

- Worldwide distribution
- Most commonly isolated bacterium from humans and primates with diarrhea
- All primates are susceptible
- Frequently isolated from asymptomatic animals; significance is unclear
- Transmission is usually via fecal-oral route

CAMPYLOBACTER PATHOGENESIS

- Pathogenesis is not fully understood
- Organisms may invade the intestinal mucosa but gross signs of this are lacking
- Infection is associated with secretory diarrhea and a cytotoxin may be involved
- Microscopic examination of fecal smears show leukocytes and erythrocytes

CAMPYLOBACTER IMMUNITY

- Placental transfer of maternal antibodies may occur but decreases by 6 – 14 weeks of age when isolation of *Campylobacter* is greatest in infants
- Infection results in rapid antibody response but is not protective against re-infection

CAMPYLOBACTER GROSS PATHOLOGY

- Gross findings are consistent with colitis and diarrhea
- Small intestine and colon are reddened, roughened and edematous

SALMONELLA ETIOLOGY

- Aerobic, motile, gram negative bacilli
- Grow readily on simple culture media

SALMONELLA

- Specific antisera are required for serotyping and may be available in special labs
- Some serotypes have host preferences
- *S. typhimurium*, *S. stanley* and *S. enteritidis* – most frequently isolated from nonhuman primates
- *S. typhoid* is a human pathogen never reported in nonhuman primates

SALMONELLA EPIDEMIOLOGY

- World wide distribution with predilection sites for various serotypes
- Most reports exist in zoological settings
- Primary mode of transmission is fecal oral route
- Can survive and multiply outside host
- Sources of infection include
- fruit and other foods, rodents, small birds, reptiles
- insects can be mechanical vectors
- commercial feeds can become contaminated

SALMONELLA PATHOGENESIS

- Organisms invade the mucosa of the jejunum, ileum and colon → secretory diarrhea
- Organisms can invade epithelium, spread to lymph nodes and undergo systemic distribution
- Initial inflammatory response is primarily polymorphonuclear cells followed by lymphocyte and monocyte infiltration
- The large intestinal inflammatory reaction is less severe than with shigellosis

SALMONELLA GROSS PATHOLOGY

- Pathology is consistent with watery diarrhea with occasional blood & mucus
- The ileum, cecum and colon are congested and edematous
- Mesenteric lymph nodes are often swollen

BACTERIAL ENTEROCOLITIS / CLINICAL MANIFESTATIONS

- Range from mild to severe; vomiting is rare
- *Campylobacter* can produce inappetence with soft, semisolid stools and gas filled loops of bowel
- Clinical signs appear abruptly with *Salmonella* and *Shigella*
- There have been reports of *Shigella* stools having a characteristic odor

BACTERIAL ENTEROCOLITIS / DIAGNOSIS

- Clinical diagnosis is based on symptoms, fecal leukocyte count, hemogram and electrolyte analysis
- Differential diagnosis includes viral, parasitic and bacterial agents and chronic inflammatory disease
- Definitive diagnosis is based on isolation of the infectious agent
- Culture of fresh stool or rectum should be plated immediately or stored in a transport medium

CLINICAL PATHOLOGY / FECAL LEUKOCYTE COUNT

- Methylene blue stain of fecal smear
- Shigellosis is characterized by large numbers of polymorphonuclear cells
- Salmonellosis causes a lower total fecal leukocyte count with more mononuclear cells
- Campylobacteriosis is variable with only erythrocytes, only leukocytes or neither

TREATMENT OF ENTEROCOLITIS

- Fluid and electrolyte replacement
- Antimicrobial therapy
- Adjunctive therapy

FLUID TREATMENT CONSIDERATIONS

- Therapy is based on electrolyte, glucose and protein values prior to treatment
- Hyponatremia and hypochloremia are the most common electrolyte abnormalities
- → Normonatremic fluids: LRS or normal saline (0.9%)
- Hypokalemia has been observed and will often require supplementation with potassium
- Blood glucose values should be monitored and glucose supplemented accordingly
- Refer to the PASA Primate Veterinary Healthcare Manual and other PASA references for details

ADDITIONAL CONSIDERATIONS

- Metabolic acidosis may also be present and is often associated with a high anion gap
- Monitor animal during fluid therapy
- Electrolytes, total protein (TP), packed cell volume (PCV), urine output and specific gravity and body weight

- In limited facilities, body weight is the single best determinant of hydration
- Fluid overload
- → increased body weight and urine output
- → decreased PCV and TP
- Auscultate chest frequently

ANTIMICROBIAL THERAPY

- Antimicrobial use is recommended in nonhuman primates to assist in elimination of the organism
- Culture and sensitivity should be obtained prior to treatment and sensitivity should be monitored throughout treatment
- Antibiotic resistance has been reported with *Salmonella* and *Shigella*
- Primates with greater human contact, especially human refuse, have a higher proportion of antibiotic resistant strains

ANTIMICROBIAL THERAPY / SHIGELLOSIS

- *Shigella* has the greatest propensity for developing multiple antibiotic resistance
- Ampicillin resistant strains are common
- Fluroquinolones, particularly ciprofloxacin, may be a good first choice antibiotic
- Other effective antibiotics may include Trimethoprim-sulfamethoxazole (TMPS), cephalosporins and perhaps Tetracyclines
- Treatment is recommended for a minimum of 5 days

ANTIMICROBIAL THERAPY / CAMPYLOBACTERIOSIS

- Treatment does not change the course of the disease but untreated cases can shed for > 10 days
- Recommended treatment includes
- Aminoglycosides, clindamycin, chloramphenicol, furazolidine, erythromycin, ciprofloxacin and enrofloxacin
- B-lactams are ineffective and resistance has been reported with tetracyclines

ANTIMICROBIAL THERAPY / CAMPYLOBACTERIOSIS

- Some *C. jejuni* strains are resistant to enrofloxacin
- Some *C. coli* strains are resistant to erythromycin
- Due to increased prevalence of combined *Shigella* and *Campylobacter* infections, consider use of parenteral trimethoprim/sulfa and oral erythromycin pending culture and sensitivity

ANTIMICROBIAL THERAPY / SALMONELLOSIS

- Antibiosis does not shorten the clinical course of illness but can eliminate shedding
- Recommended treatment includes
- Cephalothin, cefazolin, trimethoprim/sulfa, ciprofloxacin and norfloxacin
- Many strains are resistant to
- Ampicillin, erythromycin, chloramphenicol, tetracycline, kanamycin and dihydrostreptomycin

- Organisms should be eliminated by 5 days but clinical signs may persist longer

ADJUNCTIVE THERAPY

- Antimotility drugs are contraindicated
- → prolonged secretion
- Fasting is not recommended in young or small animals
- Frequent, small meals are ideal
- Caloric and protein needs should be addressed

CARRIER STATUS

- Chronic carriers are common with *Salmonella* and *Shigella* infection
- Chronic carriers should be identified and isolated or removed from the colony
- Treatment is controversial as it may prolong the carrier state and promote antibiotic resistance
- Reports exist of eliminating the *Shigella* carrier state with long term antibiosis but this is unlikely with *Salmonella* infection

REFERENCES

- Fowler, M. and Miller, E. 2003. Zoo and Wild Animal Medicine, 5th Edition.

Employee Health Programs

**Kenneth N. Cameron, DVM
Tchimpounga Chimpanzee Sanctuary / JGI-Congo**

Rationale

- Animal health
 - Anthroponozoonotic risk
 - captive
 - wild
- Human health
 - Zoonotic risk
 - employees
 - visitors, researchers

Rationale

- >1,400 known pathogens
- 50%+ common to humans and other animals
- >100 anthroponozoonotic threats to great apes

Reminders

- Intended to provide a sample or guideline for what is possible.
- Realize that not all components may be feasible.
- Need to tailor the program based on the specific needs, disease threats (species, regional) and logistical and financial constraints unique to each site.

Components

- Regular clinical examinations
- Routine parasitology & treatment
- Vaccination
- Serum banking
- Case management (treatment)
- Education

Clinical Examination

- Complete physical examination
- GI parasitology (direct smear, flotation, special stains)

- TB testing (intradermal, chest x-rays)
- HIV testing (ideally)
- Testing for hepatitis A, B, C
- Additional serology
- CBC, biochemistries

TB testing

- 0.1 ml PPD tuberculin intradermally
- Read at 48 hours
- Positive: 10 mm or greater induration at injection site
- Follow-up:
 - Chest x-rays
 - Sputum culture
- Prior BCG vaccination will affect intradermal test results.
- Chest x-rays for reactors

HIV Testing

- HIV & susceptibility: HIV +ity puts the employee at greater risk of acquiring TB and other diseases and increases the likelihood of a shedding state.
- Consent
- Confidentiality
- Legal considerations

Vaccinations

- Measles
- Poliomyelitis (IPV, killed)
- Tetanus
- Hepatitis B
- Hepatitis A
- Rabies (based on endemicity, cost, post-exposure intervention available)
- Others regionally prevalent or endemic

Education Program

- Hygiene (hand-washing, toilet usage)
- Sanitation
- Family planning
- STDs / STIs (risk, personal behavior, condom usage)
- Specific disease prevention (endemic to region or facility)
 - malaria
- Chronic conditions / life-style related (hypertension, diabetes)
- regular training sessions
- trust-building

- understanding of the Health Program
- risks and how to minimize them
- community health

Pre-Employment Requirements

PASA Health Care Manual:

- TB test (intradermal & radiography if possible)
- Serology for hepatitis A, B, C
- HIV testing (ideally)
- 2-week quarantine period
 - no primate contact
 - incubation period
 - additional testing
- Vaccination
 - Polio
 - Tetanus
 - Hepatitis B

Beyond the Employee

- Families?
- Family (children) as a reservoir.
- Communities?
- Community health becoming more and more prominent.
- MGVP example.
- Researchers / Volunteers / Consultants?
- Commitment
- Logistics / Expertise
- Financial resources

Tchimpounga Volunteer Health Requirements

- Hepatitis A vaccination
- Hepatitis B vaccination
- Measles vaccination
- Meningococcal meningitis vaccination
- Polio vaccination (or proof of childhood exposure)
- Tetanus vaccination
- Yellow fever vaccination
- TB test negative result (or negative chest x-ray if vaccinated against TB) within the past six (6) months

Potential Limitations

- Employee compliance
- Follow-up diagnostics

- HIV
- Local infrastructure
- Healthcare facilities / expertise
- Finances

Records

- Permanent records
- Maintained by health care provider
- Maintained on-site
- Responsible person – ideally will have one staff person responsible for administrating program
- Tchimpounga – Nurse/Infermier

Health Service Provider

- Facilities available will vary: nurse/internal clinic, local clinic, individual provider, fully-staffed hospital.
- Communication:
 - Medical professionals (zoonotic & anthropozoonotic risks, needs of the program)
 - Employees (results must be communicated)
- Insurance programs (?)

Reminders

- Intended to provide a sample or guideline for what is possible.
- Realize that not all components may feasible – and that much more is possible.
- Need to tailor the program based on the specific needs, disease threats (species, regional) and logistical and financial constraints unique to each site.

