

MAR 18 2020



**Department of Interior
U.S. Fish and Wildlife Service
Federal Fish and Wildlife Permit Application Form**

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

Type of Activity

REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT
(For this application, all permits, registrations, and certificates are referred to as a permit.)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details. Instructions on how to make your application complete and help avoid unnecessary delays are attached.

Section A: Complete if applying as an individual

1.a. Last Name		1.b. First Name		1.c. Middle Name/Initial	1.d. Suffix
2. Date of Birth (mm/dd/yyyy)	3. Telephone Number		3.a. Alternate Telephone Number		4. E-mail address

Section B: Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution Saint Louis Zoo		1.b. Doing business as (DBA) Same			
2. Tax identification no. 43-1027364		3. Description of business, agency, Tribe, or institution Public Zoological Gardens			
4.a. Principal officer Last name Bonner	4.b. Principal officer First Name Jeffrey		4.c. Principal officer Middle name/initial P.	4.d. Suffix Ph.D.	
5. Principal officer title Dana Brown President/CEO		6. Primary contact name Rae Lynn Haliday			
7.a. Business telephone number (314) 646-4572	7.b. Alternate telephone number (314) 781-0900		7.c. Business fax number (314) 647-7969	7.d. Business e-mail address haliday@stlzoo.org	

Section C: All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes) 1 Government Drive				
1.b. City St. Louis	1.c. State MO	1.d. Zip code/Postal code 63110	1.e. County/Province St. Louis	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

Section D: All applicants MUST complete

1. Attach the nonrefundable application processing fee in the form of a check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount identified on page 6 and 7. 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)].	Attachment A
2. 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.	
Signature of applicant/Principal Officer for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)	
<div style="display: flex; justify-content: space-between;"> <div style="text-align: right;">2/18/2020</div> </div>	
Please continue to next page	

Internal Revenue Service

District
Director

St. Louis Zoological Park
Forest Park
St. Louis, Missouri 63110

Department of the Treasury
P.O. Box 1123, Central Station
St. Louis, Missouri 63188

Person to Contact:
S. Robertson
Telephone Number:
314-425-6286

Refer Reply to:
EP/EO:Tech:Service Unit
Date:

MAR 23 1978

Gentlemen:

This is in response to your application seeking status as an organization exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code.

Since your organization is an instrumentality of the State of Missouri, it is an organization as described in Section 115 of the Internal Revenue Code of 1954 which provides, in part, as follows:

"Gross income does not include—

- (1) income derived from any public utility or the exercise of any essential governmental function and accruing to a State or any political subdivision thereof, or the District of Columbia; or
- (2) income accruing to the government of any possession of the United States or any political subdivision thereof.

Contributions made to you for exclusively public purposes are deductible by the donors for Federal income tax purposes in the manner and to the extent provided in Section 170 of the Internal Revenue Code.

This is an advisory letter.

Sincerely yours,

R. C. Yaskin

District Director

Enclosure 19

State of Missouri

EXEMPTION FROM MISSOURI SALES AND USE TAX ON PURCHASES

Issued to:

ZOOLOGICAL PK SUBDIST. OF METRO ZOOLOGICAL PK/MUSEUM
FOREST PARK
ST LOUIS MO 63118

Missouri Tax ID
Number: 12623491

Effective Date:
07/11/2002

Your application for sales and use tax exemption status has been approved pursuant to section 144.000.1, RSMo. This letter is issued as documentation of your exempt status.

Purchases by your Agency are not subject to sales or use tax if within the conduct of your official function and activities. When purchasing under this exemption, furnish all sellers or vendors a copy of this letter. This exemption may not be used by individuals for personal purchases.

A contractor may purchase any type of construction material exempt from sales tax then fulfill the contract with your Agency only if your Agency issues a proper exemption certificate and the contractor takes purchases in compliance with the provisions of section 144.002, RSMo.

Sales by your Agency are subject to applicable state and local sales taxes. If you engage in the business of selling tangible personal property or taxable services at retail, you must obtain a Missouri Retail Sales Tax license and collect and remit sales tax.

This is a continuing exemption subject to legislative changes and review by the Director of Revenue. Your Agency ceases to qualify as an exempt entity, this exemption will cease to be valid. This exemption is non-transferable. It is an exemption from sales and use tax only and is not an exemption from real or personal property tax.

Any alteration to this exemption letter renders it invalid.

If you have any questions regarding the use of this letter, please contact the Division of Taxation and Collection, P.O. Box 3380, Jefferson City, MO 65105-3380, phone 573-751-2836.

6. Past activities.

- a. Provide copies of all cleared documents and form 3-177 (FWS declaration of wildlife) associated with this permit. *Enclosure #1*
- b. Provide a summary detailing activities conducted under this permit, as well as a brief statement of why you are seeking reissuance/renewal. *Enclosure #2*

7. Annual Report. If required by your permit, provide an annual report as conditioned (Please disregard if you have already submitted your annual report.) *Enclosure #2***8. Sport-hunted trophies:** If you did not hunt during the hunting season stated in your original application, you are not eligible for a renewal. Please submit a new application form.**9. Certification** - Complete one of the statements below and supply any additional documentation requested: (original signature is required)

- a. For **NO CHANGES** to original application:

I certify that the information submitted in support of my original application for the permit indicated above has not changed and is still currently correct. I hereby request reissuance or renewal of this permit.

Permittee's signature: *[Signature]* Date: *2/18/2020*

- b. For **CHANGES** to original application:

On an attached page(s), provide a complete description of any changes (e.g., change in principal officer, personnel, address, location of activities, types of activities). Please sign each attached page. Also note that we may need to request additional information regarding the changes after reviewing your initial request.

I certify that the information submitted in support of my original application for the permit indicated above is still currently correct EXCEPT for the changes noted on the attached, signed page(s). I hereby request re-issuance or renewal of this permit with the indicated changes.

Permittee's signature: _____ Date: _____

All international shipment(s) must be through a designated port, unless otherwise authorized. A list of designated ports (where an Inspector is posted) is available. If you wish to use a port not listed, please contact either the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2) or the Division of Management Authority.

U.S. FISH AND WILDLIFE SERVICE



DECLARATION FOR IMPORTATION
OR EXPORTATION OF
FISH OR WILDLIFE

1. Date of Import/Export (mm/dd/yyyy):
08/09/2019

2. Import/Export License Number:

3. Indicate One:
☒ import ☐ export

4. Port of Clearance:
MI

5. Purpose Code:
M

6. Customs Document Number(s):
M85-7523

7. Name of Carrier:
LANTAM AIRLINES

8. Air Waybill or Bill of Lading No.:
Master:
House:

9. Transportation Code: P

License No.
State or Province: FL

10. Bonded Location for Inspection:
LANTAM

11. Number of Cartons Containing Wildlife:
1

12. Markings on Cartons Containing
Wildlife:

13. (indicate one) SAINT LOUIS ZOO
☒ U.S. Importer ZOO
☐ U.S. Exporter #1 GOVERNMENT DRIVE
ST LOUIS, MO 63110
305-5925656

14. (indicate one) FUNDACION CHARLES
☐ Foreign Importer DARWIN
☒ Foreign Exporter AV CHARLES DARWIN
SANTA CRUZ, EC

13b. Identifier Number: ID Type:

14c. Identifier Number: ID Type:

15. Customs Broker, Shipping Agent or Freight Forwarder:
[Redacted]

15b. Identifier Number: ID Type:

Phone Number / Fax Number / Email Address:

15c. Contact Name: [Redacted]

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
GEOF	CHELONOIDIS PORTERI LAND TORTOISE	19EC000001/PG	SPE W	300.00 NO \$ 1	EC	<input type="checkbox"/>
GEOF	CHELONOIDIS HOODENSIS LAND TORTOISE	19EC000001/PG	SPE W	165.00 NO \$ 1	EC	<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

22. I certify under penalty of perjury that the information furnished is true and correct:
Filed Electronically: 08/06/2019 ConfirmNum: 2019MI2457796

U S F I S H & W I L D L I F E S E R V I C E
N I T E D
Electronic Filing
CLEARED
T A T E S

Date: 11/12/2019



DIRECCIÓN DEL PARQUE NACIONAL GALÁPAGOS
DIRECCIÓN DE ECOSISTEMAS
AUTORIZACIÓN PARA EXPORTACIÓN DE MUESTRAS

EXPORTACIÓN	X	FAUNA SILVESTRE	X	AUTORIZACIÓN No.	103-2019 DPNG
		FLORA SILVESTRE		VALIDO	1 MES
FINES INVESTIGACIÓN	X	MATERIAL PÉTRICO		EMISION	05-08-2019
		AGUA		CADUCA	05-09-2019
		SEDIMENTOS			

PAIS DE ORIGEN: Ecuador

DESTINO: Estados Unidos

NOMBRES: Sharon L. Deem

INSTITUCIÓN: Zoológica de Saint Louis

No. CEDULA

N/A

No. PASAPORTE

531193850

NACIONALIDAD

Estadounidense

PAGO DERECHOS FACTURA No.

N/A

PROYECTO DE INVESTIGACIÓN

"Ecología de movimiento de tortugas de Galápagos" PC-16-19.

Considerando: Que mediante Acuerdo Ministerial No. 256 del 20 de agosto de 2014 la Ministra del Ambiente delegó al Director del Parque Nacional Galápagos, para que dentro de su jurisdicción, y a través de la Dirección de Ecosistemas de la Dirección del Parque Nacional Galápagos, ejerza las funciones como Unidad de Patrimonio Natural y cumpla con la siguiente atribución: emisión de permisos de importación y exportación de fauna y flora silvestres, conforme lo establece el Libro IV del TULSMA y la Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres. CITES.

