



Department of the Interior
U.S. Fish and Wildlife Service

OMB No. 1018-0093
Expires 05/31/2017

Federal Fish and Wildlife Permit Application Form

RCVD AUG 05 2015

LB

Return to: U.S. Fish and Wildlife Service
Division of Management Authority (DMA)
Branch of Permits, MS: 1A
5275 Leesburg Pike
Falls Church, VA 22041-3803
1-800-358-2104 or 703-358-2104

Type of Activity:
EXPORT/RE-EXPORT/IMPORT/INTERSTATE AND
FOREIGN COMMERCE/TAKE OF ANIMALS
(LIVE SAMPLES/PARTS/PRODUCTS) (ESA and/or CITES)
(circle/highlight proposed activity)
☒ New Application
☐ Requesting Re-issuance/Amendment of Permit#: _____

Complete Sections A or B, and C through H of this application. U.S. address may be required in Section C, see instructions for details.
See attached instruction pages for information on how to make your application complete and help avoid unnecessary delays.

A. Complete if applying as an individual			
1 a. Last name	1 b. First name	1 c. Middle name or initial	1 d. Suffix
2. Date of birth (mm/dd/yyyy)	3. Social Security No.	4. Occupation	5. Affiliation/ Doing business as (see instructions)
6 a. Telephone number	6 b. Alternate telephone number	6 c. Fax number	6 d. E-mail address

B. Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution			
1 a. Name of business, agency, Tribe, or institution University of Illinois, Vet Diagn Lab		1 b. Doing business as (dba) NA	
2. Tax identification no. 37-600-0511		3. Description of business, agency, Tribe, or institution Veterinary Diagnostic Laboratory	
4 a. Principal officer Last name Fredrickson	4 b. Principal officer First name Richard	4 c. Principal officer Middle name/ initial L	4 d. Suffix Dr.
5. Principal officer title Director		6. Primary contact name Dr. Karen Terio	
7 a. Business telephone number 708-216-1185	7 b. Alternate telephone number	7 c. Business fax number 708-216-5934	7 d. Business e-mail address kterio@illinois.edu

C. All applicants complete address information				
1 a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes) Zoological Pathology Program, LUMC Bldg 101 Rm 0745, 2160 S First St.				
1 b. City Maywood	1 c. State IL	1 d. Zip code/Postal code: 60153	1 e. County/Province Cook	1 f. Country USA
2 a. Mailing Address (include if different than physical address; include name of contact person if applicable)				
2 b. City	2 c. State	2 d. Zip code/Postal code:	2 e. County/Province	2 f. Country

D. All applicants MUST complete	
1. Attach check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount of \$100 nonrefundable processing fee. Federal, Tribal, State, and local government agencies, and those acting on behalf of such agencies, are exempt from the processing fee - attach documentation of fee exempt status as outlined in instructions. (50 CFR 13.11(d))	
2. Do you currently have or have you ever had any Federal Fish and Wildlife permits? Yes <input checked="" type="checkbox"/> If yes, list the number of the most current permit you have held or that you are applying to renew/re-issue: <u>14US203197/9</u> No <input type="checkbox"/>	
3. Certification: I hereby certify that I have read and am familiar with the regulations contained in Title 50, Part 13 of the Code of Federal Regulations and the other applicable parts in subchapter B of Chapter I of Title 50, and I certify that the information submitted in this application for a permit is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to the criminal penalties of 18 U.S.C. 1001. <u>[Signature]</u> <u>DVM</u> <u>7/24/15</u> Signature (in blue ink) of applicant/person responsible for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)	

E. EXPORT/RE-EXPORT/IMPORT/INTERSTATE AND FOREIGN COMMERCE/TAKE OF NON-NATIVE ANIMALS (Live/samples/parts/products) (CITES and/or ESA)

Allow at least 90 days for the application to be processed. Applications for endangered species permits must be published in the Federal Register for a 30-day public comment period.

Complete all questions on the application. Mark questions that are not applicable with "N/A". If needed, use a separate sheet of paper. On all attachments or separate sheets you submit, indicate the application question number you are addressing. If you are applying for multiple specimens, be sure to indicate which specimen you are addressing in each response.

1. What activity are you requesting authorization to carry out (Indicate appropriate activities):

EXPORT ☒

IMPORT ☐

INTERSTATE COMMERCE ☐

FOREIGN COMMERCE ☐

*Interstate Commerce permits authorize the sale of endangered and threatened species across State lines, but only for that will contribute to enhancing the propagation or survival of that species. Captive-breeding alone will not generally meet this requirement. Scientific research must be related to the species to be permitted. Interstate commerce activities with wildlife require the buyer to obtain a permit prior to the sale.

2. For EACH animal/specimen involved in the proposed activity provide:

Scientific name (genus, species, and, if applicable, subspecies)	Common Name	Birth/Hatch Date (mm/dd/yyyy) Or Approximate date	Quantity	Gender, if known	Permanent markings (e.g., tattoo, ID #, microchip #, scars), if alive	Type of Sample or product (e.g., blood, tissue, DNA)
EXAMPLE: <i>Macaca fascicularis</i>	Crab-eating macaque					
<i>Acinonyx jubatus</i>	Cheetah	see attached addendum	49	mixed	NA	glass slides and paraffin tissue blocks

3. The current location of the specimen(s) (address and country):

Name: Dr. Karen Terio

Business Name: Zoological Pathology Program, University of Illinois Veterinary Diagnostic Laboratory

Address: LUMC Bldg 101 Rm 0745
2160 S First St

Address:

City: Maywood

State/Province: IL, 60153

Country, Postal Code: USA

4. Recipient/Sender:

- If export, provide name and address of the recipient in the foreign country.
- If import, provide name and address of the exporter in the foreign country.
- If interstate or foreign commerce, provide name and address of recipient.

Name: Dr. Emily Lane

Business Name: National Zoological Gardens in South Africa

Address: 232 Boom Street

Address:

City: Pretoria

State/Province: 0002

Country, Postal Code: SOUTH AFRICA

F. SOURCE OF SPECIMEN (answer question 5 or 6 for each animal/specimen involved, as appropriate).

5. For each animal or animal from which specimen are obtained born in captivity:

- a. If you are the **breeder** of the specimen(s), please provide a signed and dated statement that includes the following:
 - i. Scientific name (genus, species, and, if applicable, subspecies) and common name;
 - ii. That the animal was bred and born at your facility;
 - iii. Birth/hatch date (mm/dd/yyyy), and, if applicable, identification information (as described in question 2b above);
 - iv. Name and address of your facility where each animal was bred and born; and
 - v. Location (Name of facility, address, city, State/province, postal code) of parental stock.
- b. If you are **NOT the breeder** of the specimen(s), provide copies of documentation showing that you acquired the animal from the breeder or documentation demonstrating the history of transactions (e.g., chain of ownership of the animal) and a signed and dated statement from the breeder or breeder's record that clearly includes the following:
 - i. Scientific name (genus, species, and, if applicable, subspecies) and common name;
 - ii. That each animal was bred and born/hatched at his/her facility;
 - iii. Birth/hatch date (mm/dd/yyyy), and, if applicable, identification information (as described in question 2b above);
 - iv. Name and address of the breeder's facility; and
 - v. Location (name of facility, address, city, State/province, postal code) of parental stock.

6. For each animal/specimen **taken from the wild**, provide the following:
- Scientific name (genus, species, and, if applicable, subspecies) and common name;
 - Specific location of where, when, and by whom (name and address) the specimen was removed from the wild;
 - Purpose of removal and length or approximate length of time held in captivity;
 - Describe your efforts to use captive specimens (e.g., captive-born, captive-held), or parts thereof, in lieu of taking animals from the wild.
 - Copies of your foreign or domestic collecting permit, license, contract or agreement;
 - Documentation showing that the specimen(s) was legally obtained by the applicant; and
 - Copies of any applicable State, Tribal, Federal, or Foreign government permits or licenses that authorized the removal of this animal from the wild.

G. JUSTIFICATION FOR REQUESTED ACTIVITY.

7. Provide a full statement justifying the proposed activity, particularly the following:
- Describe the purpose of your proposed activity. For example, if the purpose is scientific research, attach a copy of your research proposal outlining the purpose, objectives, methods (e.g., specific information on survey/collection methods, sampling regime, equipment to be used), and whether similar work has already been done or is currently being done. If the purpose is conservation education, provide copies of educational materials (e.g., handouts, text of signage or public presentations), and include the purpose and objectives of the proposed activity. If the purpose is for propagation for conservation purposes, provide a description of how the species will be propagated, disposition of progeny, and cooperative agreements that are/will be established for re-introduction.
 - Description of the technical expertise of each person (please include CV or resume), as it relates to the proposed activities. If the proposed activity involves the import of live animals, include the experience of each animal caretaker working with the species.
 - Copies of contracts, agreements or other documents that identify persons involved and dates of activities for which authorization is being requested.
8. Provide a statement on how the activities will **enhance or benefit the wild population** (e.g., in-situ and ex-situ projects).
9. If live specimens are to be held in captivity as part of the proposed activity:
- Provide a detailed description (e.g., size, construction materials, protection from the elements) and photographs or diagrams (no blueprints, please) clearly depicting the existing facilities **where the wildlife will be maintained**. If the specimens will be housed at multiple facilities, either immediately or within the next year, provide a full description of each facility. If you are unsure of which facilities may be receiving specimens (e.g., SSP has not made final decision), please indicate likely candidates and the mechanism that will be used to determine recipient facilities.
 - A statement of the specific technical experience of CV or resume available to the recipient(s) for maintaining and propagating live specimens of the same or similar species.
 - The number of years each species has been maintained at the facility;
 - The number of births by year for each species for the last 5 years; and
 - Mortalities at the facility with these or similar species in the last 5 years, causes of such mortalities, and steps taken to avoid or decrease such mortalities.

18. Who should we contact if we have questions about the application? (Include name, phone number, and email):
Dr. Karen A. Terio 708-216-1185 ktero@illinois.edu

19. **Disqualification Factor.** A conviction, or entry of a plea of guilty or nolo contendere, for a felony violation of the Lacey Act, the Migratory Bird Treaty Act, or the Bald and Golden Eagle Protection Act disqualifies any such person from receiving or exercising the privileges of a permit, unless such disqualification has been expressly waived by the Service Director in response to a written petition. (50 CFR 13.21(c)) Have you or any of the owners of the business, if applying as a business, been convicted, or entered a plea of guilty or nolo contendere, forfeited collateral, or are currently under charges for any violations of the laws mentioned above?

☐ Yes ☒ No If you answered "Yes" provide: a) the individual's name, b) date of charge, c) charge(s), d) location of incident, e) court, and f) action taken for each violation.

Addendum to 3-200-37 Form for Re-Export of Cheetah Tissues**University of Illinois Vet Diagn Lab Application****Contact: Dr. Karen Terio kterio@illinois.edu; 708-216-1185****E. 2. Specimen Inventory:**

All specimens were obtained at post-mortem from naturally deceased cheetahs that were captive held in South African zoological institutions and captive breeding facilities. Specimens include glass slides and tissue blocks owned by the National Zoological Gardens in Pretoria SOUTH AFRICA (NZG). Original source of specimens was NZG and the current permit request is to re-export the samples to NZG (see Section 14 for canceled import permit). See attached for further individual animal information.

Scientific Name	Common Name	Quantity	Type of Sample	Source
Acinonyx jubatus	Cheetah	14	Glass slides kidney, heart, liver	captive/deceased
Acinonyx jubatus	Cheetah	1	Glass slide of kidney, heart, liver, intestine, bladder	captive/deceased
Acinonyx jubatus	Cheetah	1	Glass slide of kidney, liver, lung	captive/deceased
Acinonyx jubatus	Cheetah	1	Glass slide of kidney, heart, liver, stomach	captive/deceased
Acinonyx jubatus	Cheetah	1	Glass slide of kidney, heart, liver, stomach, lymph node	captive/deceased
Acinonyx jubatus	Cheetah	1	Glass slide of kidney, liver, thyroid, adrenal	captive/deceased
Acinonyx jubatus	Cheetah	1	Glass slide of kidney	captive/deceased
Acinonyx jubatus	Cheetah	14	Glass slides of kidney, heart, liver	captive/deceased
Acinonyx jubatus	Cheetah	12	Tissue blocks of kidney, heart, liver	captive/deceased
Acinonyx jubatus	Cheetah	1	Tissue block of kidney	captive/deceased
Acinonyx jubatus	Cheetah	1	Tissue block of kidney, spleen, adrenal	captive/deceased
Acinonyx jubatus	Cheetah	1	Tissue blocks of kidney, thyroid	captive/deceased

F. SOURCE OF SPECIMEN

5. a. Not applicable (NA)
b. Original source of specimens was the National Zoological Gardens in South Africa and the current permit request is to re-export the samples to the National Zoological Gardens in South Africa (see Section 14 for canceled import permit). All samples were obtained

at post-mortem examination from naturally deceased captive held cheetahs. Additional identifying information is on the attached inventory sheet. See also copies of canceled permits from 2012 when samples were imported into the USA for testing.