Fluid Therapy in Non Human Primates

Steve Unwin
Chester Zoo

- General Principles
- Oral rehydration therapy (ORT)
- Parenteral Fluid Therapy
- Managing malnutrition

General Principles

- Fluid Therapy Aims
 - Rehydration
 - Replacement of ongoing losses
 - Maintenance

A bit about kidneys

- Kidney
 - Regulates water and electrolytes
 - Thus blood volume
 - Sodium concentration
 - which fluids when
 - assessing dehydration
 - the diarrhoea process
-
- Don't give saline via mouth
 - Glucose: Sodium = 1:1
 - Starch (corn/ rice) better than glucose

ORT

- ORT doesn't stop the diarrhoea, but it replaces the lost fluids and essential salts thus treating dehydration
- The glucose contained in ORS enables the intestine to absorb the fluid and salts more efficiently

- ORT alone is an effective treatment for 90-95% of acute watery diarrhoea, regardless of cause

ORS Composition

- Sodium 90mmol/L
- Glucose 111mmol/L
- 2% - never over 3%
- Potassium 20mmol/L
- Banana
- Coconut water
- Bicarbonate 30mmol/L
- Correcting acidosis

Simple ORT Plan

Recommendations

Parenteral Fluid Therapy

- SC
- IP
- IO
- IV

Replacement

Maintenance

Rate of Administration

Example

Parenteral fluids and additives

CHIMPANZEE SOCIALIZATION

Carmen Vidal, Benoit Goossens, Marc Ancrenaz, Emmanuel Dilambaka, Aliette Jamart.
LIMBE 2005

- The most important aspect of the Sanctuary's work is to evaluate the potential for rehabilitation and re-socialization of each primate
- All the animals we rescue have suffered some form of deprivation before they arrived
- Due to their contact with humans, some animals have leapt up the evolutionary ladder in terms of the skills they have
- Strong attachment within the community: this is the first point: "chimp is a highly social species".
- Strong sense of hierarchy / status, leading to a wide and sophisticated range of domination and submissive behaviours
- Sex conditioning or "sex driven society"?
- Strong territorial behaviour
- Need for extensive and lengthy learning process

Chimpanzee Behaviour in the wild

1. Strong attachment within the community: this is the first point: "chimp is a highly social species".
2. Strong sense of hierarchy / status, leading to a wide and sophisticated range of domination and submissive behaviours
3. Sex conditioning or "sex driven society"?
4. Strong territorial behaviour
5. Need for extensive and lengthy learning process

Strong attachment within the community

- ▶ Mother-infant link very strong
- ▶ Social attachments last a lifetime
- ▶ Cooperate
- ▶ Non-dominant individuals intervene by happen
- ▶ The dominant individuals intervention is functional
- ▶ Females mediate society and aggression
- ▶ Males cooperate to hunt

sympatric affinity when the conflicts

Strong sense of hierarchy / status, leading to domination behaviours and submissive behaviours

- ▶ Alpha to Omega ranking very clear and very important
- ▶ Lots of aggressive displays
- ▶ Lots of submissive displays

- ▶ Continuous competition for what: access to females, access to food resources, access to alpha position... Importance of reconciliation processes and of coalitions in groups of chimps
- ▶ Partially defines the order of eating
- ▶ Built-in affinity for domination and submission

Sex conditioning or sex driving society

Alpha male attempts to monopolise oestrous females

- ▶ Basic evolutionary theory in action - the strong get to pass on more DNA than the weak

Strongly territorial behaviour

Troops have clearly defined territory

- ▶ Strong home side advantage in combat
- ▶ "Don't trespass, or we will attack you"

Learning

The present; physical (direct observation); slow

The prime motivation of chimpanzees is physical and emotional security

Cultures

- ▶ Biological culture
- ▶ Adaptation culture:
 - Cognitive culture: - Personal history
- Group history

"Learning" through direct observation

From mother, other members of the group, observation of the environment and other species

First year: link with the mother is the most important

Aggressiveness and capacity to concentrate depends on this

2-3 months:

Recognition capacity: well-known people / unwell-known people: anxiety for changes of uses, troubles for routine changes. Smile reflex

8-9 months:

Establishment of relationships with specific people

Anxiety and trauma at separation. Evocative memory appears

After the first year

Relationship between equals (brothers, same ages chimpanzees). Always positive, very important not to change the assistants

After 2-3 years

Establishment of social links: grooming, pacts, respect for the others

It seems this is the age when separation troubles are more intense

Reasons for concern in the new group adaptation process

Males are more vulnerable to stress than females:

sex is a crucial fact in the new group adaptation process

- ▶ Once one first affective link is established, affective links with other individuals are easier to establish
- ▶ The influence of many traumas suffered during infancy appear some years after the traumatic situation

Reasons for concern in the new group adaptation process
Pacts": called coalition

Basis of relationship in the chimpanzees culture

The new arrival needs to:

1. Learn to pact
2. Recognise the existing, hidden pacts in the group when introduced (relationship intelligence)
1. Learn the sense of "NO"

Reasons for concern in the new group adaptation process

Pathological behaviour parameters (1)

- ▶ Aggressivity: the loose group structure, in essence entails that every individual seeks its own nourishment independently, but there is strong competition for the sources of food; as a result, individuals are relatively aggressive
- ▶ Movements: some behaviour traumas are associated with sequential movements, and stereotypy in general
- ▶ Isolation from the group: Uncooperative behaviour
- ▶ Infanticide? In the wild the pattern of infanticide has been brought about by selective forces
- ▶ Auto mutilation
- ▶ Excessive vocalisations
- ▶ Reduction in grooming: depression
- ▶ Decreased or increased activity

2- Pathological physiologic parameters

Weight loss: reduced food intake

- ▶ Reduction of reproduction
- ▶ Pilo-erection
- ▶ Respiratory signs (e.g.. panting)
- ▶ Cardiovascular signs (e.g.. cyanosis)
- ▶ Fever or hypothermia
- ▶ Abnormal posture or gait
- ▶ Increase in stress hormone levels like cortisol or catecholamines
 - ▶ Increase or decrease in heart rate and/or signs of immunosuppression

These parameters should be used in conjunction with behavioural data, as they might not be unequivocal on their own

What should we do when pathologic parameters appear?

Veterinary procedure and Behavioural procedure

Factors to be considered prior to introductions

Who?

What?

When?

Where?

Why?

How?

Factors to be considered prior to introductions

1. Who?

- Individual characteristics: age, sex, dominance rank, mothering experience, breeding experience
- Behavioural characteristics: aggressive/irritable, submissive/shy, apprehensive/fearful, confident/secure, curious/playful, tense/watchful
- Housing, prior and current: cage or exhibit size
- Social experience:
 - rearing history: mother-reared “how long”, nursery reared alone, other
 - social history, past and current: alone, in a pair, in a peer group, with opposite-sex partners, with younger animals – particularly infants or with older animals
 - negative physical and social experience, past and current: what were the circumstances? Isolation, impoverished housing, restricted housing, other. What behavioural side effect is present?

2. What?

- What end result is to be achieved: group size and composition, primarily breeding, primarily social?

3. When?

- Is there a time limit involved?: new arrival, immediate housing change for animal health or safety...?
- When are the animals to be introduced?: time of day, female oestrus state...?

4. Where?

- Does cage provide captive management control over introduction?: Can humans intervene to separate animals if aggression is severe?

5. Why?

- Why are animals being introduced?: new arrivals, minimize or decrease stereotypies?

6. How?

- What steps are necessary to achieve the hoped-for result?

Facilities used for reintroductions should include:

- Areas that provide full olfactory, visual, and auditory contact while limiting tactile contact between animals
- Enclosures that provide some human control and management during the introduction process

Behavioural procedure

Focussing on the right behavioural procedure is necessary study case by case due to the number of variables involved

Importance of the sanctuary manager and keepers: EXPERIENCE

- ▶ With young individuals
- ▶ With adult individuals If male / If female

With young individuals:

- ▶ When trying to introduce one young orphan individual with similar ages individuals
- ▶ When trying to introduce one young orphan individual to a pre-existing formed group with individuals of different ages
 - ▶ When trying to introduce one young orphan individual with similar ages individuals
 - Promote relationships with similar age co-species
 - The same keeper figure
(some studies talk about the importance of human women figures in the 3 first years)
 - Enrichment (rehabilitation on islands if possible: HELP's experience)

When the young orphan chimpanzee is introduced into a pre-existing group with individuals of different ages

Don't introduce directly

Young individuals need to be protected from the others

How?

The best situation is to be adopted by a dominant female (HELP'S experience): several studies in captive situations show that separating one dominant female from the main group and putting her together with the infant or offspring until affective links are created can be successful

With adult individuals:

- ▶ If male: other adult males can kill him
- Separate enclosures with visual contact (a selected member or members- but sequentially- of the existing group are moved to him as soon as friendly interactions are consistently observed till all the members of the existing group)
 - Enrichment
 - Group formation may require several months, years or never

With adult individuals:

- ▶ If female: more possibilities to be accepted (but beware of aggression from other females?)
- Same procedure than males?
 - Separate enclosures with visual contact, alone or with a subordinate male, NOT the dominant because:
 - when the male returns to the group the hierarchy may have changed
 - stress in the group
 - Enrichment

Drugs to facilitate the introduction of new individual

Anxiolytics:
Sulpiride + haloperidol

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HELP's team

DISEASE TRANSMISSION PREVENTION

**Eric Dubuis, Med. Vet
Manager
JGI – Umhloti Chimpanzee Sanctuary
South Africa**

Infectious and contagious diseases are very important issues which can potentially affect many individuals or spread to a naïve colony. Some pathogen agents are potentially zoonotic (spread from animals to human beings or from human beings to animals). Contagious diseases are caused by different types of agents including viruses, bacteria and parasites. Sources of disease and spread of these agents may include a variety of factors such as water, food, cleaning material, ventilation systems, etc...

The goal is to take measures to stop the transmission of these contagious diseases. Preventive measures should be set up prior to disease outbreak including proper hygiene, vaccination plans and adequate ventilation. These subjects and other important factors will be discussed.

Ridley Method (with SAF and ethylacetate)

Advantage

- A concentration method for cysts and helminth eggs
- Vegetative stadia of protozoa disappear; This problem will be solved when using SAF instead of the normally used formaline
- Morphological details stay well visible
- Sometimes the results are less well from diarrhoea
- As ether is very inflammable; use ethylacetate instead
- The FPC® is used to provide a cleaner preparation with fewer particles of vegetable matter and this may permit a better visualisation of parasite forms; the risk of laboratory infections is reduced
- It is possible to evaluate the intensity of the infection

Method:

1. 3ml of the faeces-SAF suspension is transferred into the FPC®-tube and SAF solution is added till 9ml or +/- 1 gram of faeces is suspended in 9ml of SAF-fixative
2. The container is shaken thoroughly
3. Insert the FPC® filter into the top of a 15ml centrifuge tube and insert those, with the straw out, on the flat tube
4. Pour the faecal suspension through the filter and remove the filter
5. Add 3ml ethylacetate to the filtrate
6. Mix thoroughly for 1 min
7. Centrifuge for 10 min gradually increasing to 500 x g
8. Dislodge the plug of fat and debris using an applicator stick
9. Discard the supernatant (ethylacetate, dirt and SAF) and wipe the inside of the tube with a swab
10. Mix the sediment with 3 drops of SAF (this might be preserved in a serum vial for a long time)
11. Apply one drop of this suspension on an object with a drop of JKJ and make a thin smear to look for cysts. Make a thick smear without JKJ to look for helminth eggs and larvae
12. Cover with a cover glass and examine by 10x10 and 40x10

Disadvantage

- Ether and ethylacetate are inflammable; don't smoke!

FPC®: International Medical Products BV; Postbus 103, 7200AC Zutphen, the Netherlands

SAF fixative

Advantage

- The SAF fixative is better suitable for the fixation of vegetative amoeba and flagellate than formaline
- When it is impossible to check faeces directly for hematophage amoeba, it is better to fix the sample in SAF directly
- Blastocysts and Dientamaeba stay good in SAF but will be unrecognisable in formaline
- SAF-fixed faeces can be concentrated by the Ridley method

Preparations:

1. Sodium acetate 15 grams / Sodium Acetate Anhydrous 9 gr
2. Acetic acid, concentrated 20ml
3. Formaldehyde, 40% 40ml
4. Aqua destillata 925 ml

Dissolve 1. in 4. Consecutively add 2. and 3.

Preserve the solution in a brown bottle

Fixation:

- Mix 1 part of faeces with at least 3 parts of SAF fixative
- Well-fixed faecal samples can be stored at room temperature for a long time
- A direct smear can be made of the SAF-fixed faeces or it can be concentrated by the Ridley method

The blood film diagnosis of malaria

Dr Wendi Bailey (Jan 2005)
Liverpool School of Tropical Medicine

Blood films

- Thick film-x 20 concentration of thin - preferred method for initial diagnosis – with practice skilled staff can examine 200 oil immersion fields in 5 minutes.
- Thin film – **monolayer!** – to examine equivalent area may need to examine for up to 30 minutes before “negative”.

Thick & thin films

Plasmodium falciparum

- Infected RBC normal size & shape, no stippling of RBC - (NB Maurer's in older trophozoites).
- Ring stage predominant- may have 1 or 2 chromatin dots, acolé forms common.
- Multiple infection of RBC common.
- Crescent-shaped gametocyte diagnostic.
- May see schizont – 8-24 (40) merozoites
- Level of infection may be high- % parasitaemia counts should be performed.