DETALLE	CANTIDAD	SUBMUESTRAS		NOMBRE CIENTÍFICO	NOMBRE COMÚN	SEXO
		Tipo	#			
Muestras de sangre	20 tubos (cada tubo subdividido en 5 tarjetas FTA)	Tarjetas FTA	100	<i>Chelonoidis porteri</i>	Tortuga gigante de Santa Cruz	N/A
	11 tubos (cada tubo subdividido en 5 tarjetas FTA)	Tarjetas FTA	55	<i>Chelonoidis hoodensis</i>	Tortuga gigante de Española	
	40 tubos (cada tubo empleado en realizar 5 frots)	Frots de sangre	200	<i>Chelonoidis porteri</i>	Tortuga gigante de Santa Cruz	
	22 tubos (cada tubo empleado en realizar 5 frots)	Frots de sangre	110	<i>Chelonoidis hoodensis</i>	Tortuga gigante de Española	

OBLIGACIONES DEL SOLICITANTE: Las muestras producto de esta exportación, correspondientes al proyecto denominado "Ecología de movimiento de tortugas de Galápagos" PC-16-19, son propiedad del Estado Ecuatoriano. En consecuencia, no se autoriza hacer ningún uso comercial, patentar o reconocer derecho de propiedad intelectual alguna; así como otra actividad que no esté establecido en el Permiso de Investigación Científica No. PC-16-19.

La Dirección del Parque Nacional Galápagos entrega en custodia temporal las muestras producto de esta exportación a la PhD. María José Barragán, Directora de Ciencias - FCD, con el fin de que proceda a realizar los análisis requeridos en el marco del proyecto denominado "Ecología de movimiento de tortugas de Galápagos" PC-16-19.

La PhD. María José Barragán, Directora de Ciencias - FCD, entregará las muestras, placas preparados o cualquier material resultante producto de esta exportación a la Dirección del Parque Nacional Galápagos.

Original / 2 copias

Atentamente,

DIRECTOR DE ECOSISTEMAS

DIRECCIÓN DEL PARQUE NACIONAL GALÁPAGOS

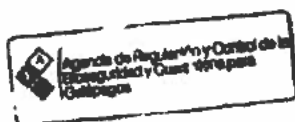


Parque Nacional
GALÁPAGOS
 Ecuador

Guía sanitaria para movilización de muestras


Aprobado

Revisado,
Inspector/a. Agropecuario/a ABG.





Guía sanitaria para movilización de muestras

Nombre del responsable: Sharon I. Deem

Fecha: 07/08/2019

Nº.278-ABC-2019

Nº. Oficio

FCD-CV-19-051

Respuesta

S/N

Cédula o pasaporte: 531193850

Transporta desde: Isla Santa Cruz

Hasta: Guayaquil

Tipo de muestra

Vertebrados	X	Invertebrados		Plantas		Agua		Suero Sanguíneo		Suelo		Otros	
-------------	---	---------------	--	---------	--	------	--	-----------------	--	-------	--	-------	--

Detalle de la/s muestra/s	Tipo de empaque	Cantidad		Total
		Letra	Número	
Sangre colectada en 20 tubos y almacenada en 100 tarjetas FTA para su transporte (<i>Chelonoides porteri</i>)	Sangre almacenada en tubos	Veinte	20	20
	Tarjetas FTA transportadas en bolsa Ziploc.	Cien	100	100
Sangre colectada en 40 tubos y almacenada en 200 frotis (<i>Chelonoides porteri</i>).	Sangre almacenada en tubos	Cuarenta	40	40
	Frotis sanguíneos transportados e cajas porta objetos.	Doscientos	200	200
Sangre colectada en 11 tubos y almacenada en 55 tarjetas FTA para su transporte (<i>Chelonoides hoodensis</i>).	Sangre almacenada en tubos	Once	11	11
	Tarjetas FTA transportadas en bolsa Ziploc.	Cincuenta y cinco	55	55
Sangre colectada en 22 tubos y almacenada en 110 frotis (<i>Chelonoides hoodensis</i>).	Sangre almacenada en tubos	Veintidós	22	22
	Frotis sanguíneos transportados e cajas porta objetos	Ciento diez	110	110
Total	Tubos	Noventa y tres	93	93
	Tarjetas	Ciento cincuenta y cinco	155	155
	Frotis	Trescientos diez	310	310

Motivo de la movilización.

PROYECTO: "Programa de Ecología de Movimiento de Tortugas de Galápagos": PC-15-19 con código 103-2019 el mismo que cuenta con autorización de la DPNG.

Medios de transporte

TIPO DE TRANSPORTE	NOMBRE DEL TRANSPORTE
AEREO	POR DEFINIR

Tiempo de validez de la guía. N° 5 Días

Desde el 07/08/2019

Hasta el 11/08/2019

Observaciones: LAS MUESTRAS NO PRESENTAN NINGUN RIESGO PARA LA SALUD HUMANA.



Edificio de la ABG
Avenida Bolívar - Puerto Ayora
Teléfono: 051527444 - 051527023
Isla Santa Cruz - Galápagos



DIRECCIÓN DEL PARQUE NACIONAL GALÁPAGOS

DIRECCIÓN DE GESTIÓN AMBIENTAL

PERMISO DE INVESTIGACIÓN CIENTÍFICA: N° PC-35-18

Versión: 01 Fecha: 09/01/17

Título del Proyecto: Ecología de movimientos de tortugas de Galápagos	
Nombre del Aplicante: Stephen Blake	Contraparte Institucional / DPNG: Responsable de Investigación Aplicada
Dirección actual completa: 6355 Alamo Avenue, Clayton, Missouri, 63105, USA, Tel: +1 314 769 9306, Email 1: sblakewcs@gmail.com	
Otros participantes en el Proyecto: James Gibbs, Arturo Izurieta, Daniel Lara, Danny Rueda, Andrea Loyola, Jorge Carrión, Martín Wikelski, Fredy Cabrera, José Haro, Ainoa Nieto, Francisco Benítez Capistras, Sebastián Cruz, Diego Ellis, Sharon Deem, Guillaume Bastille-Rousseau, Charles Yackulic, Martha Parker, Anne Guezou, Arturo Izurieta Valeri, Fernando Esperón, Casilda Rodríguez, Jamie Palmer, Kathleen Apakupakul, Paulo Colchao, Kerl Lammering, Evan Emmel, Laura Marie Kleinschmidt, Carolina Carrión, Paulina Couenberg, Karina Ramón Gómez, Patricia Jaramillo, Samuel Rivera, Nigel Blake, Adam Parlin, Kamran Safi, Daniel Warren, Paul Schaeffer.	
Clasificación del Proyecto: Ecología	Regulere Contrato Marco de Acceso a Recursos Genéticos: NO
Se requiere coleccionar muestras: SI	Factura: NO APLICA
Duración del Permiso de Investigación: Del 10 de abril del 2018 al 31 de marzo del 2019.	
Islas: Santa Cruz, Isabela, Española	Sitios: La Reserva, Cerro Fatal (Santa Cruz), Volcán Alcedo (Isabela) y Española
Instituciones auspiciantes: Swiss Friends of Galapagos, Galapagos Conservation Trust, United States National Science Foundation, National Geographic Society, Charles Darwin Foundation, DPNG.	
Condiciones de cumplimiento obligatorio:	
<ol style="list-style-type: none">1. Los investigadores deberán cumplir estrictamente con todas las regulaciones establecidas en el Manual de Procedimientos para Científicos Visitantes y Protocolos para viajes de Campo y Campamentos en las Islas Galápagos.2. Únicamente el equipo de investigadores incluido en el presente permiso está autorizado para participar durante el desarrollo del proyecto, tanto en la fase de campo, análisis de muestras, tabulación de datos y desarrollo de publicaciones. En caso de requerir la participación de investigadores adicionales, los responsables del proyecto deberán solicitar la autorización correspondiente por escrito a esta Dirección, presentando las justificaciones necesarias.3. Previo a la salida de campo, el investigador principal deberá presentar a la DPNG el AVISO DE VIAJE DE CAMPO correspondiente, con mínimo 72 horas de anticipación y de acuerdo al formato establecido; y coordinar permanentemente con el Responsable del Departamento de Investigación Aplicada de la DPNG en Santa Cruz, a fin de sistematizar todas las actividades que se ejecuten dentro del proyecto.4. Para las salidas de campo del proyecto, los investigadores deberán contar con una copia legible del respectivo Permiso de Investigación y el Aviso de Viaje de Campo firmado por los técnicos de la DPNG.5. Los sitios e islas autorizados serán exclusivamente: La Reserva, Cerro Fatal (Santa Cruz), Volcán Alcedo (Isabela) y Española.6. Para el ingreso a zonas de propiedad privada el responsable del proyecto deberá gestionar la autorización correspondiente directamente con el propietario.7. Se autoriza la colocación de máximo 60 dispositivos VHF a tortugas juveniles (crias) en la isla Santa Cruz, se aplicarán 30 dispositivos en la población de La Reserva y 30 en Cerro Fatal.8. Se autoriza la realización de ecografías a un máximo de 100 tortugas adultas-hembras, con la finalidad de determinar el grado de especímenes ovadas en las poblaciones de estudio.9. Se autoriza la ejecución de laparoscopias a un máximo de 50 crías/juveniles de tortugas gigantes en El Chato con la finalidad de determinar el sexo de los individuos.10. Se autoriza el uso de un dron (Dron semiprofesional DJI Mavic Pro; peso 743 gr, autonomía de 25 minutos de vuelo y 2km de distancia y sensor anti-objetos), con la finalidad exclusiva de identificar nuevos sitios de agregación-anidación de tortugas gigantes en la Reserva El Chato, Isla Santa Cruz. Además se podrá realizar el levantamiento de imágenes multi-espectrales y termales, con el objetivo de evaluar las variaciones en el terreno circundante a gran escala y la presencia de micro-hábitats de importancia para tortugas neonatas.	

www.galapagos.gov.ec

Santa Cruz (Pto. Ayora, PRC): (593) 052 374 1881; orquídea@galapagos.gov.ec; Ben Cristóbal, Pto. Baquería Moreno, Tel./Fax: (593) 052 320 (35/4977474); chelonai@galapagos.gov.ec; Isabela, Pto. Velazco, Tel: (593) 052 829 178/288; isabela@galapagos.gov.ec; Floreana, Pto. Velazco Barró, Tel: (593) 052 124 287; floreana@galapagos.gov.ec; RUC: 20600901009.