- i. all specimens (49 total) are from *Acinonyx jubatus*, cheetah
- ii. Specimens are post-mortem tissues obtained opportunistically from naturally deceased captive cheetahs from South Africa between 2003-2012 and previously held at the National Zoological Gardens
- iii. see attached for individual animal identification information page titled: "Additional Cheetah Information for export and CITES permit"
- iv. National Zoological Gardens of South Africa
23 Boom St. Pretoria, South Africa
- v. see attached "Additional Cheetah Information for export and CITES permit"

6. NA – no samples were taken from the wild

G. JUSTIFICATION OF REQUESTED ACTIVITY

7. a. Purpose of Proposed Activity: We are requesting re-export of glass slides and tissue blocks to the National Zoological Gardens (NZG) in Pretoria. These specimens were originally imported into the United States from NZG in 2012 for scientific research (see attached canceled permits and cleared 3-177 form). We have been researching diseases of cheetahs in collaboration with Dr. Emily Lane at NZG. For this study, samples were obtained opportunistically at post-mortem examination (n=49) from naturally deceased cheetahs that died between 2003-2012. Tissues were selected by Dr. Lane because they contained crystals consistent with calcium oxalate. Because advanced testing of crystals within tissues is not available in South Africa, tissues were imported to the United States in 2012 for testing. Testing was completed at the request of Dr. Lane and NZG. Specifically, sections of tissue were examined using RAMAN spectroscopy to identify the composition of crystals. The goal of this research was to better understand the mechanisms underlying development of oxalate crystals in captive cheetahs so that the disease can be better prevented and treated. Prior to this import, similar research had never been completed in cheetahs. RAMAN testing is now complete and we would like to return all tissues to NZG so that they can return to their biomaterials archives. NZG was the original owner of these biomaterials and it is important that we return these tissues to NZG and South Africa as they are part of their natural heritage.

b. Both Dr. Karen Terio (University of Illinois) and Dr. Emily Lane (NZG) are board certified veterinary pathologists with extensive experience studying diseases affecting cheetahs (see attached CVs). Drs. Terio and Lane have collaborated on other cheetah research and are both co-authors of a chapter "Wild Felid Diseases: conservation implications and management strategies" in the Biology and Conservation of Wild Felids eds DW MacDonald and AJ Loveridge (Oxford University Press, 2010).

c. NA

8. Testing of these samples was conducted to better understand a disease noted in captive cheetahs. As a result of this research, there is the possibility that the disease may have a genetic component. If found, this could have implications of the management and translocation of wild cheetah populations and would necessitate genetic screening so that the disease is not

inadvertently transferred to populations free of the disease. Return of the blocks to NZG is important for South Africa, as these cheetah tissues are part of their natural resource heritage. The NZG is part of the National Research Foundation of South Africa and maintains a biomaterials bank for species native to South Africa, both from captive and wild specimens to be used in scientific research that benefits the conservation of these species.

9. NA – no live specimens are being re-exported. All specimens were obtained opportunistically during post-mortem examinations from previously deceased cheetahs that were housed in South African captive facilities. Specimens were sent to the US for advanced testing not available in South Africa.

H. IMPORTS, EXPORTS, OR RE-EXPORTS

10. NA – no live specimens are being re-exported

11. NA – specimens are from cheetahs not marine mammal specimens

12. NA – permit is for re-export of specimens used of scientific study

13. See attached Import permit (#152504) authorizing re-importation of tissues into South Africa valid until 12 July 2016.

14. Re-Export of Sample

- a. See attached cancelled CITES export and import permits from the original importation of these samples
- b. See attached Cleared 3-177 form DEC Control#2012156261
- c. NA

Additional

Cheetah information for export and CITES permit

House name	Chip	Studbook no	Location	Age	Sex	PM no	Histo no	Captive	Wild	Tissue types	Blocks	Slides
Jochin	000 122 7903	3833	Cango	8 yr	M	-	WS415.03	Y	N	Kidney, heart, liver		1
M324	00-0143- 4950	NZG on loan 3980 from AvDCC		8 yr	M	04/223	04H9095	Y	N	Kidney, heart, liver	1	
Sahara	000 021 50AD	3682	Cango	Adult	F	-	05H062	Y	N	Kidney, heart, liver, intestine, bladder		1
Romeo	00- 002223B5T	3333	Hoedspruit	14 yr	M	06/080	81486.08	Y	N	Kidney, heart, liver		1
Foxler/HOE 22	00-0858- 474ET	6914	Hoedspruit	3 yr	F	06/313	Z41	Y	N	Kidney, liver, lung		1
Messina/ HOI	00-0858- 4754T	6880	Hoedspruit	5 yr	M	06/315	Z39	Y	N	Kidney, heart, liver		1
Thunder	000 1D3 1918	3532	Cango	8 yr	F	07/006	Z52	Y	N	Kidney, heart, liver, stomach		1
Lara/F40B/ DI T	00063447E4	4334	AvDCC	5.5 yr	F	07/084	Z127	Y	N	Kidney, heart, liver		1
Cola/PHOTO	00-012E- 891C	3822	Cango	12 yr	F	07/084	Z134	Y	N	Kidney, heart, stomach, lymph node		1
G46/ DEW51/ BE39	00-0137- 00010F	3990	AvDCC	8 yr	F	07/109	Z143	Y	N	Kidney, heart, liver	1	
Curly/Beiall	00-0136- 7A52T	4264	Hoedspruit	Adult	M	07/175	Z203	Y	N	Kidney, heart, liver		1
K45/ DEW51/ 807C	00-012B- CE8A	3989	AvDCC	8.5 yr	M	07/227	Z267	Y	N	Kidney, heart, liver		1
F349/ DEW51/ 1C5	00-012B- CE8A	4113	AvDCC	8 yr	F	07/448	07Z431	Y	N	Kidney, heart, liver		1
Cal	000 6B31 000 635	4152	Cango	8 yr	F	08/041	08Z033	Y	N	Kidney	1	
Dez/ CC136	3990	5583	Cango	5 yr	F	08/603	08Z398	Y	N	Kidney, heart, liver	1	
Sandton Lady	46608-0141- 01BET	3586	AvDCC	12 yr	F	08/151	08Z122	Y	N	Kidney, liver, thyroid, adrenal		1
Bianca/ CC 1: 0006399FBE	00063907E0	4505	Cango	8 yr	F	09/360	09Z187	Y	N	Kidney, heart, liver	1	
Cayla/ CC12E T	00-0136- 4390	5575	Cango	8 yr	F	09/500	09Z246	Y	N	Kidney, spleen, adrenal	1	
Cockeye M32	4390	3974	AvDCC	11.5 yr	M	09/539	09Z286	Y	N	Kidney		1
Astro/M474	00-083D- F3E4	NZG on loan 5693 from AvDCC		6.5 yr	M	09/608	09Z289	Y	N	Kidney, heart, liver	1	
Gondor M607	4959182455	7804	AvDCC	8.5 yr	M	10/300	10Z177	Y	N	Kidney, thyroid	1	
Duma/ CC13: 00063DD100	00063DCB0	5580	Cango	8 yr	M	10/750	10Z423	Y	N	Kidney, heart, liver	1	
AJ07/04, Scu ET	000611AA3A	6062	Namibia	7 yr	F	10/829	10Z448	Y	N	Kidney, heart, liver		1
M415 T	4530	4530	AvDCC	10 yr	M	11/239	11Z105	Y	N	Kidney, heart, liver		1
Ganza/ CC16	00066921CF	6526	Cango	4 yr	M	11/410	11Z159	Y	N	Kidney, heart, liver		1
F373/ DEW51	8224	4297	AvDCC	11 yr	F	11/412	11Z160	Y	N	Kidney, heart, liver		1
Juba	no chip 9651400001	no studbook r Tshwane		17 yr	M	11/609	11Z230	N	Y	Kidney, heart, liver		1
F538	13532 8780000009	5820	AvDCC	7 yr	F	11/625	11Z233	Y	N	Kidney, heart, liver		1
Bongo	85084	7020	Cango	6.5 yr	M	11/830	11Z235	Y	N	Kidney, heart, liver		1
Duma	no chip	4234	CCB	15 yr	M	11/632	11Z236	Y	N	Kidney, heart, liver	1	
Zorro	4359770B7E	6516	Cango	12 yr	M	12Z019	12Z019	Y	N	Kidney, heart, liver	1	
Jack	no chip 00-083D-	6266	JHB Zoo	12 yr	M	12Z029	12Z029	Y	N	Kidney, heart, liver	1	
Rambo/M498	950DT	5717	AvDCC	9 yr	M	12Z118	12Z118	Y	N	Kidney, heart, liver		1
Hopalong M5	434F42095E	4312	AvDCC	11 yr	M	12Z129	12Z129	Y	N	Kidney, heart, liver	1	
Dominic	433486416F	6515	Cango	9 yrs	M	12Z137	12Z137	Y	N	Kidney, heart, liver	1	

EMILY LANE

WORK EXPERIENCE

Dec 2006 – present

Senior Researcher

Wildlife Epidemiology Research Programme, National Zoological Gardens of South Africa (Pretoria)

Veterinary Pathologist

Specialising in wildlife and exotic pet pathology

- Diagnostic pathology service for the Zoological Gardens,
- Diagnostic pathology service for Centre

Senior Lecturer in Pathology, Faculty of Veterinary Science, University of

- Diagnostic services for the Dept of Pathology
- Lectures and practical training for undergraduate and postgraduate veterinary students at the University of, including participation in the departmental production of a training CD on veterinary pathology
- Diagnostic pathology service for NorthWest Parks

General Veterinary Practitioner,

Busy practice including companion and farm animals

Pathology Resident, Faculty of Veterinary Science, University of

Assist with diagnostic services and practical training for undergraduate veterinary students

Student externship, Department of National Parks

Survey of large mammals in the valley and production of tourist maps for all of National Parks

ADMINISTRATIVE AND FUNDRAISING EXPERIENCE

Annual operational, incentive and research funding, provided by

Thuthuka National Research Foundation grant to investigate the genetic component of amyloidosis in cheetahs, including funding for a BSc Honours and Master's student

awarded to the Zoological Gardens of Conservation Fund by the National Research Foundation as a research partnership bilateral agreement to investigate the genetic component of oxalate nephrosis in cheetahs, part of a multidisciplinary international research programme into this topic initiated in with (Univ of

Upgrade of necropsy facilities at the Zoological Gardens of project of

awarded by the United States Fish and Wildlife Service, Wildlife Without

Borders, Africa Skills Development for Disease Monitoring in the Great Limpopo Transfrontier Conservation Area

awarded by the Wildlife Conservation Society, Field Veterinary Program Wildlife Health Fund Skills Development for Disease Monitoring in the Great Limpopo Transfrontier Conservation Area

Veterinary pathology practice:

Organising committee: Wildlife and Livestock Disease and Sustainability: What makes sense? International Joint Conference for the Society of Tropical Veterinary Medicine and the Wildlife Disease Association.

Obtained and administered funding from the Veterinary Foundation to subsidize wildlife necropsies: University of Faculty of Veterinary Science

Administrative assistant: Associated Colleges of the Midwest Programme in

STUDENT CO/SUPERVISION

Master's student, Genetic variability in cheetah amyloidosis

PhD student, Canine Distemper molecular ecology

Master's student, Cetacean pathology

EDUCATION

Registered as a Veterinary Specialist Pathologist

College of Veterinary Pathologists

Master's of Philosophy, Veterinary Science, University of Indicators of health and disease in free-ranging impala

Membership by examination, College of Veterinary Surgeons,

University of

Awards: Class prize Zim Vet Assn prize for best final year student

BA Biology, College, USA

Awards

Studies Summer Institute National Parks and Wilderness on the

COURSES ATTENDED

Performance management, National Research Foundation of

Statistical Modelling, University of and University of

Practical implementation of ISO17025 for testing laboratories internal audit, Johannesburg, South Africa

The Examination of Fish: viewed by Pathology and Clinical Pathology, Aquarium, USA

Excel Modules 1&2. Keybase Training Solutions, [REDACTED]
[REDACTED] DVM Foundation on Diagnostic Pathology of Diseases of
Aerial, Terrestrial and Aquatic Mammals. [REDACTED] USA

Reference Manager, University of [REDACTED]

[REDACTED] DVM Foundation Symposium on diagnostic dermatopathology, [REDACTED]

[REDACTED] Disease Risk Assessment Training Workshop, [REDACTED]

[REDACTED] DVM Foundation [REDACTED] Annual Review of the Gross Morbid Anatomy of
the Diseases of Animals [REDACTED] USA

Management and Leadership Skills Awareness Workshop, University of [REDACTED]

MS Access 97, University of [REDACTED]

Windows 95, University of [REDACTED]

[REDACTED] DVM Foundation First Southern and Eastern Africa Veterinary Pathology
Symposium [REDACTED]

Course on Physical and Chemical Capture of Wildlife

MEMBERSHIPS

- [REDACTED] College of Veterinary Surgeons
- [REDACTED] Veterinary Council
- [REDACTED] Veterinary Association & Wildlife Group
- American Association of Veterinary Laboratory Diagnosticians
- [REDACTED] College of Veterinary Pathologists EL
- The Ann van Dyk Cheetah Trust Management and Research Committee
- IUCN SCC Wildlife Health Specialist Group
- Member: Great Limpopo Transfrontier Park Veterinary Sub-committee
- Advisory committee member: Wildlife Conservation Society – Animal Health for Environment and Development Programme AHEAD-GLTFCA
- [REDACTED] National Department of Health Zoonosis Committee