Plasmodium vivax

- Enlarged RBC, Schuffner's dots present (except in early ring forms), double chromatin dots may be seen.
- All stages may be seen in blood.
- Multiple infection of RBC may be seen.
- Large round/oval gametocyte.
- Schizont –12-24 merozoites
- Amoeboid trophozoite diagnostic.

Plasmodium ovale

- Some enlargement of infected RBC, up to 30% have fimbriated edges.
- Schuffner's dots except in early ring form.
- Occasional multiple infection of RBC.
- Schizont contains 6-12 (18) merozoites .
- Parasites more compact than in *P.vivax*.
- Round/oval gametocyte.

Plasmodium malariae

- Infected RBC normal or smaller size, normal shape, no stippling of infected RBC.
- Multiple infection of RBC rare.
- All stages may be seen in blood, band form trophozoite diagnostic.

- Small, compact, densely staining parasites with coarse, dark, pigment.
- Schizont 8-12 merozoites in rosette.
- Round/oval gametocyte

Remember!

- If thick film is negative it may be too soon to find the parasite.
- Repeat film as necessary .
- Parasitaemia counts should be performed for all *P.falciparum* infections – if 5% or > potentially life-threatening – inform clinician immediately.
- If in doubt regarding species it is safer to suspect *P.falciparum*.

The making and staining of blood films for malaria parasites

J.W. Bailey
Presented by Steve Unwin
Chester Zoo

Thick films

- Always use new, clean (no fingerprints!) slides.
- Spread blood in an outwardly, increasing circle.
- Don't move slides until completely dry.
- Leave for a minimum of 30 minutes before staining.

Thin films

- Ensure that slide is grease free (polish with an alcohol swab if necessary and dry with clean tissue).
- Make sure that "spreading slide" has a smooth edge.
- Use a SMALL drop of blood and slowly PUSH the blood along the clean slide.
- Slide should dry almost instantly- if not it is probably too thick!

Video clip 1 making blood films

Field's stain for thick films

- Stain in A (blue dye) for 5 seconds, drain.
- Rinse in tap water, 5 seconds
- Stain in B (red dye) about 3 seconds BEWARE this is a strong stain, may take less time, aim is to get see a purple-green colour at the EDGE of the film- it should not look too pink.
- Rinse in tap water 5 seconds, drain and gently rinse BACK of slide to remove unwanted stain.
- Dry upright.

Video clip 2- staining thick films

Thick & thin films

Quick III®stain for thin films

- Using Fixative solution dip slide (moving gently) for about 8 seconds, drain.

- Dip into Solution I (red) for about 8 seconds, drain.
- Dip slide into Solution II (blue) for about 8 seconds, drain.
- Rinse in tap water and dry upright.

Video clip 3 –staining thin films with commercial Quick III stain

WHITE BLOOD CELL COUNT (WBC)

Equipment

Improved Neubauer ruled counting chamber (haemocytometer)
Counting chamber cover glasses

A WBC calibrated bulb pipette and suction tube

Hand counter

Microscope

Reagent: Türk's solution

- Acetic acid, glacial 2 ml
- Distilled water 98 ml
- Gentian violet, 1% w/v*2 ml

*prepare by dissolving 0.1 g gentian violet in 10 ml distilled water and filter

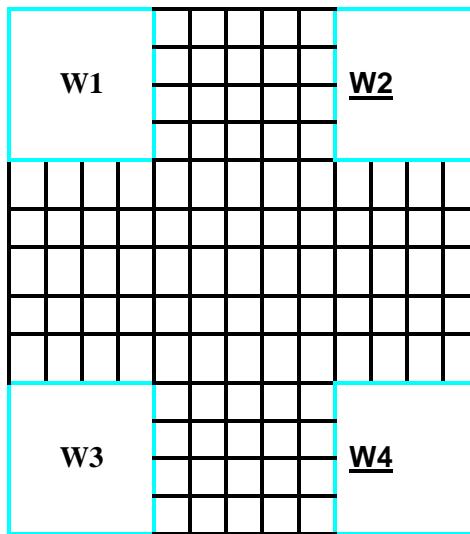
Sample

EDTA anticoagulated venous blood or free flowing capillary blood

Procedure

1. Assemble the counting chamber:
 - a. Make sure the central grid areas of the chamber and the cover glass are completely clean and dry.
 - b. Moisten the chamber surfaces on each side of the grid areas.
 - c. Slide the cover glass into the position over the grid areas and press down on each side until rainbow colours are seen. Check the cover glass is well fixed by turning the counting chamber up side down so the cover glass stays in place.
2. Draw well-mixed EDTA anticoagulated blood or free flowing capillary blood to the slightly above the 0.5 mark of the calibrated bulb pipette.
3. Wipe the blood from around the tip of the pipette.
4. Withdraw the blood down to the 0.5 mark slowly by means of tipping with a swab.

5. Taking care of not pouring the blood out of the pipette, withdraw the diluting fluid or Turk up to the mark 11 above the bulb.
6. Remove the suction tube carefully taking care of not spilling liquid out.
7. Hold the bulb pipette covering the ends with the middle finger and the thumb and mix the contents steady but gently for 3 minutes.
8. By means of controlling the pipette content by covering one of the ends with a finger tip the other end with a swab and remove the first few drops out of the pipette.
9. Hold the pipette in an angle of 45° and fill one of the grids of the chamber from one of the edges of the cover glass. Take care not to overfill the area.
10. Leave the chamber undisturbed for 2 minutes to allow time for the white cells to settle.
11. Place the chamber on the microscope. Using the 10x objective focus the rulings of the chamber and the cells. Focus the cells until they appear as small black dots.
12. Count the cells in the four large corner squares of the chamber marked as W1, W2, W3 and W4. Include in the count the cells lying on the lines of two sides of each large square.
13. Each counting chamber has double grid, so count both sides and divide by two.
14. To obtain the number of white blood cells per litre of blood multiply the number obtained by 50 and the result is expressed, as $\times 10^9$ is the white cell count.
15. After performing the count, before the sample dries, dismantle the chamber, wash and dry it. Store it with the cover glass in a safe place.



Think Tank : Future of PASA Vets

PASA Vet Workshop 2005

Wednesday 6 April 2005

This is the third and final (so far) annual PASA Veterinary Workshop. The three Think Tank groups, involving all workshop participants, addressed the question of where the PASA veterinarians should go from here. It was generally agreed that the annual veterinary workshops are very positive and valuable, and that they should continue.

The groups make the following **recommendations** to PASA:

1. The veterinary workshops should continue annually. One group feels the workshops should be shorter, more focused on certain topics and could be combined with other workshops ie. manager's workshop.
2. Workshops could be focused, to the degree possible, on sanctuaries needed the most assistance (not necessarily those in or near the easiest facilities).
3. Develop a network for communicating material and equipment needs for the sanctuaries, for collecting such items through sources abroad, and for distributing the items to sanctuaries in the field.
4. Participants in this 2005 workshop to provide a preliminary needs list before the end of this conference.
5. Develop a means for sanctuaries to find and acquire relevant scientific articles. The Web of Science was proposed as an excellent site for this. It was suggested that links with academic institutions may be the best method to provide such access, perhaps through existing members or consultants, and possibly putting references on the PASA website (technically challenging and issues of copyright). Possible links proposed
 - a. Doug Cress via University of Dar es Salaam
 - b. Benoît Goossens via HELP Congo.
 - c. Caroline Tutin via CIRMF.
 - d. Link one member of each sanctuary with a University as adjunct professor if possible. Alternatively, each sanctuary can be linked to one person in Europe/USA who has access to library articles and who travels to Africa regularly.
6. Establishing minimum standards for testing certain veterinary procedures. Ideas proposed included: quarantine, necropsy, collecting and banking of biological samples, employee health programs, biosafety procedures.
7. Generally providing lectures on more targeted or specific issues, as updates or additions to issues covered in more general terms previously.
8. Having lecture topics relate to and prepare participants for the wetlabs (in this case, general lectures may still be very appropriate).
9. Assist to the degree possible in acquisition of CITES permits needed for transport of diagnostic samples.
10. Formation of a committee or workshop to address the many questions of reintroduction, and including all appropriate disciplines (veterinary, biology, ecology, primatology, epidemiology, etc.)

11. Continue with efforts to make PASA veterinarians heard in the broader conservation committee and get out the sanctuaries' message.
12. Continue lobbying zoological and other institutions for support of PASA sanctuaries.
13. Education at governmental level: Provide more support to sanctuaries in informing governments of risks associated with certain activities (ecotourism, etc.). This would tie in well with the risk analyses.
14. Insist on the following point for the next PASA- vet workshop : Obligation for every veterinarian attending the workshop to prepare and present at least one personal medical case report.
15. Improve the PASA website, make it more informative and interactive. Should include summaries of the different workshops (education, vet, managers ...), access to the edited CD's , different vet publications.
16. Sanctuaries should consider a standardized preventive health medicine protocol based on the Office International des Epizooties (OIE) for animals which are considered for release.
17. Standardize data collection for all sanctuaries (realizing not every institution will be working on the same level).
18. If PASA is standardized and organized with a foundation of expertise, they can assist other institutions/sanctuaries outwith PASA members whom could benefit from PASA's experience and leadership. eg. Mentor sanctuaries for less equipped sanctuaries (big brother)
19. Create reliable and effective ways to communicate with mentor sanctuary or PASA members, particularly for remote areas, to aid in emergency situations.

Further, the groups propose the following specific topics for future workshops:

1. Quarantine procedures.
2. Biohazard procedures (most specifically in light of possible filovirus and other pathogen exposure).
3. Vaccination policies/recommendations (in light of rapidly changing testing possibilities).
4. Reintroduction issues, including whether or not to vaccinate in sanctuaries, etc.
5. Case studies (these seem to be especially valuable to participants, stimulating a great deal of information-sharing).
6. Biosecurity (lecture and practical).
7. Workup of primate neurological cases.
8. Nutritional aspects (perhaps targeting specific scenarios or species to limit the scope).
9. Risk analysis. It was felt by many that this is a very useful tool for PASA sanctuaries, particularly in light of increasing interest in release programs.
10. Mentoring programmes for African nationals.
11. Continue to pull in related disciplines from within the broader conservation field (in order to both help those within the sanctuary community maintain perspective and to address the critics of sanctuaries).
12. Serology update (update on serological and other testing possibilities).
13. Risk assessment and impact of ecotourism and visitors linked to the animals' health in the Sanctuaries.
14. Favor the creation of a data bank including the experiences and examples of socialization and integration in the different sanctuaries housing Chimpanzees. Make a compilation of the different examples before the workshop (one person in charge), and present the

15. compilation during the workshop. Including also the ways and means by which behavioral problems (stereotypy ...) have been addressed.
16. We recommend hosting an expert in a particular area, for example primate viruses, who will provide a full range of presentations on this topic over a 3 day period. This could be followed by a 2 day discussion session on a similar topic (or not) with practicals/demonstration.
16. Standardization of all PASA Sanctuaries – including medical records, data collection, veterinary techniques, etc. This includes developing a PASA database.



PAN AFRICAN SANCTUARY ALLIANCE

2005 EDUCATION WORKSHOP REPORT



Section 6

**Chimpanzee Sanctuary and Wildlife Conservation Trust
Entebbe, Uganda**

March 7 – 12, 2005

2005 EDUCATION WORKSHOP SPONSORS



THE **WILD** FOUNDATION

Photos provided by Barbara Cartwright.

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Prepared by the participants of the Pan African Sanctuary Alliance (PASA) 2005
Education Workshop, Ngamba Island Chimpanzee Sanctuary, Uganda, March 7 – 12,
2005.

B. Cartwright (editor). Pan African Sanctuary Alliance 2005 Education Workshop Report.



PASA EDUCATION WORKSHOP 2005

EXECUTIVE SUMMARY

The Pan African Sanctuary Alliance (PASA), recognizing the immediate threat of extinction faced by the great apes, stresses the importance of education in reversing that trend. Each sanctuary has the unique opportunity to educate visitors and surrounding communities about the great apes and the dangers they face.

As part of a three-year initiative, PASA hosts annual workshops for Education Officers from member sanctuaries. Workshops focus on skills training, best practices and program design and implementation.

The initial workshop, held in May 2003 at the Chimfunshi Wildlife Orphanage in Zambia, was a great success bringing together local sanctuary education officers from across the continent. In May 2004, PASA hosted the second annual education workshop at Limbe Wildlife Center in Cameroon. The third workshop was held at the Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT) in Uganda in March 2005.