Ministerio
del Ambiente



Parque Nacional
GALÁPAGOS
Ecuador



ÁREAS
PROTEGIDAS
EN ECUADOR

DIRECCIÓN DEL PARQUE NACIONAL GALÁPAGOS
DIRECCIÓN DE GESTIÓN AMBIENTAL
PERMISO DE INVESTIGACIÓN CIENTÍFICA: N° PC-35-18

Versión: 01 Fecha: 08/01/17

11. Autorizar la implementación de cercas adaptadas en 15 fincas, que permitan el paso de las tortugas y eviten daños de los cultivos con la finalidad de cuantificar los daños reales y verificables ocasionados por las tortugas.
12. Autorizar la colección de muestras de acuerdo al detalle del **ANEXO DE MUESTRAS D18-MAE-DPNG-IA**, adjunto al presente permiso de investigación.
13. Posterior al cumplimiento de los protocolos establecidos, el responsable del proyecto podrá exportar las muestras autorizadas en el presente permiso de investigación a los laboratorios del Max Planck Institute for Ornithology, Radolfzell, Alemania, al Zoologico de Sanit Louis, Missouri, EE.UU. Centro de Investigación en Sanidad Animal (CISA- INIA).
14. **No autorizar** temporalmente la aplicación de los dispositivos ICARUS y Ibutton thermochrons, hasta que se realice una presentación de esta metodología y resultados a la DPNG, con la finalidad de esclarecer el modo de ejecución de estas técnicas.
15. Las muestras colectadas dentro del marco legal del presente permiso de investigación **NO** podrán ser utilizadas en actividades de **BIOPROSPECCIÓN, NI ACCESO AL RECURSO GENÉTICO**; y estas únicamente podrán ser utilizadas bajo las líneas de estudio autorizadas por el Ministerio del Ambiente del Ecuador a través de Dirección del Parque Nacional Galápagos.
16. El desarrollo de actividades de investigación científica dentro de las Áreas Protegidas como el Parque Nacional y la Reserva Marina de Galápagos es un privilegio concedido por el Gobierno Ecuatoriano a través de la DPNG, por lo que los responsables del proyecto deberán citar el número de Permiso de Investigación Científica otorgada por la DPNG, e incluir los reconocimientos y/o agradecimientos en las publicaciones científicas, tesis o informes técnicos científicos que se emita como producto generada en base al presente permiso de investigación.
17. El análisis de los datos y los avances de la investigación deberán estar disponibles permanentemente para los técnicos de la DPNG, extendiendo el compromiso de estos de usarlos únicamente para acciones de manejo y no publicarlos sin el consentimiento de los Investigadores principales del proyecto.
18. Una vez concluido el análisis de las muestras, estas, las bibliotecas de datos y/o cualquier material resultante deberán ser devueltos a la DPNG. Estas deben ser preservadas, curados y depositados correctamente en las colecciones de referencia en Galápagos, de lo contrario, se deberán sufragar los gastos que demanden la preparación del material para su ingreso a la colección correspondiente.
19. Previo a la renovación del permiso de investigación, el científico responsable del proyecto o su contraparte institucional de investigación deberán entregar a la DPNG lo siguiente:
 - Una copia digital (Tabla de Excel 97-2003) de todos los datos obtenidos durante la ejecución del proyecto.
 - Un **INFORME TECNICO DE CAMPO** por cada Aviso De Viaje De Campo presentado a la DPNG, para la ejecución del proyecto.
 - Dos conferencias para los guardaparques de la DPNG, guías naturalistas y otras personas interesadas sobre los avances del proyecto. Para establecer el cronograma se deberá coordinar con el Responsable de Investigación Aplicada de la DPNG.
 - Un **INFORME DE AVANCES** del proyecto con todos los detalles de la investigación y sus recomendaciones técnicas aplicables al manejo de las Áreas Protegidas.
 - Artículos y publicaciones resultantes de la siguiente manera: en el caso de publicaciones únicamente en formato digital, si son libros o tesis, 5 impresas y una digital, en el caso de la versión digital la harán en dispositivos magnéticos adecuadamente identificados.
20. Los datos que se desprendan de esta investigación, no podrán ser utilizados para estudios posteriores sin la previa autorización del Ministerio del Ambiente a través de la Dirección del Parque Nacional Galápagos.
21. Del incumplimiento de las obligaciones dispuestas anteriormente se responsabiliza a Stephen Blake Responsable del proyecto y al Dr. Arturo Izurieta de la FCD, como contraparte de investigación. Por lo



Ministerio
del Ambiente



Parque Nacional
GALÁPAGOS
Ecuador



ÁREAS
PROTEGIDAS
PUNTO
VERDES

DIRECCIÓN DEL PARQUE NACIONAL GALÁPAGOS
DIRECCIÓN DE GESTIÓN AMBIENTAL

Versión: 01 Fecha: 00/01/17

PERMISO DE INVESTIGACIÓN CIENTÍFICA: N° PC-35-18

tanto el incumplimiento de cualquiera de estas condiciones así como el uso indebido de este documento, serán sancionados conforme a la Ley Forestal y de Conservación de Áreas Naturales y Vida Silvestre Codificada, Texto Unificado de la Legislación Ambiental Secundaria y dependiendo de la infracción podría conllevar a suspensión inmediata de la investigación.

Valoración Técnica: Gato Quezada

Categoría: COLABORADOR MPIO-FCD-DPNG 2018

Considerando que el Título II, numeral 2.2, literal V del Estatuto Orgánico de Gestión por Procesos de la Dirección del Parque Nacional Galápagos publicada en la Edición Especial N° 349 del Registro Oficial publicado el martes 16 de octubre del 2012, establece entre las atribuciones y responsabilidades del Director de Gestión Ambiental "Administrar y organizar las actividades de investigación que se desarrollen en las áreas protegidas de Galápagos, en coordinación con el proceso de investigación", además que mediante Resolución N° 71 del 14 de Diciembre del 2012, el Director del Parque Nacional Galápagos delegó al Director de Gestión Ambiental, para que en su nombre y representación tramite y suscriba los actos relacionados con el desarrollo de proyectos de investigación científica en las áreas protegidas de Galápagos; en uso de la facultad delegada y de conformidad a lo señalado en el Título Cuarto, capítulo I del Estatuto Administrativo de la Dirección del Parque Nacional Galápagos, otorga el presente PERMISO DE INVESTIGACIÓN.

Reporte de Avances o Final: 15 de Marzo 2019

Entrega de Propuesta para Renovación: 15 de Marzo 2019

FIRMA DEL INVESTIGADOR PRINCIPAL

Fecha de emisión: 13 de abril del 2018

Director de Gestión Ambiental
DIRECCIÓN DEL PARQUE NACIONAL GALÁPAGOS



ANEXO DE MUESTRAS 018-MAE-DPNG-IA

LISTA DE ESPECIES AUTORIZADAS PARA COLECCIÓN DE MUESTRAS EN EL
PROYECTO No. PC-35-18.


"Ecología de movimiento de tortugas de Galápagos".

Tipo de Muestra	Cantidad	Especie	Tipo de Análisis
Heces fecales	200 unidades	<i>Ch. donfaustoi</i>	Establecimiento y actualización de línea base del estado de salud. Determinación y cuantificación de las resistencias a antibióticos y presencia de patógenos (mediante técnicas no genéticas).
	200 unidades	<i>Ch. vandenburghi</i>	
	200 unidades	<i>Ch. hoodensis</i>	
	200 unidades	<i>Ch. porteri</i>	
Muestras de sangre	200 muestras de máximo 5 ml cada una.	<i>Ch. donfaustoi</i>	Establecimiento de parámetros sanguíneos basales, hematología, bioquímica y determinación de presencia de parásitos hemáticos.
	200 muestras de máximo 5 ml cada una.	<i>Ch. vandenburghi</i>	
	200 muestras de máximo 5 ml cada una.	<i>Ch. hoodensis</i>	
	200 muestras de máximo 5 ml cada una.	<i>Ch. porteri</i>	
Hisopados nasales	125 individuos (8 hisopados por cada individuo).	<i>Ch. donfaustoi</i>	Determinación y cuantificación de las resistencias a antibióticos (mediante técnicas no genéticas).
	75 individuos (8 hisopados por cada individuo).	<i>Ch. vandenburghi</i>	
	75 individuos (8 hisopados por cada individuo).	<i>Ch. hoodensis</i>	
	125 individuos (8 hisopados por cada individuo).	<i>Ch. porteri</i>	
Hisopados cloacales	125 individuos (8 hisopados por cada individuo).	<i>Ch. donfaustoi</i>	Determinación y cuantificación de las resistencias a antibióticos (mediante técnicas no genéticas).
	75 individuos (8 hisopados por cada individuo).	<i>Ch. vandenburghi</i>	
	75 individuos (8 hisopados por cada individuo).	<i>Ch. hoodensis</i>	
	125 individuos (8 hisopados por cada individuo).	<i>Ch. porteri</i>	
Hisopados oculares	125 individuos (8 hisopados por cada individuo).	<i>Ch. donfaustoi</i>	Determinación y cuantificación de las resistencias a antibióticos (mediante técnicas no genéticas).
	75 individuos (8 hisopados por cada individuo).	<i>Ch. vandenburghi</i>	
	75 individuos (8 hisopados por cada individuo).	<i>Ch. hoodensis</i>	
	125 individuos (8 hisopados por cada individuo).	<i>Ch. porteri</i>	