PUBLICATIONS

2015	<ol style="list-style-type: none">1. Suspected dietary lead poisoning in two captive cheetah Michelle North, Emily Lane, Kelly Marnewick, Peter Caldwell, Glen Carlisle, and Louwrens Hoffman. Accepted by JSAVA June 20152. Essa Suleman, Moses Sibusiso Mtshali and Emily Lane Investigation of false positives associated with Loop-Mediated Isothermal Amplification (LAMP)
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	assays for detection of <i>Toxoplasma gondii</i> in archived tissue samples of captive felids accepted pending corrections JVDI
	3. Morné de Wet, Emily Lane, Peter Wohlsein, Ursula Siebert, Peter Thompson, and Stephanie Plön The Importance of a Standardized Necropsy Protocol for Small Cetaceans in South Africa draft: SA journal of wildlife research (accepted)
2014	4. J. P. Dubey, Emily P. Lane, Erna van Wilpe, Essa Suleman, Bjorn Reininghaus, S. K. Verma, B. M. Rosenthal, and Sibusiso Mtshali 2014. <i>Sarcocystis cafferi</i> , N. Sp. (Protozoa: Apicomplexa) from the African buffalo (<i>Syncerus caffer</i>) Journal of Parasitology 100 (6): 817-827. doi: http://dx.doi.org/10.1645/13-467.1
	5. Lane EP, de Wet M, Thompson P, Siebert U, Wohlsein P, Plön, S. (2014) A Systematic Health Assessment of Indian Ocean Bottlenose (<i>Tursiops aduncus</i>) and Indo-Pacific Humpback (<i>Sousa plumbea</i>) Dolphins Incidentally Caught in Shark Nets off the KwaZulu-Natal Coast, South Africa. PLoS ONE 9(9): e107038. doi:10.1371/journal.pone.0107038
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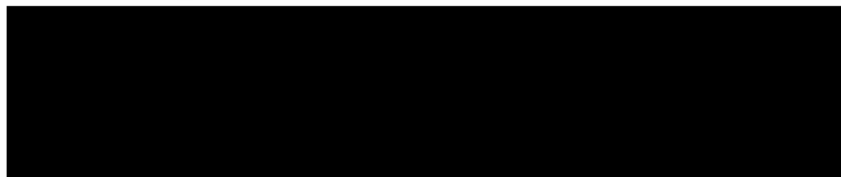
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	41. <i>Olivia Carulei</i> , Nicola Douglass, Anna-Lise Williamson, David Zimmerman, Mark D. Anderson, Emily Lane, Erna van Wilpe, Antoinette Kotze

	42. Isolation and Phylogenetic Analysis of an Avipoxvirus from a Population of Lesser Flamingos (<i>Phoeniconaias minor</i>) near Kimberley, South Africa Poster Presentation, XVIII International Poxvirus, Asfivirus and Iridovirus Symposium 5-10 June 2010, Sedona, Arizona, USA.
	43. EP Lane. Animal CSI – Why Pathology Works for Zoos. PAAZAB Annual Congress, 13-16 April, 2010, The Strand, South Africa
	44. EP Lane, R Costa, MP Penrith, J Lawrence. Skills Development for Disease Monitoring in the GLTFCA 10th AHEAD-GLTFCA Working Group Meeting 23-26th April, 2010, Hazyview, South Africa
	45. Michel AL, Hlokwe TM, Espie IW, van Zijll Langhout M, Koeppel K, Lane E. Human Tuberculosis in Captive Wild Animal Populations: Trends in South Africa and Implications for “One Health” . Oral Presentation, International Society of Veterinary Epidemiology and Economics Durban, South Africa, 10-14 August 2009
2011	46. EP Lane, Kotze A; Koeppel K, Barrows M, Michel A Hlokwe T; Gey van Pittius NC. Articular Mycobacteriosis in Painted Reed Frogs (<i>Hyperolius viridiflavus</i>) from the Johannesburg Zoo, South Africa. ACVP Annual Meeting Monterey California 2009 (poster)
	47. Lane EP, Dalton D, Kotze A, Mbatha K, Rankin J, Rehse T, Thabelo M, Tordiffe ASW Pemphigus foliaceus in a group of Arabian Oryx at the National Zoological Gardens of South Africa, South Africa. . ACVP Annual Meeting Monterey California. 2009 (poster)
	48. Lane EP, Dalton DL, Kotze A, Mbatha KR, Rehse TPR, Stam EM, Tordiffe ASW; Henton M. Necrobacillosis in captive springboks (<i>Antidorcas marsupialis</i>). ACVP Annual Meeting Monterey California 2009
2010	49. EP Lane, Kotze A; Koeppel K, Barrows M, Michel A Hlokwe T; Gey van Pittius NC. Articular Mycobacteriosis in Painted Reed Frogs (<i>Hyperolius viridiflavus</i>) from the Johannesburg Zoo, South Africa. Wildlife Group meeting of the SAVA. 6th Nov. 2009
	Lane EP, Dalton D, Kotze A, Mbatha K, Rankin J, Rehse T, Thabelo M, Tordiffe ASW Pemphigus foliaceus in a group of Arabian Oryx at the National Zoological Gardens of South Africa, South Africa. Wildlife Group meeting of the SAVA. 6th Nov. 2009
	50. Lane EP, Dalton DL, Kotze A, Mbatha KR, Rehse TPR, Stam EM, Tordiffe ASW; Henton M. Necrobacillosis in captive springboks (<i>Antidorcas marsupialis</i>) Wildlife Group meeting of the SAVA. 6th Nov. 2009
	51. EP Lane Necropsy examination of Zoo animals. Post-symposium workshop. 1st African Symposium on Zoological Medicine. 20th July, 2009. National Zoological Gardens of South Africa.
2009	52. EP Lane The role of pathology in disease investigation in zoos. 1st African Symposium on Zoological Medicine. 18-19th July, 2009, Johannesburg Zoo.
	53. EP Lane The role of Pathology in Wildlife Disease Investigation (lecture and practical). Practical Wildlife Disease Investigation Course, Faculty of Veterinary Science at the University of Pretoria, March 2009
	54. EP Lane Skills Development for Disease Monitoring in the Great Limpopo Transfrontier Conservation Area. 9th AHEAD-GLTFCA Working Group Meeting, Namaacha, Mozambique March 2009
	55. EP Lane Skills Development for Disease Monitoring in the Great Limpopo

	Transfrontier Conservation Area. 8 th AHEAD-GLTFCA Working Group Meeting, White River, South Africa March 2008
	56. E. Lane, A. Kotze, I. Espie, A. Kharibe, A. Tordiffe, P. Bartels, The role of the National Zoological Gardens in Wildlife Disease Diagnosis in South Africa. 4 th South African Veterinary and Paraveterinary Congress 2008, Sun City, July 2008
	57. E. P. Lane, A. Kotze, I. Espie, P. Bartels Wildlife Disease Monitoring at the National Zoological Gardens, South Africa. 25 th Annual Meeting of the European Society of Veterinary Pathology, Munich, Germany, Sept 2007
	58. E. P. Lane, A. Michel, I. Espie, N. Gey van Pittius, A. Kotze Mycobacterium xenopi mesenteric lymph adenitis in an adult Ruffed Lemur (<i>Varecia variegata</i>). Poster. 25 th Annual Meeting of the European Society of Veterinary Pathology, Munich, Germany, Sept 2007
	59. N. M. Duncan and E. P. Lane. The macroscopic and microscopic pathology associated with outbreaks of exotic Newcastle disease in commercial poultry and pigeon paramyxovirus infection in Laughing Doves (<i>Streptopelia senegalensis</i>) in South Africa. American Association of Avian Pathologists Annual Congress, Washington DC., 2007
	60. E. Lane, I. Espie, L. Venter, M. Henton Necrobacillosis in Springboks (<i>Antidorcas marsupialis marsupialis</i>). 2005. PAAZAB Annual Congress, National Zoological Gardens, Pretoria, 2005
	61. EP Lane The Role of Pathology in Game Ranch Management. Symposium on Game Ranch Planning and Management, Wildlife Group of the SAVA., Kyalami March 2004
	62. EP Lane Mortality records for Cheetah (<i>Acinonyx jubatus</i>) in South Africa 1975-2003. S. A. Vet. And ParaVet. Congress, Cape Town, 2004
2008	63. E. P. Lane. Necropsy technique for wildlife – what the practitioner needs to know. S. A. Vet. And ParaVet. Congress, Cape Town, 2004.
	64. E. P. Lane. Necropsy technique for wildlife – what the practitioner needs to know. S. A. Vet. And ParaVet. Congress, Cape Town, 2004.
	65. EP Lane Does the severity of kennel cough depend on the length of the trachea? Bordetella bronchiseptica in <i>Giraffa camelopardalis</i> . Wildlife Disease Association Africa and Middle East Section, 2nd Annual Meeting, Onderstepoort, Pretoria, 6-7 Nov. 2003
2007	66. E. P. Lane. Necropsy technique for wildlife – what the practitioner needs to know. S. A. Vet. And ParaVet. Congress, Cape Town, 2004.
	67. EP Lane Does the severity of kennel cough depend on the length of the trachea? Bordetella bronchiseptica in <i>Giraffa camelopardalis</i> . Wildlife Disease Association Africa and Middle East Section, 2nd Annual Meeting, Onderstepoort, Pretoria, 6-7 Nov. 2003
	68. A. D. Pardini, J. P. Nurton, A. J. Guthrie, P. G. Howell, and E. P. Lane Experimental equine encephalosis virus infection in ponies.. Equine Practitioners Group Congress, SAVA, Magaliesburg 2001
	69. EP Lane The Role of Pathology in Game Ranch Management. Symposium on Game Ranch Planning and Management, Wildlife Group of the SAVA., Kyalami March 2004
	70. E. Lane and L. Bolton. Field necropsies made easy. 5 th International Wildlife Ranching Symposium, Pretoria. 2001

2005	71. <i>E. Lane and L. Bolton</i> The role of pathology in wildlife ranching (poster). 5th International Wildlife Ranching Symposium, Pretoria. 2001
2004	72. <i>E. Lane</i> Cryptococcosis in cheetahs. A symposium on cheetahs as game ranch animals, Onderstepoort South Africa, October 1998
	73. <i>J. A. Picard, E. Lane & M. Louw.</i> Coccidiosis in South African wildlife. L. M. Lopez-Rebollar, M. F. Mul, S. S. Bastianello, E. P. Lane & D. T. de Waal. VIIth International Coccidiosis Conference, Oxford UK, Sept. 1997
	74. <i>E. Lane.</i> Health and Disease Management in a free-ranging impala: herd health schemes for wildlife. Centenary Veterinary Association of Namibia Congress, Etosha. 1994
	75. <i>J. A. Picard, E. Lane & M. Louw.</i> Coccidiosis in South African wildlife. L. M. Lopez-Rebollar, M. F. Mul, S. S. Bastianello, E. P. Lane & D. T. de Waal. VIIth International Coccidiosis Conference, Oxford UK, Sept. 1997
	76. <i>E. Lane.</i> Health and Disease Management in a free-ranging impala: herd health schemes for wildlife. Centenary Veterinary Association of Namibia Congress, Etosha. 1994
	77. <i>E. Lane.</i> How to conduct a post-mortem (practical demonstration). Zimbabwe Veterinary Association annual course in physical and chemical immobilization of wild animals, Harare 1994
2003	78. <i>E. Lane.</i> Condition assessment in impala (poster). 3rd International Wildlife Ranching Symposium, Pretoria, 1992
2001	79. <i>E. Lane.</i> How to conduct a post-mortem (practical demonstration). Zimbabwe Veterinary Association annual course in physical and chemical immobilization of wild animals, Harare 1992
	80. <i>E. Lane.</i> How to conduct a post-mortem (practical demonstration). Zimbabwe Veterinary Association annual course in physical and chemical immobilization of wild animals, Harare 1990
	81.
1998	82.
1997	83.
1994	84.
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1992	86.
	87.
1990	88.

REFERENCES:





**Karen Andrea Terio, D.V.M., Ph.D.,
Diplomate A.C.V.P.**

EDUCATION

██████████ College, ██████████
BA ██████████, Honors in Biology

██████████ University, ██████████
D.V.M. with Thesis

University of ██████████
Ph.D. Candidate, (transferred)

University of ██████████
Ph.D.

ACADEMIC POSITIONS

University of Illinois, Champaign-Urbana
Clinical Assistant Professor, Zoological Pathology Program
Clinical Associate Professor, Zoological Pathology Program

On faculty in the Zoological Pathology Program (ZPP) division of the Veterinary Diagnostic Laboratory and the Department of Pathobiology. Provide pathology services to the Chicago Zoological Society's Brookfield Zoo, John G. Shedd Aquarium, Lincoln Park Zoo, Cook County Forest Preserve District, Fort Wayne Children's Zoo and several other national and international zoological and wildlife organizations. Coordinate anatomic pathology residency and veterinary student externship programs. Train pathology residents and veterinary students on a daily basis in pathologic lesions of non-domestic species as well as pathology techniques. Supervisor for the ZPP Molecular Diagnostic Laboratory overseeing research, development, validation and implementation of molecular (PCR) based diagnostic assays for use in non-domestic species. Conduct independent research on diseases of non-domestic species and supervise graduate student research.