This year there were 17 participants from 11 member sanctuaries, two non-member sanctuaries, and two local NGO's. The workshop was designed and facilitated by PASA Education Director Barbara Cartwright, International Fund For Animal Welfare (IFAW). Guest speakers included Kathy Lehnhardt and Kathleen Gross, Disney's Animal Kingdom, Dr. Peter Apel, Jane Goodall Institute Uganda and Justine Nabakabya from the Uganda Wildlife Authority.

Building on the success of the previous workshops, this workshop followed a similar active and participatory approach that included intense daily seminars, working groups, sanctuary based education activities, case studies and roundtable discussions. The workshop focused on sharing best practices among the education officers with most sessions taught by sanctuary education officers. Each sanctuary was required to present a successful educational activity in a large group sessions in order to build the repertoire of activities available to each sanctuary. Topics included programmatic evaluation, educational activities, sanctuary education program case study, education and conservation theory, communication skills and an opportunity to follow up on programs and workshops designed during the 2004 workshop. As such, participants were presented with three new educational programs for sanctuaries: Protected By Law: threats facing wild animals in trade, Bushmeat Curriculum for Sanctuaries and Green Wisdom. This workshop also presented the opportunity to evaluate the past three years of the Education Committee and set goals for 2005.

Results

1. Best practices shared, with knowledge and skill base augmented
2. Learning from 2003 and 2004 was deepen and broaden
3. Bushmeat programs were launched in 8 sanctuaries
4. New resources were distributed
5. Goals for the PASA Education Committee 2005/2006 were defined
6. Education Officer network increased

Goals for 2005/2006

1. Design and deliver 2006 workshop (Barb Cartwright, Jerry Akaparwa, Jeta Fewoh and Abel Goussiene)
2. Produce a Best Practices Manual (Isaac Mujaasi, Wilson Ateh, Torjia Karimu)
3. Create a prototype communication plan for sanctuaries (Torjia Karimu, Jerry Akaparwa, Issac Mujassi, Wilson Ateh)
4. E-newsletter – July, October, January and April (Isaac Mujaasi)
5. Collect totems, stories, taboos, artwork and poems to create a resource for sanctuaries (Barb Cartwright)



PASA EDUCATION WORKSHOP 2005

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PASA EDUCATION WORKSHOP 2005

GOALS AND OBJECTIVES

WORKSHOP GOALS

- To build on the key learnings, action items and experiences of 2003 and 2004 education workshops.
- To assist each sanctuary in implementing a successful education program that promotes awareness and action on behalf of primates.
- To produce PASA education materials that address critical conservation issues.
- To motivate and build the capacity of local sanctuary staff members to increase education program efficiency.

WORKSHOP OBJECTIVES

By the end of the workshop participants will;

- present examples of the use of ADDIE in their sanctuaries
- analyze pre and post evaluation practices (problems and results)
- state three ways to implement evaluation techniques into their own sanctuary education programs
- understand 2 different educational theories
- state the four learning styles and give 3 examples of how to use them in sanctuary education design
- demonstrate how to incorporate experiential activities into sanctuary education
- understand and practice the art of presentation skills
- finalize a PASA Educator's Best Practices Manual (standards) that will accompany the PASA Education Manual
- Design a program on the use of totems, stories, myths and taboos in conservation education
- Create PASA guidelines of starting a bushmeat education program
- Make recommendations for the future of the PASA education committee and workshops
- Finalize the communication links outside the workshop



PASA EDUCATION WORKSHOP 2005

SCHEDULE

Sunday

6:00 pm Welcome Dinner
 Botanical Beach Hotel Restaurant All

Day One – Monday March 7, 2005

7:00 am	BREAKFAST
8:00 am	All participants meet in the lobby of the hotel depart for Ngamba Island
10:30 am	Arrive at Ngamba Island facility tour from the tourist perspective settle into accommodation
11:30 am	Tea break – settle in rooms
12:45 pm	LUNCH
1:45 pm	Official Welcome and Opening of the Workshop get to know you activity goals for the workshop schedule review
2:30pm	Chimpanzee feeding time
3:00 pm	How Ngamba Does its Work educational programming chimpanzees how the sanctuary operates
5:00 pm	FREE TIME
6:00 pm	DINNER

Day Two – Tuesday March 8, 2005

8:00 am BREAKFAST

8:30 am	Sanctuary Activity	Limbe
9:30 am	2004 Workshop Follow Up Review of key learnings Sanctuary updates	Barbara
10:30 AM	Conservation in Uganda	Dr. Peter Apel Field Programs Manager (JGI)
11:30 am	New Materials Green Wisdom	
12:45 pm	LUNCH	
1:45 pm	Sanctuary Activity	Tchimpouagna
2:45 pm	New Materials Cont Bushmeat Curriculum IFAW bushmeat curriculum	
5:00 pm	FREE TIME	
6:00 pm	DINNER	
8:00 pm	Roundtable Discussion Totems, taboos, and traditions In conservation	Barbara

Day Three – Wednesday March 9, 2005

8:00 am	BREAKFAST	
8:30 am	Sanctuary Activity	Cercopan
9:30 am	Evaluation Basics	Kathy
11:00 am	Sanctuary Case Study methodology and results of the pre and post evaluation of the second Disney project.	Lola Ya Bonobo
12:00 pm	LUNCH	
1:30 pm	Disney Evaluation results trends and applications	Kathy
2:30 pm	Bushmeat Education Program Next round of Disney Grants Determining framework and evaluation	

5:30 pm FREE TIME

6:00 pm DINNER

Day Four – Thursday March 10, 2005

8:00 am BREAKFAST

8:30 am Sanctuary Activity Sweetwaters

9:30 am Learning Theory
Learning Styles Abel Goussine

11:30 am Conservation Education in an
Economically Impoverished Environment Torjia Karimu

1:00 pm LUNCH

2:00 pm Community Visits
Kiimi
Myende Isaac

6:00 pm DINNER

Day Five – Friday, March 11, 2005

8:00 am BREAKFAST

8:30 am Sanctuary Activity HELP Congo

9:30 am How to do a GREAT presentation Barbara

11:30 am Communication Strategy in the
Conservation and Management of species Torjia Karimu

1:00 pm LUNCH

2:00 pm Sanctuary Activity Lola Ya Bonbo

3:00 pm Uganda Wildlife Authority Justine Nabakabya

5:00 pm FREE TIME

8:00 pm Final Banquet

Day Six – Saturday, March 12, 2005

8:00 am	BREAKFAST	
8:30 am	Sanctuary Activity	HELP Congo
9:30 am	What's next? PASA Education Workshops PASA Education Committee	Barbara
11:00 am	Program Evaluation	
12:00 pm	LUNCH	
1:00 pm	Depart Island	
3:30 pm	Settle into accommodation	



PASA EDUCATION WORKSHOP 2005

PROGRAM EVALUATION





PASA EDUCATION WORKSHOP 2005

ANNUAL EVALUATION

Three Things I learned at the 2005 Workshop.....

- Green Wisdom Workshop x 5
- Earth Charter
- Learning Styles x 5
- Conservation Education and Poverty
- Educational Activities from other sanctuaries x 5
- Analyzing pre and post evaluations x 5
- Greater understanding of ADDIE
- Education skills
- Upgraded knowledge on bushmeat crisis and the primates x 2
- How to plan a talk x 2
- Roles of totems, stories and taboos in conservation
- How Ngamba Island does its work x 2
- Using your senses to know the environment
- How to pass education messages from children to parents
- The closeness and feelings that I have for animals
- Experiential activities
- How to use power point in a presentation
- Importance of commitment to achieve set goals and objectives
- Project Rural Appraisal Strategy
- Conservation education
- Fully designing activities
- Being environmentally friendly all the time
- Everyone is important if conservation is to be realized
- Environmental Communication

Three Things that you would improve about the workshop.....

- More on environmental communication
- Better Learning Styles session x 2
- Change locations for each class
- Have more activities than lectures
- Give groups tasks on which to report on each day of the workshop
- A little less sitting and listening, a little more participating
- Accurate feedback on progress of project activities
- Modes of program designs, concrete project implementation reports
- More brainstorming sessions
- More group work
- More theory on education psychology
- How to design a full community based education program

- Full discussion on totems, taboos and traditions
- More games and activities
- All should use power point
- Better communication
- Respect for time
- More teambuilding

Three things you would like to see at the 2006 workshop.....

- The art of public speaking as an educator – understanding your audience and keeping them with you
- Team activities that help us explore ourselves
- Discussion of litigation and policies that affect great apes in our countries / what we can do to promote responsible behaviour
- Practicing learning styles in all our activities
- Holistic approach to conservation
- Learning through Drama
- Best Practices Manual
- Communication Plan
- Education Committee made a reality
- Proposal writing 1
- Wilderness Clubs
- Updates on each sanctuary
- Visits to other natural sites
- Application of ADDIE in the sanctuaries
- Reports from the sanctuaries since 2003 – 2005
- Active participation in soci-political decision making
- Tasks or projects agreed upon should be completed
- Education Officer networking should be improved
- Use of documentaries if possible
- Language lessons in French and Swahili
- Practical session on designing community based programs
- The use of electronic media in conservation education
- Key principles of conservation biology and communication practices
- Planning an evaluation tool
- Analyzing evaluation
- Booklet of the different taboos, totems or traditions
- How have activities evolved based on our new information
- Feedback on Green Wisdom
- More stories and traditions
- Same people, more activities, same facilitators
- Pre and Post evaluation
- More activities form the sanctuaries
- Grant proposal writing workshop



PASA EDUCATION WORKSHOPS 2003 – 2005

3 YEAR PROGRAM EVALUATION

Participant Background

Year 1 – 16 participants from 10 sanctuaries

Year 2 - 16 participants from 11 sanctuaries

Year 3 – 17 participants from 13 sanctuaries

10 participants have attended at least 2 workshops, with 5 participants having attended all three workshops.

As well, each year, PASA has sent a sanctuary education officer to the AZA Professional Training for Conservation Education (Issac Mujassi – CSWCT, Joseph Mulema – Limbe, Sylvia Jones – Chimfunshi).

Reponses to Participant Evaluation Questionnaire

Likerd Scale Questions

Question 1 – 100% indicated that the workshop improved their skills as educators with 80% indicating a marked improvement to a high degree

Question 2 – 100% indicated that their confidence as educators had increased with 40% to a high degree.

Question 3 – 100% indicated that they had used their learnings back at their sanctuaries, with 90% indicating to a greater degree

Question 4 – 100% indicated that the content of the PASA workshops was relevant and useful at their sanctuary with over 80% indicating that it was useful to a higher degree.

Question 5 – 100% indicated that they were useful with 80% of respondents indicating that useful to a high degree.

Overall, what is the most important thing you have learned at the PASA Education Workshops?

- Human contacts in this cultural biodiversity.
- Designing education programs tailored to the audience.
- The importance of report writing.
- The fact many others are dedicated to environmental education.
- Activities relevant for different age groups.
- How to organize community outreach programs.
- Leadership
- How to organize active training.
- Networking
- The importance of and need for evaluation.
- The need for immediate action to avoid extinction.
- How to convey a conservation lesson through learning, discovery and play.
- Learning styles
- The application of ADDIE in conservation programs.
- To work together with other sanctuaries to achieve the fight against habitat destruction and the bushmeat crisis.
- All the sanctuaries are trying to achieve the same thing – PASA unites us.

List 4 things you have learned from the PASA Education Workshop

- ADDIE x 6
- The scale of the bushmeat crisis and how to educate people about it
- Networking and what other sanctuaries face x 2
- Teaching each other
- Evaluation x 4
- Sanctuary/ field based educational activities x 3
- Disney grant
- How to work as a team x 2
- Communication and presentation skills x 3
- The status of primates on the African Continent
- Learning from peers
- Role modeling facilitators
- How to use games to convey conservation messages x 2
- Human/Wildlife Conflict resolution
- Using Totems, taboos and prayers to convey conservation messages
- Community Outreach Program Design
- Leadership skills
- Managing projects with minimal resources
- Learning Styles x 2
- Classroom Education
- Grant Writing

How did the PASA Education Workshop make a difference at your sanctuary?

