

# SSP/TAG VETERINARY ADVISOR

## ANNUAL REPORT FORM

SSP/TAG: Common Chimpanzee      DATE: 1 August 2008

### VETERINARY ADVISOR CONTACT INFORMATION:

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**Report was generated from requested information from 41 potential contributing institutions with 4 of these not housing chimpanzees, 8 non-responding, and 29 responding.**

### MORBIDITY (Significant illnesses/issues facing this species this year):

- Long-standing issues of trauma, related to introductions and troop status, with reports of MRSA; respiratory illnesses, usually bacterial but at least one case of viral pneumonia;
- Geriatric diseases of cardiac disease, especially as related to myocardial fibrosis and ventricular hypertrophy; stroke (n=3) with management at three institutions; diabetes mellitus
- Two cases (male) of urethral stricture following insertion of foreign objects by chimpanzee into phallic urethra – one resolved by castration and perineal urethrostomy (see publications) and one resolved by removal and early management
- Consultations on viral – specifically SIV – status of chimpanzees housed in zoos may lead to recommendation for baseline testing

### MORTALITY (Causes of death in this year):

In comparison to prior interval analyzed (1990-2003):

- Mortality rate was increased – 46 in 2004-2008 and 100 in 1990-2003.
- Ages at death markedly increased with prior oldest animals at 39 yr and 43 yr, male and female respectively, and now these ages are 61 yr and 60 yr. Additionally, in prior interval, roughly 1/3 were in the age strata greater than 20 years, now 2/3 were greater than 20 years.
- Neonatal deaths were reduced – 6 deaths in current time period versus 22 deaths previously; this reduction was considered a result of more close management of births and increased contraception efforts.

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Cause of death	<1 dy	1 dy< > 1yr	1-10 yr	10-20 yr	20-40 yr	40yr+
Conspecific trauma	1					
Trauma	1			1		1
Stillbirth/Premature	4					
Hepatic failure	1					
Metastatic melanoma						1
Enteric adenocarcinoma					1	
Hepatocellular carcinoma				1	1	
Ovarian squamous cell carcinoma						1
Exertional rhabdomyolysis			1			
Venomous snake intoxication					1	
Internal abdominal abscess				1		
Peritonitis					2	
Hepatic amyloidosis					1	
Fibrinous pleuritis					1	
Tonsillitis					1 <sup>b</sup>	
Vertebral osteomyelitis						1
Acute renal failure					1	
Non-infectious cardiac disease/ congestive heart failure				1	7 <sup>b</sup>	6
Encephalomyocarditis virus			1			
Metabolic bone disease		1				
Exhibit-related <sup>a</sup>				1 <sup>a</sup>		
Unknown cause				1 <sup>b</sup>	2 <sup>b</sup>	1
Autolysis	1					
<b>Totals</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>18</b>	<b>11</b>

**BIRTHS: See SSP Manager report.**

Males:

Females:

Number of pairs recommended for breeding:

Number of pairs bred:

Number of births:

MALES: mother-reared:

hand-reared:

FEMALES: mother-reared:

hand-reared:

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**ANESTHETIC PROTOCOLS** (Please list successful and unsuccessful protocols):

- Primary protocols include:
  - a) Ketamine alone (n=3)
  - b) Telazol alone or with ketamine (n=8)
  - c) Medetomidine and ketamine (n=12) with four of these pre-medicating with midazolam/diazepam
- Although some veterinarians express great results with option (c), several have expressed concerns of sudden recovery (n=2) intra-procedurally or excessive anesthetic depth or stability issues (n=2).

**VACCINE RECOMMENDATIONS** ( including: Vaccine reactions, new vaccines to be considered):

- Routine tetanus prophylaxis is practiced – with recommendations of every other year to every 10 years with or without supplementation at times of injury (n=8)
- Rabies/MMR/tetanus administered as routine boosters (n=5)
- Only two institutions have administered influenza vaccinations with only one regularly completing.

**CONTRACEPTION** (Methods used, successes, failures):

- Oral contraceptive options were by far the most commonly utilized (n=9) contraception in actively breeding troops with good success, minimal side effects.
- Vasectomies (n=7) are also very common for non-actively breeding troops.
- Other contraception options utilized in this four year period were Depoprovera (n=1) and MGA (n=4).
- Deslorelin was discussed but had not yet been utilized.

**ACTIVE RESEARCH PROJECTS:**

- Validation of Chembio testing for mycobacterial organisms in common chimpanzee.
- Ankle motion study
- Various behavioral and cognitive studies
- Blood typing in great apes
- Cardiac health biomarkers (pending)

**NUTRITIONAL RECOMMENDATIONS:**

- Concerns expressed about role of excessive citrus fruits and starches and its relation to inflammatory bowel disease

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### NEW HEALTH CARE RECOMMENDATIONS:

- Echocardiography (heart ultrasound) has the potential to detect many cardiac concerns. Some of these can be treated with ventricular hypertrophy specifically finding some reparation through early, low-dose enalapril.
- The primary cardiac lesion, and often associated with sudden death or anesthetic death, is myocardial fibrosis which is not apparent on echocardiograms. Although this lesion has been seen in gorilla, the chimpanzee appears to present in a more acute manner without prior detection.
- Discussions are underway with researchers investigating cardiac biomarkers – serum markers – which may give early indications or diagnosis of “silent” cardiac disease.

### NEW SSP/TAG PROTOCOLS:

See Standard Care Guidelines

### INFORMATION FROM THE FIELD:

- Several consultations this time period, including intervention options for neurologic disease presentation, post-aggression interactions, and pathology reviews.

### REFERENCES FOR THE BIBLIOGRAPHY/WEBSITE:

Mutlow, AG, WB Mauch, JW Carpenter, T Smith. 2006. SURGICAL PROCEDURE AND POSTOPERATIVE MANAGEMENT OF A PERINEAL URETHROSTOMY IN A CHIMPANZEE (*PAN TROGLODYTES*). *Journal of Zoo and Wildlife Medicine* 37(3): 381-6.

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