University of ██████████
School of Veterinary Medicine
Lecturer for Zoo and Wildlife Pathology
Assistant Research Pathologist

On faculty in Department of Pathology, Microbiology and Immunology at the School of Veterinary Medicine. Supervised and trained anatomic pathology residents during rotations on the necropsy floor, biopsy service and through seminars. Trained veterinary students in pathology during fourth year rotations through the necropsy service. Supervised all aspects of the necropsy and biopsy service during duty weeks including histopathologic evaluation of samples, coordination of ancillary testing and client/clinician communications. Coordinated "Zoo Pathology Rounds" with clinicians

in the zoo and exotic animal services. Course leader and lecturer for "Comparative Pathology of Non-Mammalian Vertebrates" course for veterinary students. Conducted independent research on diseases of cheetahs and collaborative research with colleagues in the Wildlife Health Center and exotics medicine service.

OTHER PROFESSIONAL EMPLOYMENT

Zoological Society of [REDACTED]
Third-Year Resident, Pathology

University of [REDACTED]
Post-Graduate Researcher and Pathology Fellow

OTHER PROFESSIONAL ACTIVITIES

Certification Examination Committee Member, American College of Veterinary Pathologists [REDACTED]
[REDACTED]; General Chair [REDACTED] Ad-hoc Phase I Exam Committee member [REDACTED]

Certification Examination Committee Proctor, American College of Veterinary Pathologists [REDACTED]

Nonhuman Primate Pathology Workshop Leadership Committee [REDACTED]

Veterinary Advisor (Appointed Position), American Zoo and Aquarium Association (AZA)
Animal Welfare Committee [REDACTED]

Pathology Advisor, AZA Felid Taxon Advisory Group; Cheetah, Black-footed Cat, Clouded Leopard, Sand Cat, Fishing Cat, Ocelot, Pallas' cat, and Chimpanzee Species Survival Plans (SSP);

Scientific Advisor, Elephant Care International

Scientific Advisory Board, Cheetah Conservation Fund

Pathologist, USFWS Riparian Brush Rabbit Recovery Program [REDACTED]

HONORS AND AWARDS

Wildlife Medicine Award, [REDACTED] University School of Veterinary Medicine - [REDACTED]

[REDACTED] D.V.M. Foundation Scholarship Award in Veterinary Pathology - [REDACTED]

American Association of Zoo Veterinarians, Winner Post-Graduate Competition - [REDACTED]

INVITED NATIONAL AND INTERNATIONAL LECTURES AND PRESENTATIONS

"Using molecular diagnostics to advance aquatic animal medicine and pathology" International Association of Aquatic Animal Medicine Annual Conference, [REDACTED] Foundation Pathology Workshop, [REDACTED]

"Seeing spots and spirals: Cheetahs, Helicobacter, and Gastritis" Zoobiquity Research Symposium, Stanford University School of Medicine, [REDACTED]

"Influenza, respiratory syncytia virus, and metapneumovirus in wild and zoo-housed great apes." Primate Pathology Workshop, American College of Veterinary Pathologists, Annual Conference, [REDACTED]

"Why Pathology is Important", "Performing a Necropsy", "Pathology of Primates", "Pathology of Ungulates", "Pathology of Carnivores", "Advanced Diagnostics" USAID Emerging Pandemic

Threats Program Regional Pathology Training Workshop. [REDACTED].

"Using Molecular Diagnostics to Advance Marine Mammal Medicine and Pathology" [REDACTED]
College of Veterinary Pathologists, Annual Conference [REDACTED]

"The Cheetah Paradigm: Genetics, Gastritis, *Helicobacter* and Stress" University of Guelph Invited
Lecture in joint Pathobiology and Animal Sciences Seminar Series. [REDACTED]
[REDACTED]

Procesos patológicos relevantes en felinos silvestres en la naturaleza. Iberian Lynx Conservation
Seminar Series, [REDACTED]

Procesos patológicos relevantes en felinos silvestres en cautividad. Iberian Lynx Conservation
Seminar Series, [REDACTED]

"Impact of stress on the health of captive wildlife: the cheetah paradigm" American College of
Veterinary Pathologists, Annual Conference [REDACTED] (co-author with Dr. Linda Munson)

Town-Hall Meeting "Status of Pathology Training Programs" Panel Member American College of
Veterinary Pathologists, Annual Conference [REDACTED] (One of six invited panel members
giving a presentation on the state of pathology training programs and answering questions from
ACVP members).

"Diseases of wild felids" Workshop on Lynx Veterinary Aspects, Programa de Conservacion del
Lince Iberico [REDACTED]

"Pathology and ecosystem health: beyond the microscope" Annelisa M. Kilbourn Memorial Lecture,
[REDACTED] University School of Veterinary Medicine, [REDACTED]

"Comparative inflammatory responses of non-mammalian vertebrates: Robbins and Cotran for the
Birds" American College of Veterinary Pathologists, Annual Conference, [REDACTED]

"Physiological effects of stress and resulting diseases in zoo/aquarium animals" American Zoo and
Aquarium Association Annual Conference, [REDACTED]

"Endangered species research and conservation: building on veterinary student experiences to a
career." [REDACTED] University School of Veterinary Medicine. [REDACTED]

"Gastrointestinal development in ruminants: Importance of anatomy and physiology in hand
rearing." Zoological Society of [REDACTED] Neonatal Symposium. [REDACTED]

"Cheetah Conservation: Impact of disease on captive and free-ranging cheetahs." Zoological
Society of [REDACTED]. President's Club Lecture Series. [REDACTED]

"Stress and Disease: the cheetah model." [REDACTED] University, Comparative Physiology Seminar
Series. [REDACTED]

"Potential mechanisms underlying gastritis in cheetahs (*Acinonyx jubatus*)."
Veterinary Association. Conference on Cheetahs as Game Ranch Animals.

PROFESSIONAL MEMBERSHIPS

American College of Veterinary Pathologists (ACVP)
American Association of Zoo Veterinarians (AAZV)
American Zoo and Aquarium Association (AZA)
Wildlife Disease Association (WDA)
American Association of Wildlife Veterinarians (AAWV)
American Veterinary Medical Association (AVMA)

JOURNAL AND GRANT REVIEWER EXPERIENCE

Ad hoc reviewer for: Veterinary Pathology
Proceedings B of the Royal Society
mBio
Emerging Infectious Diseases
Journal of Zoo and Wildlife Medicine
Journal of Wildlife Diseases
Zoo Biology
Transboundary and Emerging Diseases
Virus Research

Grant Reviewer for: AAZV Mazuri Fund grants; AZA Conservation Grants
Fund/Conservation Endowment Fund

GRANTS RECEIVED

Previous Grants

"Monitoring environmental stress in captive and free-ranging cheetahs (*Acinonyx jubatus*)."
Morris Animal Foundation. (Co-investigator)

"Further epidemiological studies on *Helicobacter* gastritis in zoo felids."
Morris Animal Foundation. (Co-investigator)

"Changes in adrenal corticoids as a measure of stress during translocation and exercise in cheetahs."
American Zoo and Aquarium Association Conservation Endowment Fund.
(Co-investigator)

"The development of gastritis in captured wild cheetahs: does stress alter the host response to *Helicobacter*?"
Morris Animal Foundation. (Co-investigator)

"Linking stress with altered immune responses in captive cheetahs"
Morris Animal Foundation.
(Co-investigator)

"Investigating amyloidosis in black-footed cats (*Felis nigripes*)"
American Zoo and Aquarium

Association, Mazuri Fund. [REDACTED] (Principal investigator) [REDACTED]

"Piroplasmiasis in Serengeti lions (*Panthera leo*): A co-pathogen determining mortality during canine distemper epidemics?" Morris Animal Foundation. [REDACTED] (Co-investigator) October [REDACTED]

"Development of a primate necropsy training manual and interactive guide for field personnel" AAZV/Mazuri Fund. [REDACTED] (co-investigator) [REDACTED]

"Pathogen detection and characterization in captive and free-ranging marine mammals" Office of Naval Research [REDACTED] (Principal investigator) [REDACTED]

"Investigating health threats to conserve endangered African Wild Dogs" Morris Animal Foundation. [REDACTED] Co-investigator [REDACTED]

"Do Immune responses to *Helicobacter* change over time in captivity in wild-caught Namibian cheetahs?" Morris Animal Foundation Veterinary Student Scholar Program (Terio, Mentor; Haskins, Student) [REDACTED]

"Do immune responses to *Helicobacter* change over time in captivity in wild-caught Namibian cheetahs?" Conservation Medicine Consortium of Chicago Student Grant Program (Terio, Mentor; Haskins, Student) [REDACTED]

"Do immune function alterations explain Asian elephant susceptibility to *Mycobacterium* spp.?" Morris Animal Foundation Fellowship Training Grant (Landolfi, Fellow; Terio Mentor) [REDACTED]

"Do immune function alterations explain Asian elephant susceptibility to *Mycobacterium* spp.?" University of Illinois, Research Board (Terio, Primary investigator) [REDACTED]

"Improving cheetah health by linking physiologic and behavioral stress metrics to management." Morris Animal Foundation. (Terio, Primary investigator) [REDACTED]

"The role of cellular immunity in Asian elephant susceptibility to *Mycobacterium* spp." Morris Animal Foundation. (Terio, Primary investigator) [REDACTED]

"The role of cellular immunity in Asian elephant susceptibility to *Mycobacterium* spp." Chicago Board of Trade Endangered Species Fund (Terio, Co-investigator) [REDACTED]

"Improved *Atoxoplasma* diagnostics for conservation of passerine birds" Chicago Board of trade Endangered Species Fund (Terio, Co-investigator) [REDACTED]

Currently Funded Grants

"Molecular epidemiology and the natural history of SIVcpz" National Institute of Health (NIH).
(Terio Collaborator, PI Dr. Beatrice Hahn University of Pennsylvania) [REDACTED]
[REDACTED]

"Great Ape reservoirs of human malaria" National Institute of Health (NIH). (Terio Collaborator, PI
Dr. Beatrice Hahn, University of Pennsylvania) [REDACTED]

"The Great Ape Heart Project database: A model of collaborative disease investigation" Institute
of Museum and Library Services – National Leadership Grant. (Terio Collaborator, PI Hayley
Murphy Zoo Atlanta) [REDACTED]

"Assessment of whole blood cytokine expression for tuberculosis diagnosis in Asian elephants"
AAZV Mazuri Fund (Terio, co-PI) [REDACTED]

"Whole blood cytokine expression for diagnosis of tuberculosis in Asian elephants (*Elephas
maximas*)". Disney Worldwide Conservation Fund / AZA Conservation Grant Fund. (Terio, co-PI)
[REDACTED]

PUBLICATIONS

DOCTORAL THESIS TITLE

"Potential mechanisms underlying *Helicobacter*-associated gastritis in cheetahs (*Acinonyx jubatus*)"
University of California, Davis, 2000. Mentor: Dr. Linda Munson

REFEREED PUBLICATIONS

Dickinson P.S., Mescas C., Hetling J., Terio K.. The Neuropeptide Red Pigment Concentrating
Hormone Affects Rhythmic Pattern Generation at Multiple Sites. *Journal of Neurophysiology*. 69:
1475-1483, 1993.

Brown J.L., Terio K.A., Graham L.H.. Fecal Androgen Metabolite Analysis for Non-Invasively
Monitoring Testicular Steroidogenic Activity in Felids. *Zoo Biology*. 15: 425-434, 1996.

Terio, K.A., Citino, S.B., Brown, J.L.. Fecal Cortisol Metabolite Analysis for Non-Invasive
Monitoring of Adrenocortical Function in the Cheetah (*Acinonyx jubatus*). *Journal of Zoo and
Wildlife Medicine*. 30(4):484-491, 1999.

Vernau, K.M., Terio, K.A., LeCouteur, R.A., Berry, W.L., Vernau, W., Moore, P.F.. Acute B-cell
Lymphoblastic Leukemia with Meningeal Metastasis Causing Primary Neurological Dysfunction in
a Dog. *Journal of Veterinary Internal Medicine*. 14:110-115, 2000.

Terio, K.A., Brown, J.L., Moreland R., Munson, L. Comparison of Different Drying and Storage Methods on Quantifiable Concentrations of Fecal Steroids in the Cheetah. *Zoo Biology*. 21:215-222, 2002.

Klieforth, R., Maalouf, G., Stalis, I., **Terio, K.**, Janssen, D., Schrenzel, M. Malignant catarrhal fever-like disease in Barbary red deer (*Cervus elaphus barbarus*) naturally infected with a virus resembling alcelaphine herpesvirus 2. *Journal of Clinical Microbiology*. 40(9): 3381-90, 2002.

Terio K.A., Marker L., Overstrom E.W., Brown J.L. Ovarian and adrenal activity in Namibian cheetahs (*Acinonyx jubatus*) assessed by fecal steroid analysis. *South African Journal of Wildlife Research*. 33(2):71-78, 2003.

Terio K.A., Stalis I.H., Allen J.L., Stott J.L., Worley M.B. Coccidioidomycosis in Przewalski's horses (*Equus caballus przewalskii*). *Journal of Zoo and Wildlife Medicine*. 34(4): 339-45, 2003.