- Good communication with the Sanctuary Manager.
- Created an education action plan for the sanctuary.
- Improved the methodology and structure of our programs.
- Reformulated the key messages for the program.
- I receive more respect now for my input.
- My programs are more diverse now.
- I have been recognized officially by the government as an Environmental Education Officer because of my attendance at the PASA Education Workshops
- We now have goals and know how to achieve them.
- Collaborating with other conservation organizations in the area of education which was not the case before.
- The workshop opened me to a viable resource of different people that have expertise in my area and so we don't have to work as islands in isolation
- Giving the same message as others.
- Thematic interpretation and messaging.
- It enlarged my understanding of the problems and the approaches that might be undertaken to negotiate them.
- How to be a better tour guide.
- What I have learned here has transferred into other staff and even the government that our cry for the bushmeat slaughter and habitat loss is a serious matter across Africa and the world because they saw lots of other sanctuaries from all over Africa presenting.
- Simplified our methods through the use of videos, charts, materials and many ideas.
- Helped me add variety to the education program. I can reach out to different target groups using different activities matched to their learning style.
- I conduct my programs with detailed methodologies using theories from educational psychology.

In your opinion, do you think you are reaching more people as a result of the PASA Education Workshop?

- YES!
- Thanks to the pre and post evaluations we would say YES!
- Yes, we are reaching more people because through PASA we were able to get a grant from Disney that enables us to do more outreach programs.
- There is no doubt.
- Yes!
- Yes, I am now reaching out to 45 secondary schools as opposed to the 35 before PASA and now I have 20 primary schools but before PASA I had none.
- Yes, through PASA we were able to access funds, which helped us reach underprivileged school groups.
- I am reaching the same audience but with diverse approaches and tools that I had no knowledge of before PASA.
- YES, the change in methodology permits a larger audience and more visits to the sanctuary and more schools.

How have you used your learning back at your sanctuary?

- Pre and Post evaluation.
- Using the PASA education pack to tailor to my sanctuary.
- I trained other sanctuary staff in interpretation skills and styles.
- Used the materials to design and improve our children's material.
- The materials are very useful with the school students – it brings variety.
- Thematic interpretation.
- Using pre and post evaluation.
- Better information on our display boards.
- Developed better programs for specific student groups.
- Passing on a conservation message.
- I am better equipped to plan and design programs.
- Wonderful to have a choice of activities.
- I organized a staff training workshop to pass on the PASA Education Workshop learnings.
- Organized and passed out my skills to students in a workshop attended by more than 200 students annually.
- Talked to other government authorities about practicing the law against wildlife and habitat exploitation.
- Using ADDIE and some of the activities from other sanctuaries we are able to teach our schools.
- Through methodical analysis of previous education programmes and the application of PASA-acquired learnings to my varied education programs including school outreach, community outreach and program evaluation.

How has attending the workshops made a difference to your education skills?

- The workshop has helped to re-enforce previous learning I had about education.
- Through the workshop I have been able to acquire more effective teaching and programme development skills such as ADDIE.
- It has increased my ability to access useful and vital information about primates and conservation education on the African Continent.
- I now know and understand that I am not alone!
- It has given me the courage to stand up and teach what I believe in!
- I have learned more about the bushmeat crisis around Africa so I am able to spread the word about bushmeat.
- Communication with others that are fighting for the same purpose makes me feel not alone.
- I have increased my presentation skills and apply many ideas from the workshop.
- It has given me the confidence to expand and explore myself.
- I take ideas one step further and turn them into comprehensive activities.
- It has taught me that sharing skills and ideas generally improves everything I do.
- It has made me feel very privileged to be part of a group, who really care that they can and do make a difference.
- It has made a difference to make educational skills – for example, now I use pre and post evaluation.
- It has built my confidence, I am a better presenter, I have a better relationship with my manager and it has led to my promotion to Senior Education Officer

- I have become more dynamic and analytical especially during my visitor, school and environmental interpretation, which are now targeted to audiences.
- I have been well informed and become conversant in what is happening in other areas and how we could use their examples to improve or avoid the worst scenarios. Hence I am able to offer informed and realistic ideas.
- Leadership and organizational skills.
- Before the PASA meetings our education program was basic with simple visits, a film and the kindness clubs in schools. After PASA, we organize the youth; we go to the schools and the universities and have seminars with the local communities.
- The experience with my PASA colleagues has given me the motivation to do more – all PASA educators have competence but the PASA workshop give them their performance.
- In the past my tools for passing on messages were slides and nature awareness outings but now I actually go to the school organized nature clubs with defined programs conducted at school.
- Before my primary audience was communities around the sanctuary but now students in primary and secondary schools from the whole division are also important.

Reflections on attending the PASA Education Workshops and how it has helped you with educating someone locally or at your sanctuary:

“Attending the PASA workshops has wrought a positive revolution in my desire to continue advocating for Primates and wildlife in general. PASA has over the years provided me with the rare opportunity of meeting with conservation educators often with an ocean-deep level of experience from all over Africa. My interaction with the above-mentioned persons has helped me acquire improved teaching techniques and also further impetus for excellence in my job. In view of the above, I have been able to better educate compatriots back home using culturally relevant techniques learnt through PASA.”

“My experience at the workshop is one of solidarity with my colleagues and the knowledge that I was not alone in this field. It also emphasized that I was going in the right direction but with less tools – if I were a tree, the workshops have been my watering and fertilizer. It also gave me a lot of self-esteem and self-confidence in my work. Every workshop is a booster! The workshop also helped me groom one staff member of the sanctuary. Now I have a title of education office and the workshop gave me that. The great thing is that the government has officially recognized me as such and I have their support because of the PASA Education Workshops.”

I was interested in the idea of ADDIE. The teaching was to commence in Chimfunshi – my spirit was opened and a new vision of education was created for my program. We had a program for local community members on cutting down the forests for charcoal. I applied ADDIE to it and I think that it was a great exercise and a concrete example of using PASA back at the sanctuary.

Before my first PASA workshop, I used to wonder what impact my work may be having on participants or students. Now, I not only confidently carry out outreach programmes and attend to sanctuary visitors but confidently organize a yearly rally for World Environment Day with over 5,000 students from 45 secondary schools. Moreover, I have better programs designed for attachment students preparing to work as educators for the environment. Now as a better presenter students and lecturers always want me to attend to them when they are on visits or attachment.

Joining the PASA workshop first showed me how we can unite as one and share experiences together, to share each other's passion to help teach people. After the 2004 workshop I spoke to many people about the ideas and skills I had learnt from others. It helped me spread the word about the great apes and the work of other sanctuaries and the bushmeat crisis. Many of the local people have heard about the work we are all doing and have many questions at the end of our talk. What we have learnt shows in our teaching. Having attended the workshop I have many new and great ideas on how to educate the people around me.

Using the PASA inspiration and advice from the other educators, I have acquired knowledge on how to foster and enhance community work. This has led me to revisit our village wet land restoration campaign and income generating options in own village. I have time and again explained to some of my sanctuary colleagues about the environmental problems and situations elsewhere. They now appreciate situations and have tried to use such case scenarios at the sanctuary and in their own lives and to give some realistic options. This was on a large extent a result of the leadership skills, knowledge and strategies taught to me by the other PASA educators.

Pan African Sanctuary Alliance (PASA)

2005 Workshop Report



Section 7

PASA Activities 2004-2005 News Articles



PASA ACTIVITIES 2004-2005

November 2004 – PASA secretariat Doug Cress is joined by Debby Cox and Peter Apell (JGI-Uganda) and other NGO representatives at a meeting in Goma convened by the Congo's Institute for Nature Conservation (ICCN) on Nov. 22 to produce key agreements that will benefit wildlife confiscation, care, and rehabilitation in the region.

December 2004 – PASA secretariat Doug Cress joins IFAW-South Africa's Christina Pretorius at a private meeting with South Africa's Deputy Minister of Environmental Affairs and Tourism to discuss the return of the "Taiping 4" gorillas to Cameroon. The meeting concludes with a commitment to form a technical committee and return the gorillas within six months.

December 2004 – PASA collaborates with the Jane Goodall Institute and the DRC government to help facilitate the transfer of an infant male bonobo, "Boende," from the Lwiro sanctuary facility in eastern DRC to the Lola ya Bonobo sanctuary in Kinshasa.

December 2004 – PASA appoints Wendy Mills, a certified public accountant in Los Angeles who is working towards a Master's Degree in primatology, as its Director of U.S. Business Operations.

January 2005 – PASA collaborates with the Conservation Breeding Specialist Group (CBSG) to release the Pan African Sanctuaries Alliance (PASA) 2004 Workshop Report, which includes complete data, studies, and contact information on PASA and its member sanctuaries. Full reports from the three PASA workshops in 2004 – Management, Education, and Veterinary Healthcare – are included, along with a compilation of news articles highlighting the work of PASA sanctuaries.

February 2005 – PASA collaborates with the Sweetwaters Chimpanzee Sanctuary and the Kenya Wildlife Service (KWS) to rescue and house six chimpanzees and four guenons that were smuggled from West Africa through the Jomo Kenyatta International Airport in Nairobi on January 31.

February 2005 – PASA collaborates with the Brevard Zoo in Florida, USA, and the Columbus (Ohio, USA) Rotary Club to arrange for the delivery of education suitcases for the CERCOPAN (Nigeria) and Lola ya Bonobo (DRC) sanctuaries.

February 2005 - PASA joins with dozens of wildlife conservation and welfare groups to protest Kenya's decision to donate more than 300 endangered animals to a Thailand zoo in exchange for tigers and elephant trainers. "The proposed deal, which presumably was arranged to boost political, trade and tourism prospects with South East Asia, is a tremendous step backwards for Kenyan conservation and will ultimately damage your country's tourism, perhaps fatally," PASA secretariat Doug Cress said, in a statement.

March 2005 – PASA collaborates with IFAW-Canada and JGI-Uganda to stage the PASA 2005 Education Workshop at the Ngamba Island Chimpanzee Sanctuary in Uganda. The six-day program includes topics such as bushmeat, religious taboos and totems, and communication strategies, and featured an address by noted wildlife author and expert Jonathan Kingdon.

March 2005 – PASA reaches a sponsorship agreement with Kenya Airways to provide reduced-rate airline fares to all three PASA workshops in 2005.

March 2005 – PASA collaborates with the Caldwell (Texas) Zoo and the Oakland (California) Zoo to prepare and distribute a donation of more than 350 second-hand keeper uniforms to sanctuaries in Cameroon (Limbe and Sanaga-Yong), Nigeria (Pandrillus), Gabon (PPG), and Congo (HELP Congo and PPG).

March 2005 – PASA sponsors a fact-finding mission by Sanaga-Yong veterinary advisor Cecile M. Neel to visit the Association Papaye France (APF) in Cameroon, where eight infant chimpanzees are being cared for on an island by a French expatriate. Ms. Neel performs health checks on each of the infants and advises the APF on proper nutrition and infant chimpanzee care.

April 2005 – PASA collaborates with the Limbe Wildlife Center, the London Zoo (U.K.), the Chester Zoo (U.K.) and the Wildlife Center of Virginia (U.S.A.) to stage the PASA 2005 Veterinary Healthcare Workshop at Limbe. Over 40 participants from 16 countries take part in the workshop, which focuses heavily on the veterinary healthcare protocol of reintroduction.

April 2005 – PASA issues a statement signed by over 40 primate experts challenging the Government of South Africa to honor its commitment to return the "Taiping 4" gorillas to Cameroon.

April 2005 – PASA sponsors a delegation led by Carmen Vidal of HELP-Congo, Sigal Costo of the Limbe Wildlife Center and Cecile Neel of PASA to the Edea region of Cameroon to perform further health checks, offer nutritional advice, and assess the environment for eight young chimpanzees placed on a small island by the Association Papaye France (APF).

April 2005 – PASA releases a French-language version of the PASA Veterinary Healthcare Manual and makes it available free of charge in both printed form and on CD. The French version of the manual, which was edited by PASA veterinarian Eric Dubuis, Sandrine Mahe (PPG-Gabon), Catherine Sourmail (CCC-Guinea), Christelle Colin (CCC-Guinea) and Sylvie Dubuis (PASA), is drawn from the English-language version that was released in 2004.

April 2005 – PASA collaborates with GRASP / UNEP, the Wasmoeth Wildlife Foundation, the Lusaka Task Force, and CITES to sponsor an investigation into the black-market routes of primate smugglers from West Africa through Nairobi and out to the Middle East.