ANEXO DE MUESTRAS 018-MAE-DPNG-IA

Hisopados orales	125 individuos (8 hisopados por cada individuo).	<i>Ch. donlaustai</i>	Determinación y cuantificación de las resistencias a antibióticos (mediante técnicas no genéticas).
	75 individuos (8 hisopados por cada individuo).	<i>Ch. vandenburghi</i>	
	75 individuos (8 hisopados por cada individuo).	<i>Ch. hoodensis</i>	
	125 individuos (8 hisopados por cada individuo).	<i>Ch. porteri</i>	
Raspados de piel y caparazón	100 muestras	<i>Ch. porteri</i> , <i>Ch. hoodensis</i> , <i>Ch. vandenburghi</i> , <i>Ch. donlaustai</i>	Raspados cutáneos y de caparazón de lesiones para determinación de presencia de etiología fúngica o bacteriana por medio de cultivos bacteriológicos y fúngicos.
Parásitos internos (nematodos, gusanos intestinales, etc).	50 viales.	Por identificar.	Identificación morfológica.
Parásitos externos (garrapatos, etc).	50 viales.	Por identificar.	Identificación morfológica.
Tejidos y biopsias de lesiones y carcacas	100 viales con 1 cm ³ de tejido cada uno.	<i>Ch. porteri</i> , <i>Ch. hoodensis</i> , <i>Ch. vandenburghi</i> , <i>Ch. donlaustai</i>	Técnicas anatómo-patológicas.
Muestras de suelo	50 muestras de 3 gramos cada una.	No Aplica	Determinación de correlaciones entre la salud de las especies domésticas y silvestres.
Muestras de agua	50 muestras de 2 ml cada una.	No Aplica	Determinación de correlaciones entre la salud de las especies domésticas y silvestres.

Revisado por:


Galo Quezada
Investigación Aplicada

Autorizado por:


Edison Muñoz
Director Gestión Ambiental



CONVENCIÓN SOBRE EL COMERCIO
INTERNACIONAL DE ESPECIES
AMENAZADAS DE FAUNA Y FLORA
SILVESTRES

PERMISO/CERTIFICADO
N° 19EC000001/PG

Original

- ☒ EXPORTACIÓN
☐ REEXPORTACIÓN
☐ IMPORTACIÓN
☐ OTRO

2. Válido hasta el

05/02/2020

3. Importador (Nombre y Dirección)

Dra. Sharon L. Deem

Instituto de Medicina de la Conservación Zoológico de Saint Louis; Nro. Identidad: 531193850;
Tel.: +1 (314) 648 4708; One Government Drive, Saint Louis, Missouri

3a. País de Importación: Estados Unidos

5. Condiciones especiales:

Se autoriza en base al Permiso de Investigación Nro. PC-16-19 "Ecología de movimiento de tortugas de Galápagos" emitido por la Dirección del Parque Nacional Galápagos. No se autoriza acceso a recursos genéticos ni uso con fines comerciales.

4. Exportador/reexportador (nombre, dirección y país)

Ainoa Neto Claudin

Fundación Charles Darwin, Av. Charles Darwin S/N, Puerto Ayora, Nro. Cédula: 0902026-4 E-mail: ainoa.neto@fcdarwin.org.ec; Tel.: +593 983342044

Santa Cruz, Galápagos

Firma del solicitante

6. Nombre, dirección, sello/timbre nac. y país de Autoridad Administrativa



Ministerio
del Ambiente



Parque Nacional
GALÁPAGOS
Ecuador

Mgs. Danny Rueda Córdova
Av. Charles Darwin s/n, DPNG
Puerto Ayora, Santa Cruz, Galápagos, Ecuador

5a. Propósito de la transacción

S

5b. Estampilla N°

1482092

A	7. Nombre Científico	8. Nombre común	9. Descripción Especímenes		10. Apéndice y origen		11. N° Especímenes	11a. Total Exportado/Cupo
	<i>Chelonoidis porteri</i>	Tortuga gigante de las Galápagos	Muestras de sangre en tarjetas FTA		I - W		100	XXXXX
B	12. País de Origen*	Permiso N°	Fecha	12a. País última reexportación	No. Certificado	Fecha	12b. No. Del establecimiento ** o fecha de adquisición ***	
C	7. Nombre Científico	8. Nombre común	9. Descripción Especímenes		10. Apéndice y origen		11. N° Especímenes	11a. Total Exportado/Cupo
	<i>Chelonoidis hoodensis</i>	Tortuga gigante de las Galápagos	Muestras de sangre en tarjetas FTA		I - W		55	XXXXXX
D	12. País de Origen*	Permiso N°	Fecha	12a. País última reexportación	No. Certificado	Fecha	12b. No. Del establecimiento ** o fecha de adquisición ***	
E	7. Nombre Científico	8. Nombre común	9. Descripción Especímenes		10. Apéndice y origen		11. N° Especímenes	11a. Total Exportado/Cupo
	<i>Chelonoidis porteri</i>	Tortuga gigante de las Galápagos	Frotis de sangre		I - W		200	XXXXXX
F	12. País de Origen*	Permiso N°	Fecha	12a. País última reexportación	No. Certificado	Fecha	12b. No. Del establecimiento ** o fecha de adquisición ***	
G	7. Nombre Científico	8. Nombre común	9. Descripción Especímenes		10. Apéndice y origen		11. N° Especímenes	11a. Total Exportado/Cupo
	<i>Chelonoidis hoodensis</i>	Tortuga gigante de las Galápagos	Frotis de sangre		I - W		110	XXXXXX
H	12. País de Origen*	Permiso N°	Fecha	12a. País última reexportación	No. Certificado	Fecha	12b. No. Del establecimiento ** o fecha de adquisición ***	

* País en el que los especímenes fueron recolectados en la naturaleza, criados cautividad o reproducidos artificialmente (Solo para reexportación)

** Solamente para los especímenes de especies incluidas en el Apéndice I criados en cautividad o reproducidos artificialmente con fines comerciales

*** Para los especímenes preconvencción

13. Permiso/certificado expedido por: Mgs. Danny Rueda Córdova

Puerto Ayora, Santa Cruz

Lugar

05 de agosto de 2019

Fecha

Estampilla de seguridad, firma y sello oficial

14. Aprobación de la exportación:

15. Conocimiento del embarque/carta de porte aéreo N°:

Sección	Cantidad
A	
B	
C	
D	

Puerto de exportación

Fecha

Nombre y Firma

Sello oficial y título

E. REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT (For this application, all permits, registrations, and certificates are referred to as a permit.)

NOTE 1: If you are renewing your Designated Port Exemption permit, use form 3-200-2 and submit to appropriate Office of Law Enforcement address. If you are renewing your Import/Export license (required for commercial activities), use form 3-200-3 and submit to appropriate Office of Law Enforcement address.

NOTE 2: This form **cannot** be used for a lost or damaged permit. If you need to replace a lost or damaged permit, please use form 3-200-66. The application **must** be submitted to the office that issued the initial permit. Lost or damaged permit

NOTE 3: Some activities, such as all master files for multiple shipments, Certificate of Scientific Exchange (COSE), circus/traveling exhibits, and artificially propagated plants, can only be re-issued, renewed, or amended by submitting a new application for permits for those activities. Please refer to these application types to determine if another application form would be more appropriate or contact the Division of Management Authority for more information.

1. Name and address where you wish the permit to be mailed, if different from page 1. If you would like expedited shipping, please enclose a self-addressed, pre-paid, computer-generated, courier service airway bill. If unspecified, all documents will be mailed via regular mail through the U.S. Postal Service.
2. Who should we contact if we have questions about the application (name, phone number, and e-mail)?
Rae Lynn Haliday, CRM, Registrar, (314) 646-4572 or haliday@stlzoo.org
3. 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?

☒ No ☐ Yes

If you answered "Yes" to Question 3, 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. Please be aware that a "Yes" response does not automatically disqualify you from getting a permit.

4. **Permit number.** Enter the permit number to be reissued/renewed/amended.
5. Submit the original permit with this application.

Prt#: 19US62698C/9

February 20, 2020

U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803

Reference: PRT# 19US62698C/9 – 2019 Annual Report

Please find attached the annual report for the above referenced permit as well as the 2019 Declaration of Import/Export and the cancelled CITES import permit.

We collected the following samples in Galapagos in 2018 and 2019 and imported them into the US on August 9, 2019 (see table below). Sample were collected by Dr. Ainoa Nieto Claudin, a wildlife veterinarian and PhD student with the Galapagos Tortoise Movement Ecology Programme (GTMEP) and/or by Dr. Sharon Deem, a co-PI of the GTMEP. All tortoises were free-living and manually restrained for sample collection. No morbidity or mortality occurred during the collection of these samples.

Because the governmental agency in Galapagos issued the export permit down to the subspecies level instead of *Chelonoidis niger* like the import permit, the port inspector allowed us to bring the samples in but noted the attached 3-177 as clearance refused. The samples will not be re-exported but would be used for the stated research. We will ensure that the export permit is issued, and validated, correctly with future imports.