Stacy B.A., Vidal J.D., Osofosky A, **Terio K,** Koski M, DeCock H.E. Ovarian papillary cystadenocarcinomas in a green iguana (*Iguana iguana*). *Journal of Comparative Pathology*. 130(2-3): 223-8, 2003.

Wells, A., **Terio, K.A.,** Ziccardi, M.H., Munson, L. The stress response to environmental change in captive cheetahs (*Acinonyx jubatus*). *Journal of Zoo and Wildlife Medicine*. 35(1): 8-14, 2004.

Terio K.A., Marker L., Munson, L. Evidence for chronic stress in captive but not wild cheetahs based on adrenal morphology and function. *Journal of Wildlife Diseases*. 40(2): 259-66, 2004.

Terio K.A. , Munson L, Marker L, Aldridge BM, Solnick JV. Comparison of *Helicobacter* spp. in cheetahs (*Acinonyx jubatus*) with and without gastritis. *Journal of Clinical Microbiology*. 43(1):229-234, 2005.

Munson L., **Terio K.A.,** Worley M, Jago M, Bagot-Smith A, Marker L. Extrinsic factors significantly affect patterns of disease in free-ranging and captive cheetah (*Acinonyx jubatus*) populations. *Journal of Wildlife Diseases*. 41(3):542-548, 2005.

Landolfi J., **Terio K.A.** Transitional Cell Carcinoma in Fishing Cats (*Prionailurus viverrinus*): Pathology and Expression of Cyclooxygenase-1, -2, and p53. *Veterinary Pathology*. 43:674-681, 2006.

Lacasse C., Gamble K.C., Poppenga R.H., Farina L., Landolfi J., **Terio K.** *Taxus* sp. intoxication in three Francois' langurs (*Trachypithecus francoisi*). *Journal of Veterinary Diagnostic Investigation*. 19:221-224, 2007.

Lacasse C., **Terio K.,** Kinsel M.J., Farina L., Travis D.A., Greenwald R., Lyashchenko K.P., Miller M., Gamble K.C. Two cases of atypical mycobacteriosis caused by *Mycobacterium szulgai* associated with mortality in captive African elephants (*Loxodonta africana*). *Journal of Zoo and Wildlife Medicine*. 38: 101-7, 2007.

Terio K.A., O'Brien T., Lamberski N., Famula T.R., Munson L. Amyloidosis in black-footed cats (*Felis nigripes*). *Veterinary Pathology*, 45: 393-400, 2008.

Smith J.A., Wellehan J.F.X. Jr., Pogranichniy R.M., Childress A.L., Landolfi J.A., Terio K.A. Identification and isolation of a novel herpesvirus in a captive mob of eastern grey kangaroos (*Macropus giganteus*). *Veterinary Microbiology*, 129: 236-45, 2008.

Munson L., Terio K.A., Kock R., Mlengeya T., Roelke M.E., Dubovi E., Summers B., Sinclair A.R.E., Packer C. Climate extremes promote fatal co-infections during canine distemper epidemics in African lions. *PloS ONE*. 3(6) e2545, 2008.

Timm SF, Munson L, Summers B, Terio K, Dubovi E, Rupprecht C, Kapil S, Garcelon DK. A suspected canine distemper epidemic as the cause of a catastrophic decline in Santa Catalina island foxes (*Urocyon litoralis catalinae*). *Journal of Wildlife Diseases*, 45: 333-43, 2009.

St. Leger JA, Begeman I, Fleetwood M, Frasca S, Garner MM, Lair S, Trembley S, Linn MJ, Terio KA. Comparative pathology of Nocardiosis in marine mammals. *Veterinary Pathology*, 46: 299-308, 2009.

Rotstein D, Burdett LG, McLellan W, Schwacke L, Rowles T, Terio K, Schultz S, Pabst A. Lobomycosis in two offshore bottlenose dolphins (*Tursiops truncatus*) from North Carolina. *Emerging Infectious Diseases*, 15: 588-90, 2009.

Keele BF†, Holland Jones J†, Terio KA†, Estes JD†, Rudicell RS†, Wilson ML†, Li Y, Learn GH, Beasley TM, Schumacher-Stankey J, Wroblewski E, Mosser A, Raphael J, Kamenya S, Lonsdorf EV, Travis DA, Mlengeya T, Kinsel MJ, Else JG, Silvestri G, Goodall J, Sharp PM, Shaw GM, Pusey AE, Hahn BH. Increased Mortality and AIDS-like Immunopathology in Wild Chimpanzees Infected with SIVcpz. *Nature*, 460: 515-19, 2009.

† First 6 authors contributed equally as noted in accepted manuscript

Kagan RA, Kinsel M, Gloor K, Mylniczenko ND, Langan JN, Farina LL, Terio KA. Morphologic evidence suggestive of hypertension in Western gray kangaroos (*Macropus fuliginosus*). *Veterinary Pathology*. 46: 977-984, 2009.

Landolfi JA, Schultz SA, Mikota SK, Terio KA. Development and validation of cytokine quantitative, real-time RT-PCR assays for characterization of Asian elephant immune responses. *Veterinary Immunology and Immunopathology*. 131: 73-78, 2009.

Landolfi JA, Terio KA, Kinsel MJ, Langan J, Zachariah TT, Childress AL, Wellehan JF Jr. Orthoreovirus infection and concurrent cryptosporidiosis in rough green snakes (*Opheodrys aestivus*): pathology and identification of a novel orthoreovirus strain via polymerase chain reaction and sequencing. *Journal of Veterinary Diagnostic Investigation*, 22(1): 37-43, 2010.

Landolfi JA, Mikota SK, Chosy J, Lyashchenko KP, Giri K, Gairhe K, Terio KA. Comparison of systemic cytokine levels in *Mycobacterium* spp. seropositive and sero-negative Asian elephants (*Elephas maximus*). *Journal of Zoo Wildlife Medicine* 41(3): 445-55, 2010.

Terio KA, Kinsel MJ, Raphael J, Mlengeya T, Lippende I, Kirchhoff CA, Gilagiza B, Wilson ML, Kamenya S, Estes JD, Keele BF, Rudicell RS, Liu W, Patton S, Collins A, Hahn BH, Travis DA, Lonsdorf EV. Pathologic lesions in chimpanzees (*Pan troglodytes schweinfurthii*) from Gombe National Park, Tanzania, 2004-2010. *Journal of Zoo and Wildlife Medicine*, 42: 597-607, 2011.

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BOOK CHAPTERS

"Wild Felid Diseases: Conservation Implications and Management Strategies" Munson L, Terio KA, Ryser-Degeorgis M, Lane E, Courchamp F. *In: Biology and Conservation of Wild Felids* ed. David MacDonald and Andrew Loveridge. Oxford University Press, 2010.

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WORKSHOP PRESENTATIONS

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Terio KA, Gamble K, Slater O, Kinsel MJ, Colegrove C, Murnane R, Kuypers J. hMPV in a chimpanzee. ACVP Primate Pathology Workshop, 2011

Delaney, M, Adkesson M, **Terio K**, Mankowski J. Disseminated giant cell disease in a red-capped mangabey (*Cercocebus torquatus torquatus*). ACVP Primate Pathology Workshop, 2011

Terio KA, Smith J. Alzheimer's Type II Gliosis due to environmental hyperammonemia in a ray. ACVP Neuropathology Mystery Slide Conference, 2011.

Corner S, **Terio KA**. Toxoplasmosis in Captive Pallas' Cats. ACVP Neuropathology Mystery Slide Conference, 2011

Corner S, Terio K, Kinsel M, Donahoe S. Gingival mass in a captive chimpanzee (*Pan troglodytes*). Primate Pathology Workshop, ACVP Annual Meeting 2012.

Righton AL, Terio KA, Smith J, Kagan RA. *Toxoplasma gondii* associated myocarditis in a black and white colobus (*Colobus guerza*). Primate Pathology Workshop, ACVP Annual Meeting 2013.

TEACHING ACTIVITIES

Participation in Post-Doctoral and Post-Graduate Education

Masters Training

Papageorgiou S.	M.P.V.M., University of [REDACTED]	
Vallance, C.	M.S. in Biomedical Visualization, University of [REDACTED]	
	(Committee Member)	
Delaney M.	M.S. in Pathobiology, University of [REDACTED]	(Committee Chair)
Corner S.	M.S. in Pathobiology, University of [REDACTED]	(Committee Chair)
Righton A.	M.S. in Pathobiology, University of [REDACTED]	(Committee Chair)
Schlicher, K.	M.S. candidate, University of [REDACTED]	(Committee Member)
Chu, C.	M.S. candidate, University of [REDACTED]	(Committee Chair)
Edwards, W	M.S. candidate, University of [REDACTED]	(Committee Chair)

PhD Training

Landolfi, J.	Ph.D. [REDACTED], University of [REDACTED].	(Dissertation Committee Chair)
Corner, S.	Ph.D. candidate, [REDACTED] State University	(Committee Member)
Woodburn D.	Ph.D. candidate, University of [REDACTED]	(Committee Chair)

Participation in Training of Anatomic Pathology Residents (ACVP/ECVP Board Certified)*

Drs. Caroline Chu, Daniel Woodburn, Alison Righton*, Sarah Corner*, Martha Delaney*, Maria de los Angeles Jiménez Martínez[§], Shannon Donahoe*, Rebecca Kagan*, Jaime Landolfi*, Karin Lemberger*, Lisa Farina*, Jaromir Benak, Clifton Drew*, Taylor Spangler*, Oded Foreman*, Kathleen Colegrove*, Timothy Affolter*, Phillip Martin*, Tanja Zabka*, Brian Stacy*, Philippe Labelle*, Aimee Norris*, Martin Busch*, Patricia Pesavento*, Matthew Smith*, Jonathan Werner*

Veterinary /Graduate Curriculum Teaching Experience

(at University of [REDACTED])

[REDACTED]	PMI 476	Comparative Pathology of Non-Mammalian Vertebrates, Course leader
[REDACTED]	VM 446	Veterinary Reproduction, Teaching assistant for pathology laboratories
[REDACTED]	VMD 459	General Pathology, Laboratory teaching assistant
[REDACTED]	VMD 452	Systemic Pathology, Laboratory teaching assistant

(at University of [REDACTED])

[REDACTED]	VP 456	Exotic Animal Pathology I
[REDACTED]	VP 457	Exotic Animal Pathology II
[REDACTED]	VP 458	Exotic Animal Pathology Seminar
[REDACTED]	VP 492	Special Topics

Path 556	Exotic Animal Pathology I
Path 557	Exotic Animal Pathology II
Path 558	Exotic Animal Pathology Seminar
CB 540/Path 640	Conservation Medicine, Lecturer
ANSC 406	Zoo Animal Conservation Science, Lecturer

Other Teaching Related Activities

American Zoo and Aquarium Association Student and Post-graduate manuscript competition judge,

Participation in Avian and Exotics Club rounds and necropsy wet labs.

Zoo University Instructor. Zoological Society's Zoo.

Primate Necropsy Workshop. National Park, Instructor.

Mentor, Morris Animal Foundation Veterinary Student Summer Research Project

Guest Lecturer: "Common Diseases of Pet and Exotic Birds" Pathology Winter Symposium, University of

Instructor: Felid Husbandry Course, Association of Zoos and Aquariums Felid Taxon Advisory Group.

Instructor: First Regional Wildlife Pathology Workshop, University. Sponsored by USAID Emerging Pandemic Threats Program (PREDICT).

Guest Lecturer, Comparative Pathology Course, The State University College of Veterinary Medicine Department of Veterinary Biosciences,

Instructor: Pathology. American College of Zoological Medicine Short Course.



CONVENTION ON
INTERNATIONAL TRADE IN
ENDANGERED SPECIES OF
WILD FAUNA AND FLORA

PERMIT / CERTIFICATE No 152504

<input type="checkbox"/> EXPORT	ORIGINAL
<input checked="" type="checkbox"/> RE-EXPORT	
<input checked="" type="checkbox"/> IMPORT	
<input type="checkbox"/> OTHER	

2. Valid until 12/07/15

3. Originator (name and address) National Zoological Gardens of South Africa
932 Boom Street
Pretoria
0002

3a. Country of import South Africa

5. Special conditions Permit invalid without the attached permit condition and addendum with security stamp No. 1271031
For the purposes of this permit or certificate it is hereby confirmed that the conditions for Transport of Live Animals or, in the case of all Transport, to the IADC Live Animals Regulations Permit / Certificate valid for one assignment only.

4. Exporter / Re-exporter (name, address and country) Dr Karen A. Terrio
Veterinary Diagnostic Lab
Zoological Pathology Program
University of Illinois
LUMC Building 101 Room 0145
2160 S First Street
Urbana, Illinois 61801 USA

6. Name, address, national seal / stamp and country of Management Authority

Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA



7a. Purpose of the transaction (see reverse) S 1271035

7.b. SCIENTIFIC NAME (genus and species)
AND COMMON NAME OF ANIMAL OR PLANT

8. Description of specimen, including identifying marks or numbers (specimens) if two 10. Appendix No. (see reverse) 11. Quantity (including unit) 11a. Total exported / quota

A 7.b. *Acinonyx jubatus* (cheetah) 8. See attached addendum 10. 1P 11. AA (Party Nine) 11a.

7.8 12. Country of origin 12a. Country of last re-export 10. 11. 11a.