May 29, 2005 - PASA posts a new inter-active website (www.panafricanprimates.org) that offers up-to-date information on PASA members, workshops, sponsors, contact details, links and volunteer opportunities. The PASA website project, which was managed by Wendy Mills, PASA's director of U.S. business operations, was the result of a collaboration with Dr. Elaine Winston of Hofstra University in New York, USA.

May 2005 – PASA collaborates with the Knoxville (Tennessee) Zoo to send Sylvia Jones of the Chimfunshi Wildlife Orphanage as its annual delegate to the American Zoological Association (AZA) Conservation Education course, which was held in Sacramento, California.

May 2005 – PASA collaborates with Rwanda Office of Tourism and National Parks (ORPTN), the Kenya Wildlife Service (KWS), and the Dian Fossey Gorilla Fund International to transfer a lone adolescent male chimpanzee, “Amahirwe,” to the Sweetwaters Chimpanzee Sanctuary in Kenya.

June 2005 – PASA collaborates with the Sweetwaters Chimpanzee Sanctuary, Kenya Airways, and the Mount Kenya Safari Lodge to stage the PASA 2005 Management Workshop. Presentations included a report evolutionary genetics in chimpanzees, reintroduction programs in Congo and Nigeria, the GRASP summit scheduled for September, the bushmeat trade, and an update on an investigation into illegal smuggling routes that ferry chimpanzees, gorillas and other primates from Nigeria to Sudan, Kenya and Egypt.

June 2005 – PASA officially changes its name to the “Pan African Sanctuary Alliance” and releases a revised logo.

June 2005 – PASA collaborates with the Care for the Wild International foundation in Great Britain to establish the PASA Crisis Fund, which will release up to USD \$50,000 annually for emergency relief and response to PASA members.

July 2005 – PASA collaborates with the Primate Rescue Center in Kentucky (USA) to access medical supplies for sanctuaries in Cameroon (Limbe and Sanaga-Yong) and Uganda (Ngamba Island).

August 2005 – PASA receives permission from the International Primatological Society (IPS) to host two seminars - one on primate reintroduction and the other on conservation education -- at the 2006 IPS congress in Entebbe, Uganda.

September 2005 – PASA announces plans to stage the African Primate Reintroduction Workshop in collaboration with the IUCN, the CBSG, and DEFRA (U.K.) at Apenheul in The Netherlands from April 20-22, 2006.

September 2005 - PASA was well-represented at the landmark Inter-Governmental Meeting (IGM) that was arranged by the Great Apes Survival Project (GRASP) in the DRC, including PASA secretariat Doug Cress, reintroduction committee member Marc Ancrenaz, and sanctuary representatives Aliette Jamart and Halit Khoshen (HELP-Congo), Claudine Andre and Pierrot Mbonzo (Lola ya Bonobo), Tony King and Christelle Chamberlan (PPG-Congo).

September 2005 – PASA collaborates with the Brevard (Florida) Zoo, the Columbus (Ohio) Rotary Club, and the Zambia High Commission to the United States to deliver an education suitcase to the Chimfunshi Wildlife Orphanage in Zambia.

September 2005 - PASA secretariat Doug Cress and PASA veterinary advisor Wayne Boardman made presentations during a workshop entitled “EAZA Support for African Animal Collections” at the 22nd European Association of Zoos and Aquariums (EAZA) conference in Bath, England.

September 2005 - PASA secretariat Doug Cress made several presentations on PASA and reintroduction projects at the American Zoological Association (AZA) conference in Chicago.

October 2005 – PASA collaborates with Lion Country Safari (Florida, USA) to deliver donated second-hand keeper uniforms to the Chimfunshi Wildlife Orphanage in Zambia.

October 2005 – PASA joins with the Born Free Foundation and a host of other NGOs to protest the Government of Kenya’s decision to de-list the Amboseli National Park.

PASA NEWS ARTICLE 2005

PASA

- [Kenya pressured to drop planned wildlife swap](#)
... the Pan-African Sanctuaries Alliance (Pasa), which represents 16 primate refuges in 12 ... 2005 Independent Online. All rights strictly reserved.
www.iol.co.za/index.php?set_id=1&click_id=143&art_id=qw1106912882927B253 - 67k
- [Cameroon Seeks to Reclaim Gorillas from South Africa](#)...CAPE TOWN, South Africa, Oct. 14 /U.S. Newswire/ -- A high-level delegation of Cameroon government officials arrives in South Africa on Saturday ahead of week-long talks intended to secure the return of the "Taiping 4"gorillas...
<http://releases.usnewswire.com/GetRelease.asp?id=55041>
10/14/2005 9:59:00 AM
- [Smuggled gorillas cause poser](#)
Meeting in Limbe, Cameroon, at the Pan-African Sanctuaries Alliance (PASA) 2005 veterinary healthcare workshop, the group said: ...
www.news24.com/News24/South_Africa/News/0,,2-7-1442_1686672,00.html - 58k
- [Zoo Document Admits Taiping 4 Gorillas from Cameroon](#)
...sanctuaries caring for orphaned great apes welcomed the 2005 edition of the ...IFAW and the Pan African Sanctuary Alliance (PASA) believe the government ...
www.wag.co.za/News/juldec/Zoo%20Document%20Admits%20Taiping%204%20Gorillas%20from%20Cameroon.htm - 6k
- [Discussion Forum: Wait a minute! Eti donate 300 w. animals?](#)
... Story by RICHARD CHESOS Publication Date: 1/27/2005 Kenya might ... Safari Lodge, is under "serious" review by Pan Africa Sanctuaries Alliance (PASA), an umbrella ...
www.nationfm.co.ke/forum/display_topic_threads.asp?ForumID=22&TopicID=3470&PagePosition=1 - 101k
- [SA defiant as Cameroon demands gorillas](#)
By John Yeld Cape Argus (SA)
April 11 2005 at
01:06PM...
http://www.iol.co.za/index.php?set_id=14&click_id=14&art_id=vn20050411115422364C447306
- [Life-Saving Decision: Plight of Great Apes Inspired Executive to Change Careers](#)
Orange County Register, Jan. 31, 2005
http://www.kentucky.com/mld/kentucky/news/breaking_news/10816197.htm

Chimfunshi Wildlife Orphanage

- The Legacy of Chimfunshi Chimpanzees Sanctuary

In a world of crass commercialism, Chimfunshi thrives on unconditional love and untrammeled dedication. To read the whole story, please visit
[http://www.times.co.zm/news/viewnews.cgi?category=7&id=1120675164.](http://www.times.co.zm/news/viewnews.cgi?category=7&id=1120675164)

- Feeding the Chimps? Mind Your Fingers!
Zambia Education Post , Saturday, Feb. 12, 2005,
- Chimfunshi Update: Chimps Move to 150-Acre Enclosure
Ring & Bring Copperbelt Direct, Nov. 2004-April 2005

Sanaga-Yong Chimpanzee Rescue Center

- Sheri Speede, chimpanzee champion, answers questions | Grist ...
We are collaborating with Pandrillus and the Cameroon Wildlife Aid Fund in a ...
answer I foresee that the center itself will continue to be supported by ...
[www.grist.org/comments/interactivist/ 2005/10/10/speede/index1.html](http://www.grist.org/comments/interactivist/2005/10/10/speede/index1.html) - 31k - Oct 17, 2005
- Cataract Surgery In Remote Jungle Restores Chimp's Sight
Sunday, October 16, 2005 6:41:32 PM ... a 40-year-old male chimp, at IDA-Africa's
Sanaga-Yong Chimpanzee Rescue center in West-Central Africa. ...
www.buzzle.com/editorials/2-22-2004-50855.asp - 37k
- U.S. Ambassador Makes Chimpanzee Protection a Priority
June 6, 2005...Niels Marquardt, the US Ambassador ...
The Marquardt family visited the IDA-Africa's Sanaga-Yong Chimpanzee Rescue
<http://www.ens-newswire.com/ens/jun2005/2005-06-06-02.asp>

Limbe Wildlife Center

- Cameroonian Gorillas Still Held In ...
The four gorillas, first smuggled from Cameroon into Nigeria, ... It further states that the Limbe Wildlife Centre alone houses different primate species as ...
www.postnewsline.com/2005/04/strongcamerooni.html - 38k
- James and the Other Apes | The Green Report | Animal Tales
Photographed at Limbe Wildlife Center, Cameroon, December 2001.
www.greenzones.org/gliving/news/animal_tales/special_reports_animaltales_002.html - 27k
- Cameroon Wants Smuggled Gorillas Home from South Africa
CAMEROON: April 18, 2005. YAOUNDE - Cameroon called on South Africa on Saturday... the gorillas sent to the Limbe Wildlife Centre in southwestern Cameroon.
www.africanconservation.org/cgi-bin/dcforum/dcboard.cgi?az=read_count&om=40&forum=DCForumID29 - 25k

- [Cameroon Chimp Trafficker Behind Bars](#)
 Thursday, October 13, 2005 10:32:01 AM ... Kita is now in a safe haven at the Limbe wildlife centre in south-western Cameroon. ...
www.buzzle.com/editorials/8-10-2003-44073.asp - 36k
- [Cameroon vs. South Africa in the Battle of the Gorillas](#)
 May 10, 2005, Tuesday...By MICHAEL WINES (NYT); Foreign Desk
<http://www.nytimes.com/2005/05/10/international/africa/10gorilla.html>
- [Gorillas in the Midst...of a Custody Battle](#)

The Times, October 22, 2005...<http://www.timesonline.co.uk/article/0,,3-1837805,00.html>

Cameroon Wildlife Aid Fund (CWAF)

- [Earl Of Wessex Encourages Wildlife Conservation](#)
 POLITIQUE, Dimanche 20 Fevrier 2005. ... The guided tour was led by the director of Cameroon Wildlife Aid Fund (CWAF), Colonel Avi Sivan Abraham. ...
www.cameroon-tribune.net/article.php?lang=Fr&oled=j07062004&idart=16828&olarch=&ph=y - 59k
- [Des étudiants camerounais à l'école de la protection](#)
http://www.lemessager.net/details_articles.php?code=101&code_art=6350

Ngamba Island Chimpanzee Sanctuary

- [Traffickers Smuggle Baby Chimpanzee](#)
 New Vision (Kampala)...April 9, 2005
 By Gerald Tenywa
<http://allafrika.com/stories/200504090180.html>

CERCOPAN

- [Tooze Wins Whitley Award](#)
 Zena Tooze earned the Whitley Award for her work...<http://www.whitleyawards.org/display.php?id=91>

Tacugama Chimpanzee Sanctuary

- [President: Speech: At the Tenth Anniversary ...](#)
 President of the Republic of Sierra Leone at the Tenth Anniversary Celebration ... Finally, I would like to declare the 10th Anniversary of the Tacugama ...
www.statehouse-sl.org/speeches/chimp-ann-oct6.html - 48k

Pandrillus

- Bush-meat traders threaten Nigeria's chimps
<http://www.straight.com/content.cfm?id=13827>

Pan African Sanctuary Alliance (PASA)

2005 Workshop Report



Section 8

Appendices

Name of Sanctuary	Chimpanzee Rehabilitation Association
Location	GAMBIA
Date Established	1974
Mailing Address	PO.Box 2208, Serrekunda Post Office, Gambia, West Africa
Telephone	+220 (0) 4497554(office) or mobile: 9958508
Fax	
Email	CRT@jdmar.freeserve.co.uk
Website Address	www.chimprehab.com
Contact Name	Stella Marsden

Overseas Contact (if applicable)	Chimpanzee Rehabilitation Trust (CRT,UK) c/o Sarah Foster
Mailing Address	7 Glengorse Court, Glengorse, Battle TN33 OTX
Telephone	+44 (0)1424 772251, or mobile +44 (0)7881 687135
Fax	
Email	sarahlin9@aol.com
Website Address	

	2001	2002	2003	2004	2005
Present number of chimps/groups		61	65	69	76
Brief Staff Composition					21
• Director		2	2	2	1
• Education Officer		1	2	2	2
• Caregivers		6	7	7	6
• Security Guards		-	4	4	10
• Volunteers		-	0	0	0
• Veterinarian		-	0	0	0
• Other	Cook/guide 2				
Additional Information					
Carrying capacity		61	65		75
Acquisition rate					
Estimate number illegally held					
Budget		£24,000	£27,000	£30,000	£35,000
Area of expertise	Long term management/integration				