- 1) Galapagos tortoise (*Chelonoidis porteri*): Whole blood on FTA cards (100)
- 2) Galapagos tortoise (*Chelonoidis porteri*): Whole blood smears on slides (200)
- 3) Galapagos tortoise (*Chelonoidis hoodensis*): Whole blood on FTA cards (55)
- 4) Galapagos tortoise (*Chelonoidis hoodensis*): Whole blood smears on slides (110)

Sample type	Island of Origin	Species: Galapagos giant tortoise	Quantity of samples	Amount of blood for all samples	Method of preservation
Whole Blood	Santa Cruz, Galapagos	<i>Chelonoidis porteri</i> sp.	100 (<i>C. n. porteri</i>)	20 ml	FTA cards
			200 (<i>C. n. porteri</i>)	4 ml	Blood slides/smears
Whole Blood	Espanola, Galapagos	<i>Chelonoidis hoodensis</i> sp.	55 (<i>C. n. hoodensis</i>)	11 ml	FTA cards
			110 (<i>C. n. hoodensis</i>)	2.2 ml	Blood slides/smears

We respectfully request a re-issuance of the CITES permit in order to complete the health assessments outlined in #6 of the attached annual report and to continue to import the samples covered under the original permit/master file.

If you have questions or comments, please do not hesitate to contact Rae Lynn Haliday at haliday@stlzoo.org and she will coordinate with me to provide the required information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sharon L. Deem', written over a horizontal line.

Sharon L. Deem, DVM, Ph.D., Dipl ACZM
Director, Saint Louis Zoo Institute for Conservation Medicine
Saint Louis Zoo
St. Louis, MO 63110

Enclosures: 3-177 – 08/09/2019
Collecting Permits 2018- 2019
List of Research Publications from the Galapagos Tortoise Movement Ecology
Programme (past 5 years)

Cc: Rae Lynn Haliday, CRM
Saint Louis Zoo Registrar

ANNUAL REPORT

RE: 2019 Annual Report/PRT #19US62698C/9

1. General Information:

- 1.1. **Name of the Project:** Galapagos Tortoise Movement Ecology Programme (GTMEP), Investigation Permit Number PC-16-19.
- 1.2. **Name of Principal Investigator(s):** Dr. Stephen Blake and Dr. Sharon L. Deem.
- 1.3. **Research Team:** Ainoa Nieto Claudín, Freddy Cabrera, José Haro, Fernando Esperón, Kathleen Apakupakul, Jamie Palmer, and Irene Peña.

1.4. Additional Information:

- 1.4.1. Galapagos National Park (GNPD) samples exportation number: 103-2019 DPNG. Samples exported on August 9, 2019 by Dr. Sharon L. Deem. Destination to Saint Louis Zoo Institute for Conservation Medicine (ICM), Saint Louis Zoo, Missouri, USA. A total of 310 blood smears and 155 FTA cards were exported.

Exportation CITES nº 19EC000001/PG from Ecuador.

Importation CITES nº 19US62698C/9 from USA.

2. Background

- 2.1. The main objective of the GTMEP is to assess how several factors (e.g., environment, tortoise physiology, health, life history) may interact and determine tortoise migrations, and how we may preserve this migratory behavior in the face of environmental and anthropogenic threats. As part of this programme, we do have an important health component to study the health of tortoises using a One Health perspective. Our aim is to better understand how anthropogenic activities may have impacts on tortoise health, and the health of other wildlife species, domestic animals, and humans.

3. Objectives:

- 3.1. Main objective: to export samples so we may perform laboratory diagnostics in order to establish a giant tortoise health baseline.
- 3.2. Specific goals:
 - 3.2.1. To establish a baseline database of tortoise hematologic parameters from tortoise blood samples.

- 3.2.2. To determine the presence of pathogens (e.g., viruses, bacteria) and antimicrobial resistance by molecular tools.

4. Methods:

- 4.1. Blood samples (FTA= 155 and Smears= 310) were collected in 2019 from tortoises living on Santa Cruz Island and Espanola Island. Samples were collected under GNP investigation permits PC-16-19. Blood was collected with a 6ml syringe and a 20G needle, directly from the brachial vein. Blood smears were prepared immediately upon blood collection (within the field), air dried, and fixed with methanol. Additional blood smears were also made in the laboratory at Charles Darwin Research Station (CDRS) within 24h post blood collection. FTA cards were filled with 4 drops of fresh blood right after blood collection (in the field) and air dried. All samples were stored at room temperature at CDRS facilities until international transportation.
- 4.2. Smears are used to perform total and differential blood cell counts in order to determine a baseline for these species and to identify possible pathologies and blood parasites, as part of the health assessment for giant tortoises. Smears are stained with Diff-Quick staining solution and counts performed with a microscope 40x and 100x lens. Total cell counts are performed with 40x lens, counting 10 fields and multiplying the mean by 100 (number of cells/ul). To perform leucocyte cell differential counts we do use a 100x lens by counting a total number of 100 leucocytes to obtain a percentage with the composition of the different white blood cells (e.g., monocytes, heterophils, lymphocytes).
- 4.3. Blood smears and FTA cards are very durable materials that have a number of advantages for sample storage since they can be stored at room temperature for long periods of time, for further diagnostic analyses.

5. Preliminary results:

- 5.1. We imported the following materials on August 9, 2019

Galapagos tortoise (*Chelonoidis porteri*): Whole blood on FTA cards (100)
Galapagos tortoise (*Chelonoidis porteri*): Whole blood smears of slides (200)

Galapagos tortoise (*Chelonoidis hoodensis*): Whole blood on FTA cards (55)
Galapagos tortoise (*Chelonoidis hoodensis*): Whole blood smears of slides (110)

Galapagos Tortoise Movement Ecology Programme Publications 2013-2019

Updated February 20, 2020

Nieto-Claudin, A., Esperon, F., Blake, S., and Deem, S.L. 2019. Antimicrobial resistance genes present in the faecal microbiota of free-living Galapagos tortoises (*Chelonoidis porteri*). *Zoonoses and Public Health*. <https://doi.org/10.1111/zph.12639>.

Bastille-Rousseau, G., Yackulic, C., Gibbs, J.P., Frair, J., Blake, S. Migration triggers in a large herbivore: Galápagos giant tortoises navigating resource gradients on volcanoes. *Ecology*. <https://doi.org/10.1002/ecy.2658>

Ellis-Soto, D., S. Blake, A. Soutan, A. Guézou, F. Cabrera and S. Lötters. 2017. Plant species dispersed by Galapagos tortoises surf the wave of habitat suitability under anthropogenic climate change. *PLoS ONE* 12(7): e0181333.

Abrahms, B., Seidel, D.P., Dougherty, E., Hazen, E.L., Bograd, S.J., Wilson, A.M., Weldon McNutt, J., Costa, D.P., Blake, S., Brashares, J.S., and Getz, W.M. 2017. Suite of simple metrics to identify movement syndromes across individuals and species. *Movement Ecology*. 5(12): 1-11.

Yackulic, C.B., Blake, S., Bastille-Rousseau, G. 2017. A bioenergetics model explains size-biased partial migration in giant Galapagos Tortoises. *Journal of Animal Ecology*. 86(4): 972-982.

Bastille-Rousseau G, Gibbs JP, Campbell K, Yackulic, C.B., and Blake, S. 2017. Ecosystem implications of conserving endemic versus eradicating introduced large herbivores in the Galapagos Archipelago. *Biological Conservation* 209: 1-10.

Bastille-Rousseau, G; Gibbs, J; Yackulic, C; Frair, J; Cabrera, F; Rousseau, L-P; Wikelski, M; Kuemmeth, F; Blake, S. 2017. Animal movement in the absence of predation: environmental drivers of movement strategies in giant Galapagos tortoises. *Oikos*. 126(7): 1004-1019.

Bastille-Rousseau, G., Yackulic, C.B., Frair, J.L., Cabrera, F., and Blake, S. 2016. Walking with giants: Allometric and temporal scaling of movement characteristics in Galapagos tortoises. *Movement Ecology*. 4: 1-12.

Bastille-Rousseau, G., Potts, J.R., Yackulic, C.B., Frair, J.L., Ellington, E.H., and Blake, S. 2016. Flexible characterisation of animal movement behaviour using net squared displacement in a mixture distribution framework. *Journal of Animal Ecology*. 85(5): 1171-1181.

Sheldon, J.D., Stacy, N.I., Blake, S., Cabrera, F., and Deem, S.L. 2016. Comparison of total leukocyte quantification methods in free-living galapagos tortoises (*Chelonoidis* spp.). *Journal of Zoo and Wildlife Medicine*. 47(1). 196-205.

Blake, S., Guézou, A., Deem, S.L., Yackulic, C.B., Cabrera, F. 2015. The dominance of introduced plant species in the diets of migratory Galapagos tortoises increases with elevation on a human-occupied island. *Biotropica*. 47 (2). 246-258. Editor's Choice.

Blake S, CB Yackulic, M Wikelski, W Tapia, JP Gibbs, S Deem, F Villamar and F Cabrera. 2015. Migration by Galapagos giant tortoises requires landscape-scale conservation efforts. Pp. 144-150. In: Galapagos Report 2013-2014. GNPD, GCREG, CDF and GC. Puerto Ayora, Galapagos, Ecuador.

Blake, S., Yackulic, C.B., Cabrera, F., Tapia, W., Gibbs, J.P., Kummeth, F. & Wikelski, M. 2013. Vegetation dynamics drive segregation by body size in Galapagos tortoises migrating across altitudinal gradients. *Journal of Animal Ecology*, 82: 310-321.



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Transporting Wildlife & Wildlife Products Between Alaska & the "Lower 48"

If you take wildlife or wildlife products (products, parts, and derivatives) with you when you travel by land between Alaska and the "lower 48" contiguous States, you need to be aware of U.S. and Canadian laws and regulations that govern the import and export of wildlife.

These laws and regulations apply to you if you travel by car or bus and cross into and out of Canada on your trip. They may affect your ability to take certain belongings with you (for example, a pet bird) or to bring home wildlife products (such as hunting trophies or tourist souvenirs) that you acquire while traveling.

The guidelines below can help you enjoy your trip and comply with U.S. and Canadian wildlife protection laws that govern the import and export of live wildlife and wildlife parts and products.