B 7.8 12. Country of origin 12a. Country of last re-export 10. 11. 11a.

7.8 12. Country of origin 12a. Country of last re-export 10. 11. 11a.

C 7.8 12. Country of origin 12a. Country of last re-export 10. 11. 11a.

D 7.8 12. Country of origin 12a. Country of last re-export 10. 11. 11a.

12. THIS PERMIT / CERTIFICATE IS ISSUED BY: SA TSIANE

14. EXPORT ENDORSEMENT: 15. ID of Landing Permit Number: 13/07/15

Block	Quantity
A	
B	
C	
D	

Port of Export: Date: Signature: Official stamp and date

V & R Printing Works (Pty) Ltd (012) 333 2462 (2021)

PERMIT / CERTIFICATE No 152504



CONVENTION ON
INTERNATIONAL TRADE IN
ENDANGERED SPECIES OF
WILD FAUNA AND FLORA

PERMIT / CERTIFICATE N^o 152504



EXPORT
RE-EXPORT
IMPORT
OTHER

2. Valid until

3. Importer (name and address)

4. Exporter / Re-exporter (name, address and country)

5a. Country of import

6. Name, address, national seal / stamp and country of Management Authority

5. Special conditions

For five animals, this permit or certificate is only valid if the re-export conditions conform to the Guidelines for Transport of Live Animals or, in the case of air transport, to the IATA Live Animals Regulations. Permit / certificate valid for one consignment only.

6a. Purpose of the transaction (see reverse)

6b. Security stamp No.

Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA



7.8. SCIENTIFIC NAME (genus and species)
AND COMMON NAME OF ANIMAL OR PLANT

8. Description of specimen, including identifying marks or numbers (specimens) if any

10. Appendix No. (see reverse)

11. Quantity (including unit)

11a. Total exported / quota

A
12. Country of origin

Date

12a. Country of last re-export

Certificate No.

Date

12b. No. of the operation " or date of acquisition "

7.8

B
12. Country of origin

Date

12a. Country of last re-export

Certificate No.

Date

12b. No. of the operation " or date of acquisition "

7.8

C
12. Country of origin

Date

12a. Country of last re-export

Certificate No.

Date

12b. No. of the operation " or date of acquisition "

7.8

D
12. Country of origin

Date

12a. Country of last re-export

Certificate No.

Date

12b. No. of the operation " or date of acquisition "

12. THIS PERMIT / CERTIFICATE IS ISSUED BY:
Country in which the specimens were taken from the wild, listed in country or authority proposed (only in case of re-export)
Only for specimens of Appendix I species listed in country or authority proposed for commercial purposes
For Pre-Convention specimens

DEPT. OF ENVIRONMENTAL AFFAIRS

13-37-2015

PRETORIA 0001

NATIONAL CITES SECRETARIAT (011) 6711

Security stamp, signature and official seal

14. EXPORT ENDORSEMENT:

15. IATA of Transporter / Mail Number:

Block

Quantity

A

B

C

D

Port of Export

Date

Signature

Official stamp and seal

ADDENDUM TO SOUTH AFRICAN CITES PERMIT No. 152504

issued in terms of NEMBA 10 of 2004

Common Name	Scientific Name	Description	App/Source	Quantity
Cheetah	<i>Acinonyx jubatus</i>	Glass slides of kidney, heart, liver	1 (F)	14
Cheetah	<i>Acinonyx jubatus</i>	Glass slide of kidney, heart, liver, intestine, bladder	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Glass slide of kidney, liver, lung	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Glass slide of kidney, heart, liver, stomach	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Glass slide of kidney, heart, liver, stomach, lymph node	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Glass slide of kidney, liver, thyroid, adrenal	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Glass slide of kidney	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Glass slides of kidney, heart, liver	1 (F)	14
Cheetah	<i>Acinonyx jubatus</i>	Tissue blocks of kidney, heart, liver	1 (F)	12
Cheetah	<i>Acinonyx jubatus</i>	Tissue block of kidney	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Tissue blocks of kidney, spleen, adrenal	1 (F)	1
Cheetah	<i>Acinonyx jubatus</i>	Tissue blocks kidney, thyroid	1 (F)	1

ISSUED BY:

Jm Tjane

AT: PRETORIA

DATE: 13/07/15



ENDORSEMENT: To be completed by official who inspected the shipment.

No.	Quantity	No.	Quantity	No.	Quantity	No.	Quantity
1		8		15		22	
2		9		16		23	
3		10		17		24	
4		11		18		25	
5		12		19		26	
6		13		20		27	
7		14		21		28	

Official Stamp

PERMIT CONDITIONS FOR THE NATIONAL/ INTERNATIONAL IMPORT, EXPORT OR RE-EXPORT OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; NON-CITES LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH

These conditions will be applicable to all National/ International Imports, Exports and Re-Exports of CITES and Non-CITES species and any products thereof; live wild animals, live exotic animals, hunting trophies, wild animal products, protected plants and live fish by air, mail, rail and road within the Gauteng Province of which the first port of entry into and/ or the last port of exit out of the Province of Gauteng/ South Africa will be OR Tambo International Airport.

Import permits are not valid unless the imported consignment is accompanied by a valid original export permit from the country/ province of origin if required, which must be handed to the authorized Environmental Management Inspector on inspection.

THE FOLLOWING CONDITIONS ARE APPLICABLE TO:

- (A) **ALL NATIONAL/ INTERNATIONAL IMPORTS, EXPORTS AND RE-EXPORTS OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH (INCLUDING AIR, MAIL, RAIL, ROAD)**

THIS PERMIT:

1.
 - a) Shall not be transferable;
 - b) Shall be invalid until the signature of the holder/ Recipient thereof been appended thereto;
 - c) This permit is not valid unless it has been endorsed and released by an authorized Environmental Management Inspector/ official prior to the import, export or re-export taking place. In cases of inspection of the animals, which are to be quarantined at OR Tambo International Airport's Quarantine Station, the permit must be released prior to the animals leaving quarantine. Original import permits to be inserted into a sealed envelope and placed in the Environmental Management Inspector box that's provided at the quarantine station, no more than 14 working days after import;
 - d) Shall be subject to the provisions of any other law and or regulation;
 - e) Shall be valid for one consignment only;
 - f) This permit is subject to the compliance of Veterinary and Agricultural requirements; and to the compliance of IATA Live Animal Regulations.
2. The permit holder or his delegated agent must contact one of the authorized Environmental Management Inspector/ officials, per telephone and confirm per fax a minimum of 48 hours prior to the import, export or re-export taking place to book an inspection (the inspection booking must be requested a minimum of 48 hours prior to the intended inspection), applicable for shipments done over weekends and public holidays, with the following information:
 - a) Name / Company Name of Importer / Exporter;
 - b) Name of Airline and Warehouse where intended inspection will take place;
 - c) Date and Time of Import / Export / Re-Export;
 - d) Date and Time of intended inspection (subject to approval);
 - e) Agents particulars (if applicable), Carrier Name, Flight Number, Flight Time and Waybill Number;
 - f) The applicable permit numbers and relevant expiry dates; and
 - g) Detailed packing list as per condition 7.
3. Inspections are by appointment only and early booking is necessary. An authorized Environmental Management Inspector/ official may be contacted at the following telephone numbers during office hours 011-390-1729 - 18-30:
Office: +27 (11) 390-1729/ 2411
Fax: +27 (11) 390-1729
4. All relevant documentation, including original permit/s (CITES permits must include original and coloured copy), Packing List/s, Waybill/s and Bill of entry/s (SAD/ DA 550) must be presented for inspection. A photo copy of all these documents must also be handed to the Environmental Management Inspector/ official on inspection. The original permit/s, these conditions and packing list/s must accompany the consignment/s.
5. All transport containers must be numbered and the numbers must coincide with the numbers on the packing list/s. The country/ province of destination as shown on the containers must coincide with the country/ province of destination as on the permit. The details on the packing list/s must coincide with the details on the permit/s and Waybill/s.
6. Detailed packing list/s, that are signed and dated must accompany the consignment/s, with the following information:
 - a) Details of Importer and Exporter (Names, addresses and contact numbers);
 - b) Waybill number/s and name of carrier, flight number, date and time;
 - c) Transport container number/s;
 - d) Scientific name of species (in full) with relevant transponder / tag / ring number/s; a detailed description of specimen / product and the origin thereof;
 - e) Common name of species (in full);
 - f) Number per species per container (actual number exported / imported); and
 - g) Applicable permit number/s
7. If this permit is not used, the original permit (CITES permits must include coloured copy) must be returned to the issuing authority within 14 working days after expiry thereof. Import permits must be returned to the issuing authority within 14 working days after use. Export permits must be handed to a Management Authority of the importing country/ province within 14 working days after use.
8. The permit holder must make and retain photo copies of permits for audit inspections. Copies of import permits must be made and retained after endorsement, for Re-export permit applications. When applying for a Re-export permit, a copy of the endorsed import permit must be submitted to the Permit office with the application.
9. Only A person authorized thereto by the Premier or Minister may make any alteration on the permit.
10. Failure to comply with any of the permit conditions renders the permit invalid and may result in criminal proceedings, cancellation of the permit/s and seizure of the consignment/s.
11. The holder of the permit and / or his/ her delegated agent will be held responsible for any legal costs; costs incurred for delays and / or storage fees due to irregularities and / or due to the consignment being withheld due to incorrect documentation, and / or incorrect consignment/s and / or failure to comply with permit conditions.
12. Permit holders or their delegated agent/s must inform the Environmental Management Inspector/ official if an inspection is cancelled, or if they are to be late for an inspection within a reasonable time before the inspection is due to take place.

<p>Signature of Issuing Officer</p> <p><i>Im Tlane</i></p> <p>Full Name</p>	<p>Signature of Recipient</p> <p>_____</p> <p>Full Name</p>
---	---

13-07-15

13-07-2015

PRETORIA, 0601

NATIONAL ENVIRONMENTAL MANAGEMENT AUTHORITY

1. Date of Import/Export (mm/dd/yyyy): 09/06/2012
2. Import/Export License Number: *****
3. Indicate One: <input checked="" type="checkbox"/> import <input type="checkbox"/> export
4. Port of Clearance: CH
5. Purpose Code: S
6. Customs Document Number(s): NA

U.S. FISH AND WILDLIFE SERVICE

DECLARATION FOR IMPORTATION
OR EXPORTATION OF
FISH OR WILDLIFE

7. Name of Carrier: DHL / GLOBEFLIGHT
8. Air Waybill or Bill of Lading No.: Master: 1593761330 (DHL) House: 2710979022 (GlobeFlight)
9. Transportation Code: A
License No. State or Province:
10. Bonded Location for Inspection: CHICAGO
11. Number of Cartons Containing Wildlife: 1
12. Markings on Cartons Containing Wildlife:

13. (indicate one) <input checked="" type="checkbox"/> U.S. Importer <input type="checkbox"/> U.S. Exporter University of Illinois Karen Terio 2160 S First St Rm 0745 LUMC Bldg 101 Maywood, IL 60153 708-216-1185 kterio@illinois.edu	14. (indicate one) <input type="checkbox"/> Foreign Importer <input checked="" type="checkbox"/> Foreign Exporter NATIONAL ZOOLOGICAL GARDENS OF SOUTH AFRICA EMILY LANE 232 BOOM ST PRETORIA, ZA emily@nzg.ac.za
13b. Identifier Number: ID Type:	14c. Identifier Number: ID Type:
15. Customs Broker, Shipping Agent or Freight Forwarder: DHL	
15b. Identifier Number: ID Type:	
Phone Number / Fax Number / Email Address	
15c. Contact Name:	

Species Code	16a. Scientific Name 16b. Common Name	17a. Foreign CITES Permit Num. 17b. U.S. CITES Permit Num.	18a. Description Code 18b. Source	19a. Quantity/Units 19b. Total Monetary Value	20. Country of Species Origin Code (ISO Code)	21. Venomous Live Wildlife Indicator
ACIJ	ACINONYX JUBATUS CHEETAH	0131389 11US203197/9	SPEC	49.00 NO \$ 0	ZA	<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

Knowingly making false statement in a Declaration for Importation or Exportation of Fish or Wildlife may subject the declarant to the penalty provided by 18 U.S.C. 1001 and 16 U.S.C. 3372(d).

22. I certify under penalty of perjury that the information furnished is true and correct.
Filed Electronically 09/25/2012 - Confirm Num: [REDACTED]
Fees Paid \$93.00

Action/Comments:
SHIPMENT CLEARED CBP BEFORE FWS AND WAS DELIVERED. PACKAGE NOT OPENED BY IMPORTER AND WAS THEN INSPECTED BY FWS. CLEARED FOR IMPORTER. CORRECTIVE ACTION WILL BE TAKEN AGAINST DHL FOR VIOLATIONS.