Name of Sanctuary	CERCOPAN
Location	Nigeria
Date Established	1995
Mailing Address	4 Ishie Lane, C/- Housing Estate, PO Box 826, Calabar, Cross River State, Nigeria
Telephone	+234 87 234 670 or mobile +234 (0)803 475 2084 (Calabar)
Fax	
Email	zena@cercopan.org
Website Address	www.cercopan.org
Contact Name	Zena Tooze

Overseas Contact (if applicable)	Bob Baxter or Sarah Seymour (Trustees)
Mailing Address	13 Prestbury Cres, Banstead Surrey UK (BB) Conservation Manager, Durrell Wildlife Trust, Jersey, Les Augres Manor (SS)
Telephone	
Fax	
Email	Sarah.seymor@durrell.org
Website Address	

	2001	2002	2003	2004	2005
Present number of primates/groups (species include: Sclater's, red-eared, Preuss', putty-nosed and mona guenons and red capped mangabeys, patas)				100 (in 14 groups; 6 in quarantine); 7 species	16G/116 primates

Brief Staff Composition (includes both forest and urban centres)

• Director				1	1+1
• Education Officer				2	3
• Caregivers				8	8
• Security Guards				8	8
• Volunteers				4	3
• Veterinarian				1	1
• Other				13	9

Additional Information

Carrying capacity					Full until release
Acquisition rate					8-14
Estimate number illegally held					
Budget					£80,000
Area of expertise	Community partnerships/conservation education/scientific monitoring/ecological research				

Name of Sanctuary	CHIMFUNSHI WILDLIFE ORPHANAGE
Location	ZAMBIA
Date Established	
Mailing Address	PO Box 11190, Chingola, ZAMBIA
Telephone	00 27 1102 311 293
Fax	00 27 1102 311 293
Email	2chimps@bushmail.net
Website Address	www.chimfunshi.org.za
Contact Name	David and Sheila Siddle

Overseas Contact (if applicable)	Chimfunshi-USA
Mailing Address	PO.Box 5873 Boston Ma 02114
Telephone	1-503 238 8077
Fax	1-503 238 8077
Email	chimfunshiUSA@aol.com
Website Address	www.chimfunshi.org.za

	2001	2002	2003	2004	2005
Present number of chimps/groups	83	94	101	105	109
Brief Staff Composition					
• Director			1	1	2
• Education Officer			1	1	2
• Caregivers			12	12	18
• Security Guards			2	3	4
• Volunteers			2	2	
• Veterinarian			1	1	
• Other (Doctor)					1
Additional Information					
Carrying capacity			150		150
Acquisition rate					5
Estimate number illegally held					?
Budget			\$100,000		\$110,000
Area of expertise					

Name of Sanctuary	CHIMPANZEE CONSERVATION CENTER Centre de Conservation Pour Chimpanzés
Location	GUINEA
Date Established	1996
Mailing Address	CCC BP 36 Faranah, Guinea
Telephone	+224 11 58 17 05/ +995 32 31 30 58
Fax	sat phone: 8816 31412525
Email	esthel@yahoo.com
Website Address	www.projectprimate.org
Contact Name	Estelle Raballand, Christelle Colin, Christine Sagno

Overseas Contact (if applicable)	PROJECT PRIMATE, Inc.
Mailing Address	PO Box 191714 DC 20036, USA
Telephone	+1-240-505-6042
Fax	+1-301-258-3043
Email	kconlee@hsus.org
Website Address	projectprimate.org

	2001	2002	2003	2004	2005
Present number of chimps/groups	30 in 3G	31 in 4G	33 in 4G	36 in 5 G	40 in 5 G
Brief Staff Composition					
• Director	1	1	1	1	1
• Education Officer					
• Caregivers	2	2	4	5	4
• Security Guards					
• Volunteers	2	2	2	3 (incl vet)	3 (incl Vet)
• Veterinarian		1 (also manager)	1 (also manager)	1 (also manager)	1 (also manager)
• Other	1 driver				
Additional Information					
Carrying capacity	10-15	10-15	20-25	30	40
Acquisition rate	0	3	3	3	4
Estimate number illegally held	100	100	150	100	200
Budget	\$22,000	\$45,000*	\$35,000	\$35,000	\$55,000
Area of expertise					

*including new car purchase

Name of Sanctuary	DRILL REHAB AND BREEDING CENTER
Location	Cross River State, Nigeria
Date Established	1991
Mailing Address	H.E.P.O Box 826, Calabar, Nigeria
Telephone	+234 87 234 310
Fax	+234 487 234 310
Email	drill@infoweb.com.ng / frill@hyperia.com
Website Address	
Contact Name	Peter Jenkins and Liza Gadsby (Directors) Dr. Ade Egbetade(Manager)

Overseas Contact (if applicable)	Pandrillus Foundation
Mailing Address	PO Box 10082, Portland, OR 97296, USA
Telephone	
Fax	
Email	pandrillus@earthlink.net
Website Address	www.pandrillus.org

	2001	2002	2003	2004	2005
Present number of chimps/drills	21 in 3G	22 in 2G	22/174	25/202	26/242
Brief Staff Composition					
• Director	2	2	2	2	2
• Education Officer	1	-	1	1	1
• Caregivers	22	22	22	16	17
• Security Guards	10	9	9	9	10
• Volunteers	1	2	9	1	2
• Veterinarian	1	1	3	1	2
• Other	Project Manager –1 Misc. staff 10 (total staff: 44)				
Additional Information					
Carrying capacity	20	25	25	35	35
Acquisition rate	3	3	3	2	2
Estimate number illegally held	150-200	150-200	150-200	100-150	100
Budget	\$70,000	\$100,000*	\$120,000	\$120,000	\$120,000
Area of expertise	Vet, general operations, construction, conservation, release/introduction. Drill captive breeding (153)				

Name of Sanctuary	H.E.L.P. CONGO
Location	Republic of Congo, Conkouati-Douli NP
Date Established	1989 (nursery for two years in Pointe Noir and then they were transferred to islands in 1991)
Mailing Address	BP 335, Pointe Noire, Republic of Congo
Telephone	00 242 94 15 20
Fax	
Email	help.congo@cg.celtelplus.com
Website Address	www.help-primates.org
Contact Name	Madame Aliette Jamart
Overseas Contact (if applicable)	Dr.Benoit Goossens
Mailing Address	BEPG. Cardiff School of Biosciences, Cardiff University, PO.Box 915, Cathays Park, Cardiff, CF103TL
Telephone/ Fax	
Email	gossensbr@cardiff.ac.uk
Website Address	www.cf.ac.uk/biosci/research/biodiversity/staff/benoit.html

	2001	2002	2003	2004	2005
Present number of chimps/groups	17 released 24 on islands	17 released 24 on islands	38 released 12 on islands	23 in forest 12 on islands	37 released 29 still followed 12 on islands
Brief Staff Composition					
• Director	1		1	1	1
• Education Officer				1	1
• Caregivers	12		13	18	15
• Security Guards	1		1	1	3
• Volunteers	Yes		Yes	5-7	Yes
• Veterinarian	1		1	1	1
• Other	1 driver				
Additional Information					
Carrying capacity	Full		Full		Full
Acquisition rate	1		1	0	1
Estimate number illegally held	100		100		?
Budget	\$38,000US		\$150,000	\$150,000	\$120,000
Area of expertise	Reintroduction/radio collars, habitat protection				

Name of Sanctuary	LIMBE WILDLIFE CENTER
Location	Limbe, Southwest Province, Cameroon
Date Established	December 1993
Mailing Address	PO Box 878, Limbe, SWP Cameroon
Telephone	+237 998 25 03
Fax	
Email	default@limbewildlife.org
Website Address	www.limbewildlife.org
Contact Name	Felix Lankester

Overseas Contact (if applicable)	Pandrillus Foundation
Mailing Address	PO Box 10082, Portland, OR 97296, USA
Telephone	
Fax	
Email	Pandrillus@earthlink.net
Website Address	

	2001	2002	2003	2004	2005
Present number of chimps/groups; number of gorillas	28 in 2G	27 in 2G	35 in 2G	31 in 2 G 5 in Quar 12 gorillas	37 in 2G 5 in Q 11 gorillas
Brief Staff Composition					
• Director	2	2	2	2	2
• Education Officer	1	1	1	1	1
• Caregivers	15	16	17	13	21
• Security Guards	4	4	3	3	3
• Volunteers	2	2	2	8	1
• Veterinarian		1		3	2
• Other	1 civil servant/conservator				
Additional Information					
Carrying capacity	30	30	32	37	37
Acquisition rate	3	2	4	5	6
Estimate number illegally held	300	300	300	200	
Budget	\$60,000	\$80,000	\$80,000	\$125,000	\$200,000
Area of expertise	Education, vet, fundraising				

Name of Sanctuary	“LOLA YA BONOBO” Sanctuaire des Bonobos de Kinshasha
Location	Democratic Republic of Congo
Date Established	1994
Mailing Address	By post you can only DHL:10 Ave de L'Eglise Ma Campagne Ngaliema, Kinshasha, DRC
Telephone	+243 99 07 737 or +243 (0)81 333 02 34
Fax	
Email	lolayabonobo@ic.cd
Website Address	www.lolayabonobo.org
Contact Name	Claudine Andre

Overseas Contact (if applicable)	Friends of Bonobos
Mailing Address	PO.Box 80254 , Minneapolis MN 55408 USA
Telephone	
Fax	
Email	
Website Address	www.friendsofbonobos.org

	2001	2002	2003	2004	2005
Present number of bonobos/groups	20	22	24	38	44
• Education Officer			2	2	2
• Caregivers	7	7	6	8	7
• Security Guards		5	6	7	2+4police
• Volunteers	1	2	2	3	1fulltime 4partime
• Veterinarian (a)(+1 nurse)	1	1	1	1 + 1	2
• Other	9 site upkeep/cleaning; day labourers (lots); 1 accountant				

Additional Information					
Carrying capacity	20	30	30	80	80
Acquisition rate		3	4	4 INRB /6PPG/+6	+8
Estimate number illegally held			?	?	?
Budget	\$40,000	\$55,000	\$100,000	\$100,000	135,000
Area of expertise	Education, captive care of Bonobos,				

Name of Sanctuary	NGAMBA ISLAND CHIMPANZEE SANCTUARY
Location	Lake Victoria, Uganda
Date Established	October 1998
Mailing Address	PO Box 884, Entebbe, Uganda
Telephone	+256 41 320 662 or mobile +256 77 221 537 (Monty)
Fax	+256 41 320 662
Email	director@ngambaisland.org
Website Address	www.ngambaisland.org
Contact Name	Lilly Ajarova

Overseas Contact (if applicable)	Governed by the Chimpanzee Sanctuary & Wildlife Conservation Trust (CSWCT), which is made up of 5 international trustees: Born Free Foundation, Jane Goodall Institute, IFAW, UWEC, UWS & ECOTRUST
Mailing Address	(contact above email for details)
Telephone	
Fax	
Email	
Website Address	

	2001	2002	2003	2004	2005
Present number of chimps/groups	33 in 2G	36 in 2G	39 in 2G	39 in 2G	39 in 2G
Brief Staff Composition					
• Director	2	2	2	1	2
• Education Officer	1	1	1	1	1
• Caregivers	6	6	6	8	7
• Security Guards	2	2	2	2	2
• Volunteers	Marketing coordinator 1; Peace Corps x 2 for community develop				
• Veterinarian		1	2	2	2
• Other	4 cook/cleaners @ 2 sites; 3 office staff; 2 gardeners/guides				
Additional Information					
Carrying capacity	35	35	35	55-60	45
Acquisition rate	1	3	8	0	0
Estimate number illegally held	0	2-3		0	0
Budget	\$110,000	\$170,000	\$170,000	\$200,000	\$300,000
Area of expertise	Vet, holding facilities, integration, management, eco-tourism, wild population protection and conservation; community development				

Name of Sanctuary	PROJET PROTECTION DES GORILLES, MPASSA
Location	Mpassa, Gabon Plateau Bateke National Park
Date Established	1998
Mailing Address	BP 583 Franceville, Gabon
Telephone	(241)67-11-14 or 241-06-60-73-57 Franceville 882-162-115-7447 sat phone Mpassa base camp
Fax	
Email	ppg gabon@yahoo.fr or mpassa@uuplus.com (base camp – no attachments/photos)
Website Address	
Contact Name	Liz Pearson