General Guidance

Why do wildlife import/export laws apply to a person traveling between Alaska and another State with wildlife or wildlife products?

Such transactions are imports and exports if you travel by land through Canada – a separate country – even if your destination is either Alaska or one of the lower 48 States.

If you have wildlife or wildlife products with you, you are exporting them from the United States to Canada when you cross the border and enter that country. You are importing wildlife into the United States when you leave Canada and re-enter this country.

How do I import/export wildlife when I travel by land between Alaska and the lower 48?

In all cases, you must declare any wildlife products to U.S. or Canadian Customs when you enter or leave each country.

Additional requirements apply if your wildlife or wildlife products involve species protected under U.S. or Canadian law or you are traveling with live wildlife.

Who regulates the import and export of wildlife between the United States and Canada?

On the U.S. side of the border, the U.S. Fish and Wildlife Service, U.S. Customs and Border Protection, and other Federal agencies regulate wildlife imports and exports. Canadian Customs and Environment Canada deal with wildlife imports and exports in Canada.

Protected Species

What additional requirements apply if I am importing/exporting protected species?

If your wildlife or wildlife products involve species protected under U.S. or Canadian law, you will need to obtain permits and other authorizations in advance before you can transport them through Canada. You will also need to file a U.S. Fish and Wildlife Service Form 3-177 to declare your wildlife when you enter and leave the United States.

What types of wildlife require permits?

Permits may be required under U.S. or Canadian law to import or export the following types of wildlife:

- Species listed as endangered or threatened under the U.S. Endangered Species Act (50 CFR 17)
- Animals and plants regulated under the Convention on International Trade in Endangered Species (CITES). Examples include parrots, macaws, pythons, tortoises, and some sport-hunted species.
- Live birds protected under the Wild Bird Conservation Act (e.g., parrots and macaws)
- Marine mammals species listed under the Marine Mammal Protection Act (50 CFR 18)
- Migratory birds (50 CFR 21)
- Injurious species (such as live snakehead fish and mitten crabs) (50 CFR 16)

Are there any other requirements for importing or exporting protected species?

Yes, U.S. regulations require individuals importing or exporting protected species to declare and present their wildlife to the Fish and Wildlife Service for inspection at specific locations called designated ports. Since none of these ports are located on the U.S./Canadian border, you must apply for a **designated port exception permit** from the Service before you can travel by land through Canada with protected wildlife.

Hunting Trophies

How do I transport my sport-hunted wildlife between Alaska and the lower 48?

As with other wildlife, you must declare your trophy to Canadian and U.S. Customs and Border Protection when you enter or leave each country. If your trophy requires a permit under 50 CFR 16, 17, 18, or 21, you must obtain a designated port exception permit from the Service as described above.

A number of commonly sport-hunted species are protected under the CITES treaty and require permits. As explained below, U.S. and Canadian rules implementing the treaty waive permits for some species under certain circumstances.

What are some examples of common sport-hunted species that require CITES permits for transport through Canada?

The following trophies need a CITES export permit issued by the United States to enter Canada from Alaska. You must also obtain a CITES re-export permit from Canada to bring these products back into the United States.

- Fully processed/taxidermied black bear (*Ursus americanus*) products
- Fresh or mounted grey wolf (*Canis lupus*) sport-hunted trophies
- Fresh or mounted brown bear (*Ursus arctos*) sport-hunted trophies

Either you (the hunter) or another person may transport these trophies provided they are properly declared and have the required permits.

What are some common trophy products for which permits are not required?

As a hunter, you may bring the following products into Canada from Alaska and from Canada to the lower 48 without a CITES permit even though the species involved is protected under the CITES treaty. Only the person who took the animal is eligible for these permit waivers. (If someone else transports these products for you, CITES permits will be needed from both the United States and Canada.)

- The hide, hide with claws attached, skull and meat of legally hunted black bear (*Ursus americanus*). These products must be in a fresh, frozen, or salted state. No internal organs of any kind may be imported or exported.
- The carcass or meat of legally hunted sandhill crane (*Grus canadensis*). These products must be in a fresh, frozen, or salted state.

Souvenirs

What do I need to know before I transport wildlife souvenirs I purchased in Alaska through Canada to the lower 48?

Before you travel through Canada by car or bus with tourist souvenirs made from wildlife, you should check Canadian law to make sure that you can legally import and export your products. Be sure to declare your products to U.S. and Canadian Customs when you enter or leave each country.

Are there some common souvenirs made from protected species and sold in Alaska that cannot be transported through Canada?

Yes. Popular tourist souvenirs sold in Alaska include Native Alaskan handcrafts made from wildlife parts. Although it is legal to buy authentic Native Alaskan handcrafts made from certain protected species, the following products are either not considered an Alaskan native handcraft or cannot be transported through Canada:

- Polar bear rugs
- Raw skins and skin pieces of polar bear
- Uncarved or unaltered walrus ivory
- Whale baleen
- Products made from sea otter

Live Wildlife

What requirements apply if I am traveling with live wildlife?

If you travel with live wildlife, you must file a special declaration form (Fish & Wildlife Service Form 3-177) when you leave or return to the United States.

To facilitate your transport of live wildlife, the Service requires notification before your arrival at any U.S. port. Please contact the appropriate port of entry for more information.

Most of the live wildlife we regulate may require permits and veterinary certificates for valid transport. Please contact the U.S. Department of Agriculture for more information on veterinary certificate requirements.

Other Modes of Transport

Do wildlife import/export rules affect me if I fly between Alaska and one of the lower 48 States with wildlife or wildlife products?

No. Direct flights between Alaska and any other State are domestic flights. Taking wildlife or wildlife products with you on such a flight does not constitute an import or export.

Do wildlife import/export rules affect me if I mail my wildlife or wildlife products between Alaska and the lower 48?

No. You can send wildlife products by mail between Alaska and another State using either the U.S. Postal Service or an overnight package delivery company. If you are driving through Canada on your way from or to Alaska, you may want to consider mailing or shipping wildlife products instead of carrying them with you.

For additional information contact:

For import/export issues
U.S. Fish and Wildlife Service
Office of Law Enforcement
703-358-1949 703-358-2271 fax

For further questions concerning CITES
U.S. Fish & Wildlife Service
Division of Management Authority
(703)-358-2104 (703)-358-2298 fax

Last updated: February 14, 2013



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

MAR 18 2020

Page 1 of 3

IMPORT PERMIT

1. Original Permit/Certificate No.

19US62698C/9

2. Valid

07/02/2020

3. Permittee (name and address, country)

SAINT LOUIS ZOO
ONE GOVERNMENT DRIVE
ST. LOUIS, MO 63110
U.S.A.

4. Consignor (name and address, country)

GALAPAGOS NATIONAL PARK
CHARLES DARWIN AVENUE
PUERTO AYORA
SANTA CRUZ, GALAPAGOS ISLANDS 200390
ECUADOR

Original, Unused
Permit Returned

5. Special Conditions

ALL APPLICABLE FOREIGN, LOCAL, STATE, OR OTHER FEDERAL LAWS, INCLUDING THOSE
REQUIRING PERMITS, MUST BE OBSERVED.

MUST COMPLY WITH ATTACHED GENERAL AND SPECIAL PERMIT CONDITIONS.

U.S. ENDANGERED SPECIES [50 CFR 17.22].

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

PERMITTEE MUST COMPLETE BLOCK 11 PRIOR TO EACH SHIPMENT.

THIS REISSUES AND REPLACES 18US62698C/9 ISSUED 03/06/2018.

*-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

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: 1A
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803



07/03/2019

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 Plant

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

10. Appendix No. and Source

A. Common Name
GALAPAGOS GIANT
TORTOISE

9. IMPORT: NASAL, OCULAR, AND CLOACAL SWABS,
COLLECTED IN GALAPAGOS ISLANDS.

10. 1 W

Scientific Name
CHELONOIDIS
NIGER

11. Quantity (including units)

12. Country of Origin
ECUADOR

B. Common Name
GALAPAGOS GIANT
TORTOISE

9. IMPORT: WHOLE BLOOD COLLECTED IN GALAPAGOS
ISLANDS.

10. 1 W

11. Quantity (including units)

12. Country of Origin
ECUADOR

Scientific Name
CHELONOIDIS
NIGER

C. Common Name
GALAPAGOS GIANT
TORTOISE

9. IMPORT: BLOOD SMEARS COLLECTED IN GALAPAGOS
ISLANDS.

10. 1 W

11. Quantity (including units)

12. Country of Origin
ECUADOR

Scientific Name
CHELONOIDIS
NIGER

D. Common Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Scientific Name

E. Common Name

9.

10.

11. Quantity (including units)

12. Country of Origin

Scientific Name



United States Department of the Interior



FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS-IA
Falls Church, VA 22041-3803

Page 2 of 3
PRT-19US62698C/9

SPECIAL TERMS AND CONDITIONS FOR SAINT LOUIS ZOO

1. Samples collected from wild-caught animals may be imported provided the conditions of paragraphs 2 through 8 below are met.
2. Animals may only be captured in cooperation with local wildlife authorities (e.g., samples may be collected in parks/nature reserves only with the knowledge and consent of the park/reserve manager). No samples may be obtained from animals that are removed from the wild for the sole purpose of collecting samples, or for other than scientific or management purposes approved and carried out by appropriate wildlife authorities.
3. No remuneration, either financial or in-kind, may be offered for the taking of animals from the wild (i.e., killing, trapping) or for the collection of samples from free-ranging wildlife. This condition does not preclude legitimate collection and transportation expenses (e.g., hiring staff, freight costs), but does prohibit the paying of bounties or incentive pay for taking of animals from the wild, or the collection of samples from animals in the wild. Explicit written approval for collection from wild animals must be obtained from appropriate wildlife authorities and retained in the applicant's files for a period of 5 years and must be supplied upon the Division of Scientific Authority's request.
4. No animals may be killed intentionally for the purpose of collecting samples.
5. Care must be taken when handling live animals to minimize any possibility of injury. If, for any reason, any animal dies or incurs a debilitating injury as a result of being restrained for sample collection, or while having the sample collected, further collection of samples must be suspended until methods are

evaluated and, if appropriate, modified to prevent further incidences of injury or death. If two or more animals die or incur debilitating injuries within a 6-month period, sample collection must be suspended and the Division of Scientific Authority contacted in writing within 7 days of the death of the second individual. Before further sampling will be authorized a written account of the details of the event, and recommendations to resolve the situation, must be submitted for a review of sampling procedures (point of contact: Dr. Rosemarie Gnam, Chief, Division of Scientific Authority, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803; tel. 703-358-1708; fax 703-358-2276).