Wildlife Declared

U.S. FISH & WILDLIFE SERVICE
N I T E D
Electronic Filing
CLEARED
T A T E S

Date: 09/28/2012

Wildlife Inspected: Partial

Inspected By: Ishmael, WI0414



**CONVENTION ON
INTERNATIONAL TRADE IN
ENDANGERED SPECIES OF
WILD FAUNA AND FLORA**



EXPORT
RE-EXPORT
IMPORT
OTHER

ORIGINAL

2. Valid until 25-01-2013

3. Importer (name and address) **University of Illinois
Veterinary diagnostic laboratory
Zoological Pathology Program
Lurie Building Room 0745
2160 South First Avenue
Maywood IL 60153**

4. Exporter / Re-exporter (name, address and country)
**National Zoological Gardens of SA
232 Boom Street
Pretoria
0002**

3a. Country of import **USA**

5. Special conditions **Permit invalid without
attached permit conditions and
addendum with security stamp
No. 1073546**

6. Name, address, national seal / stamp and country of Management Authority

**Department of Environmental Affairs
Private Bag X447
PRETORIA
0001
SOUTH AFRICA**



5a. Purpose of the transaction (see reverse)

S

5b. Security stamp No.

10735417. B. SCIENTIFIC NAME (genus and species)
AND COMMON NAME OF ANIMAL OR PLANT9. Description of speci-
mens, including
identifying marks or
numbers (age/sex) if live10. Appendix No.
and source
(see reverse)11. Quantity
(including unit)11a. Total exported /
quota

**7.8 Acinonyx Jubatus
(cheetah)**

**9. see attached
addendum**

10. 1-F

**11. 49
(Fourty nine)**

11a.

**12. Country of
origin***

Permit No.

Date

12a. Country of last
re-export

Certificate No.

Date

12b. No. of the operation ** or date of
acquisition ***

7.8

9.

10.

11.

11a.

**12. Country of
origin***

Permit No.

Date

12a. Country of last
re-export

Certificate No.

Date

12b. No. of the operation ** or date of
acquisition ***

7.8

9.

10.

11.

11a.

**12. Country of
origin***

Permit No.

Date

12a. Country of last
re-export

Certificate No.

Date

12b. No. of the operation ** or date of
acquisition ***

7.8

9.

10.

11.

11a.

**12. Country of
origin***

Permit No.

Date

12a. Country of last
re-export

Certificate No.

Date

12b. No. of the operation ** or date of
acquisition ***

* Country in which the specimens were taken from the wild, bred in captivity or artificially propagated (only in case of re-export)
** Only for specimens of Appendix I species bred in captivity or artificially propagated for commercial purposes
*** For Pre-Convention specimens

13. THIS PERMIT / CERTIFICATE IS ISSUED BY: **OLGA KUMALO**

DEPT OF ENVIRONMENTAL AFFAIRS

PRIVATE BAG X 447

Pretoria

Place

26-07-2012

Date

**26-07-2012**

PRETORIA 0001

SOUTH AFRICAN WILDLIFE MANAGEMENT AUTHORITY

14. EXPORT ENDORSEMENT:

15. Bill of Lading/Air Waybill Number:

Block	Quantity
A	
B	
C	
D	

Port of Export

Date

Signature

Official stamp and title

PERMIT CONDITIONS FOR THE NATIONAL/ INTERNATIONAL IMPORT, EXPORT OR RE-EXPORT OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; NON-CITES LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH

These conditions will be applicable to all National/ International Imports, Exports and Re-Exports of CITES and Non-CITES species and any products thereof; live wild animals, live exotic animals, hunting trophies, wild animal products, protected plants and live fish by air, mail, rail and road within the Gauteng Province of which the first port of entry into and/ or the last port of exit out of the Province of Gauteng/ South Africa will be OR Tambo International Airport.

Import permits are not valid unless the imported consignment is accompanied by a valid (original) export permit from the country/ province of origin (if required), which must be handed to the authorized Environmental Management Inspector on inspection.

THE FOLLOWING CONDITIONS ARE APPLICABLE TO:

- (A) **ALL NATIONAL/ INTERNATIONAL IMPORTS, EXPORTS AND RE-EXPORTS OF CITES AND NON-CITES SPECIES AND ANY PRODUCTS THEREOF; LIVE WILD ANIMALS, LIVE EXOTIC ANIMALS, HUNTING TROPHIES, WILD ANIMAL PRODUCTS, PROTECTED PLANTS AND LIVE FISH (INCLUDING AIR, MAIL, RAIL, ROAD)**

THIS PERMIT:

1. Shall not be transferable;
 - b) Shall be invalid until the signature of the holder/ Recipient thereof been appended thereto;
 - c) This permit is not valid unless it has been endorsed and released by an authorized Environmental Management Inspector/ official prior to the import, export or re-export taking place. In cases of importation of live animals, which are to be quarantined at OR Tambo International Airport's Quarantine Station, the permit must be released prior to the animals leaving quarantine. Original import permits to be inserted into a sealed envelope and placed in the Environmental Management Inspector box that's provided at the quarantine station, no more than 14 working days after import;
 - d) Shall be subject to the provisions of any other law and or regulation;
 - e) Shall be valid for one consignment only;
 - f) This permit is subject to the compliance of Veterinary and Agricultural requirements; and to the compliance of IATA Live Animal Regulations.
2. The permit holder or his delegated agent must contact one of the authorized Environmental Management Inspector/ officials, per telephone and confirm per fax a minimum of 48 hours prior to the import, export or re-export taking place to book an inspection (the inspection booking must be requested a minimum of 48 hours prior to the intended inspection), applicable for shipments done over weekends and public holidays, with the following information:
 - a) Name / Company Name of Importer / Exporter;
 - b) Name of Airline and Warehouse where intended inspection will take place;
 - c) Date and Time of Import / Export / Re-Export;
 - d) Date and Time of intended inspection (subject to approval);
 - e) Agents particulars (if applicable), Carrier Name, Flight Number, Flight Time and Waybill Number;
 - f) The applicable permit number/s and relevant expiry dates; and
 - g) Detailed packing list as per condition 7.
 3. Inspections are by appointment only and early booking is necessary. An authorized Environmental Management Inspector/ official may be contacted at the following telephone numbers during office hours (07:00 - 15:30):
Office: +27 (11) 390-3687/ 2311
Fax: +27 (11) 390-1720
 4. All relevant documentation, including original permit/s (CITES permits must include original and coloured copy), Packing List/s, Waybill/s and Bill of entry/s (SAD/ DA 550) must be presented for inspection. A photo copy of all these documents must also be handed to the Environmental Management Inspector/ official on inspection. The original permit/s, these conditions and packing list/s must accompany the consignment/s.
 5. All transport containers must be numbered and the numbers must coincide with the numbers on the packing list/s. The country/ province of destination as shown on the containers must coincide with the country/ province of destination as on the permit. The details on the packing list/s must coincide with the details on the permit/s and Waybill/s.
 6. Detailed packing list/s, that are signed and dated must accompany the consignment/s, with the following information:
 - a) Details of Importer and Exporter (Names, addresses and contact numbers);
 - b) Waybill number/s and name of carrier, flight number, date and time;
 - c) Transport container number/s;
 - d) Scientific name of species (in full) with relevant transponder / tag / ring numbers; a detailed description of specimen / product and the origin thereof;
 - e) Common name of species (in full);
 - f) Number per species per container (actual number exported / imported); and
 - g) Applicable permit number/s
 7. If this permit is not used, the original permit (CITES permits must include coloured copy) must be returned to the issuing authority within 14 working days after expiry thereof. Import permits must be returned to the issuing authority within 14 working days after use. Export permits must be handed to a Management Authority of the importing country/ province within 14 working days after use.
 8. The permit holder must make and retain photo copies of permit/s for audit inspections. Copies of import permits must be made and retained after endorsement, for Re-export permit applications. When applying for a Re-export permit, a copy of the endorsed import permit must be submitted to the Permit office with the application.
 9. Only A person authorized thereto by the Premier or Minister may make any alteration on the permit.
 10. Failure to comply with any of the permit conditions renders the permit invalid and may result in criminal proceedings, cancellation of the permit/s and seizure of the consignment/s.
 11. The holder of the permit and / or his/ her delegated agent will be held responsible for any legal costs; costs incurred for delays and / or storage fees due to irregularities and / or due to the consignment being withheld due to incorrect documentation, and / or incorrect consignment/s and / or failure to comply with permit conditions.
 12. Permit holders or their delegated agents must inform the Environmental Management Inspector/ official if an inspection is cancelled, or if they are to be late for an inspection within a reasonable time before the inspection is due to take place.

Signature of Issuing Officer

DEPT. OF ENVIRONMENTAL AFFAIRS	
26-07-2012	
Date	
PRETORIA 0001	
NATIONAL CITES MANAGEMENT AUTHORITY	

Signature of Recipient

21/8/12
Date

Full Name

Conditions to this permit been issued subject to the provisions of section 100 (2), Ordinance 12 of 1983 and the National CITES Regulations, 2010

ADDENDUM TO SOUTH AFRICAN CITES EXPORT PERMIT NO.0131389

Scientific Name	Common Name	Description	App/Source	Quantity
<i>Acinonyx jubatus</i>	Cheetah	Glass slides of kidney, heart, liver	1 (F)	14
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of kidney, heart, liver, intestine bladder	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of kidney, liver, lung	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of kidney, heart, liver, stomach	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of kidney, heart, liver, stomach, lymph node	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of Kidney, liver, thyroid, adrenal	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of Kidney	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Glass slide of Kidney, heart, liver	1 (F)	14
<i>Acinonyx jubatus</i>	Cheetah	Tissue blocks of kidney, heart, liver	1 (F)	12
<i>Acinonyx jubatus</i>	Cheetah	Tissue block of kidney	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Tissue blocks of kidney, spleen, adrenal	1 (F)	1
<i>Acinonyx jubatus</i>	Cheetah	Tissue blocks kidney, thyroid	1 (F)	1

ISSUED BY:

AT: PRETORIA

DATE: 26-07-2012



Cheetah information for export and CITES permit

House name	Chip	Studbook no	Location	Age	Sex	PM no	Histo no	Captive	Wild	Tissue types	Blocks	Slides
Jochin	000 122 7903	3833	Cango	8 yr	M	-	WS415.03	Y	N	Kidney, heart, liver		1
M324	00-0143- 4950	NZG on loan 3980 from AvDCC		6 yr	M	04/223	04110065	Y	N	Kidney, heart, liver	1	
Baham	000 021 50AD	3862	Cango	Adult	F	-	05H982	Y	N	Kidney, heart, liver, intestine, bladder		1
Romeo	00- 00222385T	3333	Hoedspruit	14 yr	M	08/080	81488.06	Y	N	Kidney, heart, liver		1
Foxie/HOE 2	00-0658- 474ET	6914	Hoedspruit	3 yr	F	08/313	241	Y	N	Kidney, liver, lung		1
Messina/HOI	00-0658- 4754T	6880	Hoedspruit	5 yr	M	08/315	239	Y	N	Kidney, heart, liver		1
Thunder	000 1D3 1918	3832	Cango	8 yr	F	07/006	252	Y	N	Kidney, heart, liver, stomach		1
Lara/F408/ D/T	00063447E4	4334	AvDCC	5.5 yr	F	07/084	2127	Y	N	Kidney, heart, liver		1
Cola/PHOTO	00-012E- 891C	3822	Cango	12 yr	F	07/084	2134	Y	N	Kidney, heart, liver, stomach, lymph node		1
Q46/ DEW51	00-0137- 8E39	3990	AvDCC	8 yr	F	07/109	2143	Y	N	Kidney, heart, liver	1	
Curly/Selali	0001DF 7AE2T	4264	Hoedspruit	Adult	M	07/175	2203	Y	N	Kidney, heart, liver	1	
K45/ DEW51	00-0136- 807C	3989	AvDCC	8.5 yr	M	07/227	2287	Y	N	Kidney, heart, liver		1
F349/ DEW51	00-012B- CE8A	4113	AvDCC	8 yr	F	07/448	072431	Y	N	Kidney, heart, liver		1
Cal	000 1C5 6B31	4152	Cango	8 yr	F	08/041	08Z033	Y	N	Kidney		1
Dezi/ CC136	000 835 3990	5583	Cango	5 yr	F	08/603	08Z398	Y	N	Kidney, heart, liver		1
Sandton Lady	46600-0141- 01BET	3586	AvDCC	12 yr	F	08/181	08Z122	Y	N	Kidney, liver, thyroid, adrenal		1
Bianca/ CC 1	0006389FBE	4505	Cango	8 yr	F	09/360	09Z187	Y	N	Kidney, heart, liver	1	
Cayla/ CC128	00063907E0	5575	Cango	8 yr	F	09/500	09Z246	Y	N	Kidney, spleen, adrenal	1	
Cockeye M32	00-0136- 4390	3974	AvDCC	11.5 yr	M	09/539	09Z286	Y	N	Kidney		1
Astro/M474	00-083D- F3E4	NZG on loan 5693 from AvDCC		6.5 yr	M	09/608	09Z289	Y	N	Kidney, heart, liver	1	
Gondor M697	4959182455	7804	AvDCC	6.5 yr	M	10/300	10Z177	Y	N	Kidney, thyroid	1	
Duma/ CC13	00063DD100	5580	Cango	8 yr	M	10/750	10Z423	Y	N	Kidney, heart, liver	1	
AJ07/04, Sou	00063DCBO	6062	Namibia	7 yr	F	10/829	10Z448	Y	N	Kidney, heart, liver		1
M415	000811AA3A T	4530	AvDCC	10 yr	M	11/239	11Z105	Y	N	Kidney, heart, liver		1
Ganza/ CC16	00086921CF	6526	Cango	4 yr	M	11/410	11Z159	Y	N	Kidney, heart, liver		1
F373/ DEW51	00-0606- 8224	4287	AvDCC	11 yr	F	11/412	11Z160	Y	N	Kidney, heart, liver		1
Juba	no chip	no studbook	Tshwane	17 yr	M	11/809	11Z230	N	Y	Kidney, heart, liver		1
F538	9851400001 13532	5820	AvDCC	7 yr	F	11/625	11Z233	Y	N	Kidney, heart, liver		1
Bongo	9780000009 85084	7020	Cango	6.5 yr	M	11/630	11Z235	Y	N	Kidney, heart, liver		1
Duma	no chip	4234	CCB	15 yr	M	11/632	11Z236	Y	N	Kidney, heart, liver	1	
Zorro	435977687E	6518	Cango	12 yr	M	12Z019	12Z019	Y	N	Kidney, heart, liver	1	
Jack	no chip	6268	JHB Zoo	12 yr	M	12Z028	12Z028	Y	N	Kidney, heart, liver	1	
Rambo/M498	00-083D- 850DT	5717	AvDCC	9 yr	M	12Z118	12Z118	Y	N	Kidney, heart, liver		1
Hopalong M5	434F42095E	4312	AvDCC	11 yr	M	12Z128	12Z128	Y	N	Kidney, heart, liver	1	
Dominic	433466416F	6515	Cango	9 yrs	M	12Z137	12Z137	Y	N	Kidney, heart, liver	1	