Overseas Contact (if applicable)	Amos Courage
Mailing Address	Howletts and Port Lympne Estates Ltd., Port Lympne, Lympne, Nr. Hythe, Kent CT214PD
Telephone	44-1303-264-647
Fax	44-1303-264-944
Email	acourage@btinternet.com
Website Address	

	2001	2002	2003	2004	2005
Present number of gorillas/groups	16	16	15	23 in 2 groups	23 in 2 groups

Brief Staff Composition					
• Director	1	1			1
• Education Officer	1				
• Caregivers	5	7		5	5
• Security Guards				4	6
• Volunteers	3		1		
• Veterinarian			1	1	1
• Other					

Additional Information					
Carrying capacity					
Acquisition rate	-	-			-
Estimate number illegally held	10	10			3
Budget	\$100,000	\$100,000			\$160,000
Area of expertise	Gorilla reintroduction in protected area				

Name of Sanctuary	PROJET PROTECTION DES GORILLES, CONGO
Location	Lesio Louna Reserve/ south-west of Lefini Reserve
Date Established	1988
Mailing Address	BP 13977 Brazzaville, Rep du Congo
Telephone	+242 681 262
Fax	+871 762 031 646 (satellite)
Email	ppg.congo@hotmail.com / ppg@uuplus.com
Website Address	
Contact Name	Christelle Chamberlan

Overseas Contact (if applicable)	Amos Courage
Mailing Address	64 Sloane Street, London, SW1 X9SH, UK
Telephone	
Fax	
Email	acourage@btinternet.com / amosc@howletts.net
Website Address	www.totallywild.org

	2001	2002	2003	2004	2005
Present number of gorillas	19	20 in 2G & 4 bonobos	23 gorillas & 3 bonobos	23	22
Brief Staff Composition					
• Director	1	1	1	1	1
• Education Officer	1	-			
• Caregivers	16	16	14	15	17
• Security Guards	15	15			
• Volunteers		-			
• Veterinarian					
• Other	1 driver/1 logistics/ 2 maintenance/1 scientific advisor				
Additional Information					
Carrying capacity	19	19	19		50-100
Acquisition rate		1	3		
Estimate number illegally held	20	20	20		20
Budget	\$350,000	\$350,000	\$280,000		\$320,000
Area of expertise	Gorilla release/ protected area management				

Name of Sanctuary	SANAGA-YONG CHIMPANZEE RESCUE CENTER
Location	Central Cameroon
Date Established	August 1999
Mailing Address	BP 98, Belabo or BP 1361 Yaounde Cameroon
Telephone	+237 746 1946 or +237 738 5047
Fax	+237 220 92 94
Email	s_speede@yahoo.com
Website Address	www.IDA-AFRICA.org
Contact Name	Sheri Speede

Overseas Contact (if applicable)	Edmund Stone
Mailing Address	700 SW 126 th Avenue, Beaverton, OR 97005 USA
Telephone	+1 503 643 8302/
Fax	+1 530 520 1195
Email	wirteresum@aol.com ; info@IDA-Africa.org
Website Address	www.Ida-africa.org

	2001	2002	2003	2004	2005
Present number of chimps/groups	15	18	33 in 2G	43 in 5G	47
Brief Staff Composition					
• Director	1	1	1	1	1
• Education Officer	1	1	1	1	1.5
• Caregivers	6	6	8	9	9
• Security Guards	4	5	5	6	4.5
• Volunteers	2	2	3	3	2-5
• Veterinarian			Director	Director	Director
• Other	6 (camp attendants/gardeners/manager/personnel chief/handyman)				
Additional Information2					
Carrying capacity	20	20	30	75	75
Acquisition rate					5
Estimate number illegally held	300	300	300	300	?
Budget	\$40,000	\$45,000		\$73,000	\$90,000
Area of expertise	Veterinary				

Name of Sanctuary	SWEETWATERS CHIMPANZEE SANCTUARY
Location	Sweetwaters Game Reserve, Near Nanyuki, Kenya
Date Established	1994
Mailing Address	
Telephone	
Fax	
Email	olpejeta@africaonline.co.ke
Website Address	http://www.olpejetaconservancy.org/chimpanzee-sanctuary-kenya.htm
Contact Name	

Overseas Contact (if applicable)	
Mailing Address	
Telephone	
Fax	
Email	
Website Address	

	2001	2002	2003	2004	2005
Present number of chimps/groups	25 in 2G	25	34	35	44
Brief Staff Composition					
• Director	1	1	1	1	1
• Education Officer			3	1	1
• Caregivers	6	6	6	6	6
• Security Guards	2	2	2	2	2
• Volunteers				0	0
• Veterinarian				0	0
• Other	Fencing staff x 4 + 3 others				
Additional Information					
Carrying capacity	60	60	60+	60+	60+
Acquisition rate	0	1	4	5	5
Estimate number illegally held	0	0		0	
Budget	\$100,000		\$100,000	\$100,000	\$100,000
Area of expertise					

Name of Sanctuary	TACUGAMA CHIMPANZEE SANCTUARY
Location	Western Area Forest Reserve, Sierra Leone, West Africa
Date Established	Sept 1995
Mailing Address	C/- SAB Technologies, PO Box 469, Freetown, Sierra Leone
Telephone	+232 22 224 098 or +232 76 611 211/ +232 77 611 211
Fax	
Email	sab@sierratel.sl & tacugama@yahoo.com
Website Address	www.tacugama.com
Contact Name	Bala Amarasekaran

Overseas Contact (if applicable)	Bala
Mailing Address	212 Wellmeadow Rd, London NSE 61HS
Telephone	44 208 695 5025
Fax	
Email	
Website Address	

	2001	2002	2003	2004	2005
Present number of chimps/groups	40	55	64	68	78
Brief Staff Composition 1					
• Director	1	1	1	1	1
• Education Officer	1	1	2	2	1
• Caregivers	4	4	5	5	6
• Security Guards				1	1
• Volunteers*	1	1		2	
• Veterinarian					1*
• Other	Driver-1				
Additional Information					
Carrying capacity	40-50	40-50	40-50	50-60	70-80
Acquisition rate	10	16	9	6	12
Estimate number illegally held					
Budget	\$30,000	\$25,000	\$30,000	\$35,000	\$45,000
Area of expertise					

Name of Sanctuary	TCHIMPOUNGA CHIMPANZEE REHABILITATION CENTRE
Location	Pointe Noire, Republic of Congo
Date Established	1992
Mailing Address	BP 1893, Pointe Noire, Congo
Telephone	+242 5345398
Fax	
Email	sanctuaryjgi@yahoo.com
Website Address	www.janegoodall.org
Contact Name	Victor de la Torre/Eric Dubuis

Overseas Contact (if applicable)	Keith Brown, Director of Africa Programmes, Jane Goodall Institute
Mailing Address	8700 Georgia Ave, Suite 500 Silver Springs, MD,20910, USA
Telephone	+44 01590 671 188
Fax	+44 01590 670 887
Email	kbrown@janegoodall.org.uk
Website Address	www.janegoodall.org

	2001	2002	2003	2004	2005
Present number of chimps/groups			117 in 7 G	116 in 6G	118 in 7G
Brief Staff Composition					
• Director*			1	1	1
• Education Officer			1		
• Caregivers			17	17	24
• Security Guards			3	3	3
• Volunteers				2	
• Veterinarian			1+1	1+1	1*
• Other	1 logistics officer/ 1 civil servant				
Additional Information					
Carrying capacity			80	80	80
Acquisition rate			10	10	2-3
Estimate number illegally held			100?	100	100
Budget			\$350,000	\$400,000	\$400,00
Area of expertise					

Name of Sanctuary	CAMEROON WILDLIFE AID FUND Yaounde Zoo/Mefou National Park
Location	Central Province, Cameroon
Date Established	Zoo – 07/08/1997 Mefou – 29/05/01
Mailing Address	BP 6508, Yaounde, Cameroon
Telephone	+237 951 3073/220 7579
Fax	+237 220 7578
Email	cwafcameroon@yahoo.co.uk
Website Address	www.cwaf.org
Contact Name	Avi Sivan/Rachel Hogan

Overseas Contact (if applicable)	Neil Maddison, Bristol Zoo Gardens
Mailing Address	Clifton, Bristol, BS8 3HT, UK
Telephone	+44 0117 974 7310
Fax	+44 0117 973 6814
Email	nmaddison@bristolzoo.org.uk
Website Address	www.bristolzoo.org.uk

	2001	2002	2003	2004	2005
Present number of chimps/groups; number of gorillas	37 in 3G	37	52 in 4 G	40 in 5 G 11 gorillas	51-5G 13 gorillas
Brief Staff Composition					
• Director	1	Recruiting	1	1	1
• Education Officer	1	1	1 (partime)	1	1
• Caregivers	12	14	12	17	17
• Security Guards	4	3	3		3
• Volunteers	7	2	6	10	1+1 assist
• Veterinarian/Vet Nurse		1	1	1 + 1 Asst	
• Other					
Additional Information					
Carrying capacity	30	40	100		
Acquisition rate	6		6		10
Estimate number illegally held	300	?	?		?
Budget	\$30,000	\$75,000	\$90,000		
Area of expertise	Community integration, conservation education				

Name of Sanctuary	LWIRO SANCTUARY*
Location	Bukavu, Congo DRC
Date Established	2003
Mailing Address	BP 86,Cyangugu, Congo DRC
Telephone	+250 08 597698/08 538137
Fax	+8717 62213326
Email	gtz@rwanda1.com / shalukchantal@yahoo.fr
Website Address	
Contact Name	Iyomi Bernard, Carlos Schuler, Chantal Shaluk

Overseas Contact (if applicable)	CSWCT/JGI - Debby Cox
Mailing Address	Po. Box 884, Entebbe Uganda
Telephone	+256.41.320 662/077 200602
Fax	+256.41.320662
Email	debby@jgiuganda.org
Website Address	

	2001	2002	2003	2004	2005
Present number of chimps/groups	5	7	12	16 1 bonobo	18 in 2G
Brief Staff Composition					
• Director	1	1	1	1	1
• Education Officer			1	1	
• Caregivers	2	4	4	4	4
• Security Guards	2	2	2	2	2
• Volunteers	2	2	3		
• Veterinarian/Vet Nurse	1	1	1	1	
• Other					
Additional Information					
Carrying capacity			7	15	15
Acquisition rate	3	2	5	3	3+
Estimate number illegally held				30+	30+
Budget			\$12,000	\$12,000	\$25,000
Area of expertise	Surviving in war zone				

* - Not a PASA member.

Name of Sanctuary	THE VERVET MONKEY FOUNDATION*
Location	South Africa
Date Established	1989
Mailing Address	P.O Box 415, Tzaneen 0850, Limpopo Province, South Africa
Telephone	015 304 3484
Fax	
Email	ververts@enviro.co.za
Website Address	www.enviro.co.za/vervet/
Contact Name	Arthur Hunt

Overseas Contact (if applicable)	
Mailing Address	
Telephone	
Fax	
Email	
Website Address	

	2001	2002	2003	2004	2005
Present number of vervet monkeys				628	648
Brief Staff Composition					
• Director					
• Education Officer					
• Caregivers					
• Security Guards					
• Volunteers					
• Veterinarian/Vet Nurse					
• Other					
Additional Information					
Carrying capacity					
Acquisition rate					
Estimate number illegally held					
Budget					

* - Not a PASA member.

Name of Sanctuary	CENTRE FOR ANIMAL REHABILITATION AND EDUCATION (CARE) *
Location	South Africa
Date Established	1996
Mailing Address	P.O. Box 1937, Phalaborwa 1390 South Africa
Telephone	27(15) 769 6251
Fax	
Email	care@lantic.net , info@primatecare.org.za
Website Address	
Contact Name	Rita Miljo

Overseas Contact (if applicable)	
Mailing Address	
Telephone	
Fax	
Email	
Website Address	

	2001	2002	2003	2004	2005
Present number of chacma baboons				357	402
Brief Staff Composition					
• Director					
• Education Officer					
• Caregivers					
• Security Guards					
• Volunteers					
• Veterinarian/Vet Nurse					
• Other					
Additional Information					
Carrying capacity					
Acquisition rate					
Estimate number illegally held					
Budget					

* - Not a PASA member.



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