6. The applicant must maintain a record of all samples imported under this permit which must be made-available to the Division of Scientific Authority upon request. This record should include for each import: the species and type(s) of specimens, date(s) collected, the date shipped, the location(s) of collection and name of person who collected the sample(s), conditions under which samples were collected (salvage or wild-caught), authorizing government agency, and any mortalities or debilitating injuries that may have occurred as a result, directly or indirectly, of the collection activities.
7. The applicant must maintain copies of all CITES permits used to obtain and import all specimens and these documents must be made available to the Division of Scientific Authority upon request.
8. Prior to renewing or amending this application, the applicant must provide USFWS with a report that contains a record of all samples imported under this permit. The report must include the primary reason for the collection and the name and organizational affiliation of all individuals who conducted the sampling, as well as a copy of all relevant sample collection permits issued by the authorizing government agency, or individual in the case of private landowners. The report must include any mortalities or debilitating injuries that may have occurred as a result, directly or indirectly, of the collection activities. Finally, the report must include for each sample in each import: (a) the species and type of sample collected (e.g., blood, tissue etc.); (b) date of sample collection; (c) date of sample shipment and where the sample was shipped; and (d) the collection location.

07/03/2019
Date



Chief, Branch of Permits
Division of Management Authority



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

IMPORT PERMIT

Page 1 of 3

1. Original Permit/Certificate No.
19US62698C/92. Valid
07/02/2020

3. Permittee (name and address, country)

SAINT LOUIS ZOO
ONE GOVERNMENT DRIVE
ST. LOUIS, MO 63110
U.S.A.

4. Consignor (name and address, country)

GALAPAGOS NATIONAL PARK
CHARLES DARWIN AVENUE
PUERTO AYORA
SANTA CRUZ, GALAPAGOS ISLANDS 200350
ECUADOR

5. Special Conditions

ALL APPLICABLE FOREIGN, LOCAL, STATE, OR OTHER FEDERAL LAWS, INCLUDING THOSE
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THIS REISSUES AND REPLACES 18US62698C/9 ISSUED 03/06/2018.

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Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: 1A
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

07/03/2019

Issuing Date

United States Management Authority

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

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TORTOISE

Scientific Name
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NIGER

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10. Appendix No. and Source

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11. Quantity (including units)

12. Country of Origin
ECUADOR

B. Common Name
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Scientific Name
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NIGER

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ISLANDS.

10. 1 W

11. Quantity (including units)

12. Country of Origin
ECUADOR

C. Common Name
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TORTOISE

Scientific Name
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NIGER

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ISLANDS.

10. 1 W

11. Quantity (including units)

12. Country of Origin
ECUADOR

D. Common Name

Scientific Name

9. [REDACTED]

10. [REDACTED]

11. Quantity (including units)

12. Country of Origin

E. Common Name

Scientific Name

9. [REDACTED]

10. [REDACTED]

11. Quantity (including units)

12. Country of Origin



United States Department of the Interior



FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS-IA
Falls Church, VA 22041-3803

Page 2 of 3
PRT-19US62698C/9

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07/03/2019
Date


Division of Management Authority

Chief, Branch of Permits
Division of Management Authority

Grab, Kirstine M

From: Rae Lynn Haliday <Haliday@stlzoo.org>
Sent: Friday, August 28, 2020 12:20 PM
To: Grab, Kirstine M; Sharon Deem
Subject: Re: [EXTERNAL] Re: CITES permit application 62698C

Importance: High

Categories: Permit Information

You are welcome Kirstine. Thank you for your response and confirmation.

Rae

From: Grab, Kirstine M <kirstine_grab@fws.gov>
Sent: Friday, August 28, 2020 11:18 AM
To: Rae Lynn Haliday <Haliday@stlzoo.org>
Subject: RE: [EXTERNAL] Re: CITES permit application 62698C

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Rae,

Thank you for getting back to me on the update. I appreciate it. I will add this to your file and continue with the review process.

Kind regards,
Kirstine

From: Rae Lynn Haliday <Haliday@stlzoo.org>
Sent: Friday, August 28, 2020 11:02 AM
To: Grab, Kirstine M <kirstine_grab@fws.gov>
Subject: [EXTERNAL] Re: CITES permit application 62698C
Importance: High

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Good morning Kirstine, please confirm that you received our response to your questions, when you can.

Thanks so much,

Rae

From: Rae Lynn Haliday <Haliday@stlzoo.org>
Sent: Thursday, August 27, 2020 12:08 PM
To: Grab, Kirstine M <kirstine_grab@fws.gov>
Subject: Fw: CITES permit application 62698C

Good morning Kirstine, please see confirmation from our researcher Sharon Deem, we have no updates to our application 62698C.

Rae

From: Sharon Deem <deem@stlzoo.org>
Sent: Wednesday, August 26, 2020 2:17 PM
To: Rae Lynn Haliday <Haliday@stlzoo.org>
Cc: Kathy Zeigler <zeigler@stlzoo.org>; Ainoa Nieto <ainoa.nieto@fcdarwin.org.ec>
Subject: Re: CITES permit application 62698C

Dear Rae Lynn,

Apologies for the delay in response.

You are correct - no changes in the current CITES permit for Galapagos tortoises.

This may change in 2021 and forward post COVID but we are not sure what direction we will take after things open up.

Thanks,
Sharon

From: Rae Lynn Haliday <Haliday@stlzoo.org>
Sent: Wednesday, August 26, 2020 10:58 AM
To: Sharon Deem <deem@stlzoo.org>
Cc: Kathy Zeigler <zeigler@stlzoo.org>
Subject: Re: CITES permit application 62698C

Sharon, making sure you got this email, I need to respond to the biologist so they can get the reissuance finished up.

Thanks!

Rae

From: Rae Lynn Haliday <Haliday@stlzoo.org>
Sent: Thursday, August 20, 2020 10:21 AM
To: Sharon Deem <deem@stlzoo.org>
Subject: Fw: CITES permit application 62698C

Please confirm if we have any changes per the two questions below and send directly to me so I can provide to the biologist. They are just now getting to this reinsurance.

Thanks Sharon.

Rae

From: Grab, Kirstine M <kirstine_grab@fws.gov>
Sent: Thursday, August 20, 2020 7:58 AM
To: Rae Lynn Haliday <Haliday@stlzoo.org>
Subject: CITES permit application 62698C

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Rae Lynn Haliday,

We received your application for a Convention on International Trade in Endangered Species (CITES) and Endangered Species Act (ESA) permit for importing biological samples from Galapagos tortoises. Upon review of your renewal application, I have a few questions.

1. Do you have any updates to the personnel you wish to have authorized under this permit? If so, please let us know about any removals or additions. If you are adding any additional personnel, please provide their resume or CV.
2. Are there any updates to the activities that you are planning on conducting under this permit? I know in the application you had indicated no changes, but just wanted to see if there were any updates.

Please provide the information and documentation indicated. **Any response must be in written or email form.**

Pursuant to 50 CFR 13.11(e), if we do not receive **all** the information requested above within **45 days** from the date of this e-mail (**by October 4, 2020**), your application will be abandoned and administratively closed. Once the file is closed, you would need to submit a new application, supplemental documentation and all required fees.

If you have questions, you may contact me at kirstine_grab@fws.gov or at 5275 Leesburg Pike, MS: IA, Falls Church, VA 22041-3803. Please reference your file number 62698C.

Sincerely,
Kirstine Grab (she/her)
Permits Biologist | International Affairs | US Fish and Wildlife Service
5275 Leesburg Pike, Falls Church, VA, 22041
kirstine_grab@fws.gov
<https://www.fws.gov/international/> | <https://cites.org/>



Saint Louis Zoo

Animals Always

MAY 21 2019

One Government Drive
St. Louis, MO 63110-1395

(314) 781-0900
fax (314) 647-7969

www.stlzoo.org

Jeffrey P. Bonner, Ph.D.
President & CEO

May 16, 2019

U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, VA 22041-3803

Reference: PRT# 18USUS62698C/9

Please find attached the annual report for the above referenced permit as well as the 2018 Declaration of Import/Export and the cancelled CITES import permit.

We collected the following samples in Galapagos in 2017-2018 and then imported them into the US in August 2018 (see table below). Samples were collected by Dr. Ainoa Nieto Claudin, a wildlife veterinarian and PhD student with the Galapagos Tortoise Movement Ecology Programme (GTMEP), or by Dr. Sharon Deem, a co-PI of the GTMEP. All tortoises were free-living and manually restrained for sample collection. No morbidity or mortality occurred during the collection of these samples.