**ORDINARY PERMIT**

(Issued in terms of the provisions of the
National Environmental Management:
Biodiversity Act 2004, Act 10 of 2004)

PERMIT NUMBER: 0 20994

NAME OF ISSUING AUTHORITY	
NAME	DEPT OF ENVIRONMENTAL AFFAIRS
ADDRESS	PRIVATE BAG X 447
	PRETORIA 0001
PROVINCE	NATIONAL DEPARTMENT

DETAILS OF PERMIT HOLDER

NAME	National Zoological Gardens		ID NO.
SURNAME	C/O TE Kaunda		PASSPORT NO.
	POSTAL ADDRESS	RESIDENTIAL ADDRESS	
ADDRESS	P.O. Box 74	232 Boom Street	
ADDRESS			
ADDRESS			
TOWN	Pretoria	Pretoria	
POSTAL CODE	0001	0002	
PROVINCE	Gauteng	Gauteng	

PROPERTY WHERE RESTRICTED ACTIVITIES WILL BE CARRIED OUT

NAME AND SURNAME OF APPLICANT	National Zoological Gardens
NAME AND SURNAME: RESPONSIBLE PERSON	TE Kaunda
NAME AND SURNAME OF AGENT	
PHYSICAL ADDRESS OF FACILITY	232 Boom Street
PHYSICAL ADDRESS OF FACILITY	Pretoria, 0002
DISTRICT	
PROVINCE	Gauteng
REGISTERED NAME AND NUMBER (in the case of game farm)	

DETAILS OF SPECIES INVOLVED

SPECIES		SEX (if known)	QUANTITY	MARKING (if applicable)
COMMON NAME	SCIENTIFIC NAME			
Cheetah	Acinonyx jubatus			

DETAILS OF RESTRICTED ACTIVITIES INVOLVED

Transport

NAME AND SURNAME OF PURCHASER/SELLER	
RESIDENTIAL ADDRESS OF PURCHASER/SELLER	

IN THE CASE OF INTERNATIONAL IMPORT/EXPORT:

NAME AND SURNAME OF CONSIGNEE/CONSIGNOR	
RESIDENTIAL ADDRESS OF CONSIGNEE/CONSIGNOR	

IN THE CASE OF A HUNT:

NAME AND SURNAME OF HUNTING CLIENT (if applicable)	
NAME AND SURNAME OF PROFESSIONAL HUNTER (if applicable)	
NAME AND SURNAME OF HUNTING OUTFITTER (if applicable)	
WEAPON AND METHOD OF HUNTING	

IN THE CASE OF POSSESSION OF ELEPHANT IVORY OR RHINOCEROS HORN:

WEIGHT OF EACH PIECE APPLIED FOR	
LENGTH OF THE ELEPHANT IVORY	
BASE CIRCUMFERENCE OF ELEPHANT IVORY OR RHINOCEROS HORN	
REGISTRATION NUMBER	
MICROCHIP NUMBER	

PERMIT VALIDATION

PERIOD OF VALIDITY	FROM: 20-08-2012	TO: 19-09-2012
RECEIPT NUMBER		
	DEPT. OF ENVIRONMENTAL AFFAIRS	
	PRIVATE BAG X 447	



ORDINARY PERMIT

(Issued in terms of the provisions of the National Environmental Management: Biodiversity Act 2004, Act 10 of 2004)

PERMIT NUMBER: 20994

NAME OF ISSUING AUTHORITY	
NAME	DEPARTMENT OF ENVIRONMENTAL AFFAIRS
ADDRESS	PRIVATE BAG X 447 PRETORIA 0001
PROVINCE	NATIONAL DEPARTMENT

DETAIL OF SPECIES INVOLVED				
SPECIES		SEX (If known)	QUANTITY	MARKING (If applicable)
COMMON NAME	SCIENTIFIC NAME			
Cheetah	<i>Acinonyx jubatus</i>		14 glass slides of Kidney, heart, liver	
Cheetah	<i>Acinonyx jubatus</i>		1 glass slide of Kidney, heart, liver, intestine bladder	
Cheetah	<i>Acinonyx jubatus</i>		1 glass slide of Kidney, liver, lung	
Cheetah	<i>Acinonyx jubatus</i>		1 glass slide of Kidney, heart, liver, stomach	
Cheetah	<i>Acinonyx jubatus</i>		1 glass slide of Kidney, heart, liver, stomach, lymph node	
Cheetah	<i>Acinonyx jubatus</i>		1 glass slide of Kidney, liver, thyroid, adrenal	
Cheetah	<i>Acinonyx jubatus</i>		1 glass slide of Kidney	
Cheetah	<i>Acinonyx jubatus</i>		14 glass slides of Kidney, heart, liver	
Cheetah	<i>Acinonyx jubatus</i>		12 tissue blocks of Kidney, heart, liver	
Cheetah	<i>Acinonyx jubatus</i>		1 tissue block of Kidney	
Cheetah	<i>Acinonyx jubatus</i>		1 tissue block of Kidney, spleen, adrenal	
Cheetah	<i>Acinonyx jubatus</i>		1 tissue block of Kidney, thyroid	

DETAILS OF RESTRICTED ACTIVITIES INVOLVED	
<p>1. This permit authorizes transport for the above mentioned specimen from National Zoological Gardens, 232 Boom Street, P O Box 755, Pretoria, 0002 to UNIVERSITY of ILLINOIS, Veterinary Diagnostic Laboratory, Zoological Pathology Program</p>	

PERMIT VALIDATION			
PERIOD OF VALIDITY	FROM:	20-08-2012	TO: 19-09-2012
RECEIPT NUMBER			

DEPT. VAN OMGEWINGSAKE
PRIVAATSAK / PRIVATE BAG X 447
20-08-2012
PRET / SA 0001
DEPT. OF ENVIRONMENTAL AFFAIRS



SIGNATURE OF ISSUING OFFICER

DATE STAMP:

DEPT. VAN OMGEWINGSAKE
PRIVAATSAK / PRIVATE BAG X 447
20-08-2012
PRET / SA 0001
DEPT. OF ENVIRONMENTAL AFFAIRS

SIGNATURE PERMIT HOLDER



CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

IMPORT PERMIT

Page 1 of 2

1. Original Permit/Certificate No.

11US203197/9

2. Valid until

12/26/2012

3. Permittee (name and address, country)

UNIVERSITY OF ILLINOIS
VETERINARY DIAGNOSTIC LABORATORY
ZOOLOGICAL PATHOLOGY PROGRAM, LUMC
2160 SOUTH FIRST AVENUE, ROOM 0745 - BLD
MAYWOOD, IL 60153
U.S.A.

4. Consignee (name and address, country)

United States Fish & Wildlife
Service
#0414 9/25/12
CANCELED

5. Special Conditions

MUST COMPLY WITH ENCLOSED GENERAL PERMIT CONDITIONS AND
ATTACHED SPECIAL CONDITIONS.

PERMIT MAY BE COPIED FOR MULTIPLE SHIPMENTS. PERMITTEE TO RETAIN
ORIGINAL.

EACH SHIPMENT MUST BE ACCOMPANIED BY FOREIGN CITES PERMIT.

PRIOR TO EACH SHIPMENT, PERMITTEE MUST COMPLETE BLOCKS 4, 11, AND
12; FOR BLOCKS E AND F MUST COMPLETE INVENTORY PAGE.

U.S. ENDANGERED SPECIES AND THREATENED SPECIES [50 CFR 17.22 &
17.32]; AUTHORIZED UNDER PERMIT NUMBER MA187330 ISSUED 1/09/2009.

THIS REISSUES AND REPLACES 09US203197/9 ISSUED 06/19/2009.

-May not be used for commercial purposes. For live animals, only valid
if the transport conditions comply with the CITES Guidelines for
Transport of Live Animals or, in the case of air transport, with IATA Live
Animals Regulations.

5a. Purpose of Transaction
S

6. U.S. Management Authority

U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
4401 N. FAIRFAX DRIVE
ROOM 212
ARLINGTON, VA 22203-3247

12/27/2011

Issuing Date

United States Management Authority

AUTHORITY: Endangered Species Act of 1973 (16 USC 1531 et. seq.)

7/8. Common Name and Scientific name (genus and
species) of Animal or Plant9. Description of Part or Derivative, including identifying marks
or numbers (age/sex if live)10. Appendix No. and
Source

A. Common Name

WOLF

Scientific Name

CANIS
LUPUS

9. IMPORT: BIOLOGICAL SPECIMENS FROM WILD AND
CAPTIVE-HELD WILD ANIMALS, INCLUDING BUT NOT
LIMITED TO BLOOD, SERA, ORGANS, TISSUES, SKIN,
HAIR AND BONE.

10. 1 W

11. Quantity (including units)

NO

12. Country of Origin

B. Common Name

WOLF

Scientific Name

CANIS
LUPUS

9. IMPORT: BIOLOGICAL SPECIMENS FROM CAPTIVE-
BORN ANIMALS, INCLUDING BUT NOT LIMITED TO
BLOOD, SERA, ORGANS, TISSUES, SKIN, HAIR AND
BONE.

10. 1 F

11. Quantity (including units)

NO

12. Country of Origin

C. Common Name

BUSH
DOG

Scientific Name

SPEOTHOS
VENATICUS

9. IMPORT: BIOLOGICAL SPECIMENS FROM WILD AND
CAPTIVE-HELD WILD ANIMALS, INCLUDING BUT NOT
LIMITED TO BLOOD, SERA, ORGANS, TISSUES, SKIN,
HAIR AND BONE.

10. 1 W

11. Quantity (including units)

NO

12. Country of Origin

D. Common Name

BUSH
DOG

Scientific Name

SPEOTHOS
VENATICUS

9. IMPORT: BIOLOGICAL SPECIMENS FROM CAPTIVE-
BORN ANIMALS, INCLUDING BUT NOT LIMITED TO
BLOOD, SERA, ORGANS, TISSUES, SKIN, HAIR AND
BONE.

10. 1 F

11. Quantity (including units)

NO

12. Country of Origin

E. Common Name

ALL SPECIES
ALL CATS

Scientific Name

FELIDAE

9. IMPORT: APPENDIX I CAT SPECIES LISTED ON
ATTACHED INVENTORY; BIOLOGICAL SPECIMENS
FROM WILD AND CAPTIVE-HELD WILD ANIMALS,
INCLUDING BUT NOT LIMITED TO BLOOD, SERA,
ORGANS, TISSUES, SKIN, HAIR AND BONE.

10. 2 W

11. Quantity (including units)

NO

12. Country of Origin



IMPORT
CONTINUATION
SHEET

U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
4401 N. FAIRFAX DRIVE
ROOM 212
ARLINGTON, VA 22203-3247

Page 2 of 2

1. Original Permit/Certificate No.
US203197/9

6. U.S. Management Authority
ARLINGTON, VA
PLACE

12/27/2011
Issuing Date

7/8. Common Name and Scientific name (genus and species) of Animal or Plant

8. Description of Part or Derivative, including identifying marks or numbers (age/sex if live)

10. Appendix No. and Source

F. Common Name
ALL SPECIES
ALL CATS

Scientific Name
FELIDAE

9. IMPORT: APPENDIX I CAT SPECIES LISTED ON ATTACHED INVENTORY; BIOLOGICAL SPECIMENS FROM CAPTIVE BORN ANIMALS, INCLUDING BUT NOT LIMITED TO BLOOD, SERA, ORGANS, TISSUES, SKIN, HAIR AND BONE.

10. 2 F

11. Quantity (including units) NO

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

REMOVE DOCUMENT ALONG THIS PERFORATION

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UNIVERSITY OF ILLINOIS

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TO THE Department of the Interior

ORDER US Fish and Wildlife Service

4401 North Fairfax Dr Rm 212

OF Arlington VA 22203

Edward J. Miller

Susan M. Kiser

AUTHORIZED SIGNATURES