- 1) Galapagos tortoise (*Chelonoidis niger*): Whole blood on FTA cards (191)
- 2) Galapagos tortoise (*Chelonoidis niger*): Whole blood smears of slides (383)

Sample type	Island of Origin	Species: Galapagos giant tortoise	Quantity of samples	Amount of blood for all samples	Method of preservation
Whole Blood	Santa Cruz, Galapagos	<i>Chelonoidis niger</i> spp.	105 (<i>C. n. porteri</i>)	16 ml	FTA cards
			15 (<i>C. n. donfaustoi</i> Fatal)	3 ml	FTA cards
			206 (<i>C. n. porteri</i>)	5 ml	Blood slides/smears
			35 (<i>C. n. donfaustoi</i> Fatal)	1 ml	Blood slides/smears
Whole Blood	Volcano Alcedo, Isabela Island, Galapagos	<i>Chelonoidis niger</i> sp.	71 (<i>C. n. vandenburghi</i>)	11 ml	FTA cards
			142 (<i>C. n. vandenburghi</i>)	3 ml	Blood slides/smears



We respectfully request a re-issuance of the CITES permit in order to complete the health assessments outlined in #6 of the attached annual report and to continue to import the samples covered under the original permit/master file.

If you have questions or comments, please do not hesitate to contact Rae Lynn Haliday at haliday@stlzoo.org and she will coordinate with me to provide the required information.

Sincerely,

Sharon L. Deem, DVM, Ph.D., Dipl ACZM
Director, Saint Louis Zoo Institute for Conservation Medicine
Saint Louis Zoo
St Louis, MO 63110

Enclosures: 3-177 – 08/04/2018
Galapagos Export Permit 2018
List of Research Publications from the Galapagos Tortoise Movement Ecology
Programme (past 5 years)
Cancelled CITES import permit

Cc: Rae Lynn Haliday, CRM
Saint Louis Zoo Registrar



**Department of Interior
U.S. Fish and Wildlife Service
Federal Fish and Wildlife Permit Application Form**

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

Type of Activity

REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT
(For this application, all permits, registrations, and certificates are referred to as a permit.)

Complete Sections A or B, and C, D, and E of this application. U.S. address may be required in Section C, see instructions for details. **Instructions on how to make your application complete and help avoid unnecessary delays are attached.**

Section A: Complete if applying as an individual

1.a. Last Name	1.b. First Name	1.c. Middle Name/Initial	1.d. Suffix
2. Date of Birth (mm/dd/yyyy)	3. Telephone Number	3.a. Alternate Telephone Number	4. E-mail address

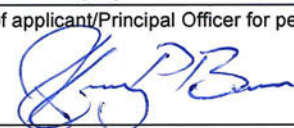
Section B: Complete if applying on behalf of a business, corporation, public agency, Tribe, or institution

1.a. Name of business, agency, Tribe, or institution Saint Louis Zoo		1.b. Doing business as (DBA) Same	
2. Tax identification no. 43-1027364		3. Description of business, agency, Tribe, or institution Public zoological garden	
4.a. Principal officer Last name Bonner	4.b. Principal officer First Name Jeffrey	4.c. Principal officer Middle name/initial P	4.d. Suffix Ph.D.
5. Principal officer title Dana Brown CEO/President		6. Primary contact name Rae Lynn Haliday	
7.a. Business telephone number (314) 781-0900	7.b. Alternate telephone number (314) 646-4572	7.c. Business fax number (314) 647-7969	7.d. Business e-mail address haliday@stlzoo.org

Section C: All applicants complete address information

1.a. Physical address (Street address; Apartment #, Suite #, or Room #; no P.O. Boxes) 1 Government Drive				
1.b. City St. Louis	1.c. State MO	1.d. Zip code/Postal code 63110	1.e. County/Province St. Louis	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

Section D: All applicants MUST complete

1.	Attach the nonrefundable application processing fee in the form of a check or money order payable to the U.S. FISH AND WILDLIFE SERVICE in the amount identified on page 6 and 7. 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.	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.
<p style="text-align: center;"><i>Attachment A</i></p> <p>Signature of applicant/Principal Officer for permit (No photocopied or stamped signatures) Date of signature (mm/dd/yyyy)</p> <p style="text-align: center;">  5/16/2019 </p>	

Please continue to next page

E. REISSUANCE, RENEWAL, OR AMENDMENT OF A PERMIT (For this application, all permits, registrations, and certificates are referred to as a permit.)

NOTE 1: If you are renewing your Designated Port Exemption permit, use form 3-200-2 and submit to appropriate Office of Law Enforcement address. If you are renewing your Import/Export license (required for commercial activities), use form 3-200-3 and submit to appropriate Office of Law Enforcement address.

NOTE 2: This form **cannot** be used for a lost or damaged permit. If you need to replace a lost or damaged permit, please use form 3-200-66. The application **must** be submitted to the office that issued the initial permit. Lost or damaged permit

NOTE 3: Some activities, such as all master files for multiple shipments, Certificate of Scientific Exchange (COSE), circus/traveling exhibits, and artificially propagated plants, can only be re-issued, renewed, or amended by submitting a new application for permits for those activities. Please refer to these application types to determine if another application form would be more appropriate or contact the Division of Management Authority for more information.

1. Name and address where you wish the permit to be mailed, **if different from page 1**. If you would like expedited shipping, please enclose a self-addressed, pre-paid, computer-generated, courier service airway bill. If unspecified, all documents will be mailed via regular mail through the U.S. Postal Service.

2. Who should we contact if we have questions about the application (name, phone number, and e-mail)?

Rae Lynn Haliday, CRM, Registrar, Saint Louis Zoo, haliday@stlzoo.org or (314) 646-4572.

3. 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?

☒ No ☐ Yes

If you answered "Yes" to Question 3, 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. Please be aware that a "Yes" response does not automatically disqualify you from getting a permit.

4. **Permit number.** Enter the permit number to be reissued/renewed/amended.

Prt#: 18US62698C/9

5. Submit the original permit with this application.

Attached

6. Past activities.

- a. Provide copies of all cleared documents and form 3-177 (FWS declaration of wildlife) associated with this permit.
- b. Provide a summary detailing activities conducted under this permit, as well as a brief statement of why you are seeking reissuance/renewal.

7. **Annual Report.** If required by your permit, provide an annual report as conditioned (Please disregard if you have already submitted your annual report.)

8. **Sport-hunted trophies:** If you did not hunt during the hunting season stated in your original application, you are not eligible for a renewal. Please submit a new application form.

9. **Certification** - Complete one of the statements below and supply any additional documentation requested: (original signature is required)

- a. For **NO CHANGES** to original application:

I certify that the information submitted in support of my original application for the permit indicated above has not changed and is still currently correct. I hereby request reissuance or renewal of this permit.

X Permittee's signature:  Date: 5/16/2019

- b. For **CHANGES** to original application:

On an attached page(s), provide a complete description of any changes (e.g., change in principal officer, personnel, address, location of activities, types of activities). Please sign each attached page. Also note that we may need to request additional information regarding the changes after reviewing your initial request.

I certify that the information submitted in support of my original application for the permit indicated above is still currently correct EXCEPT for the changes noted on the attached, signed page(s). I hereby request re-issuance or renewal of this permit with the indicated changes.

Permittee's signature: _____ Date: _____

All international shipment(s) must be through a designated port, unless otherwise authorized. A list of designated ports (where an inspector is posted) is available. If you wish to use a port not listed, please contact either the Office of Law Enforcement for a Designated Port Exemption Permit (form 3-200-2) or the Division of Management Authority.

Internal Revenue Service

District
Director

St. Louis Zoological Park
Forest Park
St. Louis, Missouri 63110

Department of the Treasury
P.O. Box 1123, Central Station
St. Louis, Missouri 63188

Person to Contact:
S. Robertson

Telephone Number:
314-425-6286

Refer Reply to:
EP/EO:Tech:Service Unit

Date:

MAR 23 1978

Gentlemen:

This is in response to your application seeking status as an organization exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code.

Since your organization is an instrumentality of the State of Missouri, it is an organization as described in Section 115 of the Internal Revenue Code of 1954 which provides, in part, as follows:

"Gross income does not include—

- (1) income derived from any public utility or the exercise of any essential governmental function and accruing to a State or any political subdivision thereof, or the District of Columbia; or
- (2) income accruing to the government of any possession of the United States or any political subdivision thereof.

Contributions made to you for exclusively public purposes are deductible by the donors for Federal income tax purposes in the manner and to the extent provided in Section 170 of the Internal Revenue Code.

This is an advisory letter.

Sincerely yours,

R. C. Yaskin
District Director

Enclosure 19

State of Missouri

EXEMPTION FROM MISSOURI SALES AND USE TAX ON PURCHASES

Issued to:

ZOOLOGICAL PK SUBDIST. OF METRO ZOOLOGICAL PK/MUSEU
FOREST PARK
ST LOUIS MO 63110

Missouri Tax ID
Number: 12623491

Effective Date:
07/11/2002

Your application for sales tax exempt status has been approved pursuant to section 144.050.2, RSMo. This letter is issued as documentation of your exempt status.

Purchases by your Agency are not subject to sales or use tax if within the conduct of your official functions and activities. When purchasing under this exemption, furnish all sellers or vendors a copy of this letter. This exemption may not be used by individuals for personal purchases.

A contractor may purchase any type of construction materials exempt from sales tax when fulfilling a contract with your Agency, only if your Agency issues a properly completed certificate and the contractor takes purchase in compliance with the provisions of section 144.052, RSMo.

Sales by your Agency are subject to applicable state and local sales taxes. If you engage in the business of selling tangible personal property or taxable services at retail, you must obtain a Missouri Retail Sales Tax License and collect and remit sales tax.

This is a continuing exemption subject to periodic changes and review by the Director of Revenue. If your Agency ceases to qualify as an exempt entity, this exemption will cease to be valid. This exemption is non-transferable. It is an exemption from sales and use tax only and is not an exemption from real or personal property tax.

Any alteration to this exemption letter renders it invalid.

If you have any questions regarding the use of this letter, please contact the Division of Taxation and Collection, P.O. Box 3380, Jefferson City, MO 65165-3380, phone 573-751-2836.



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

IMPORT PERMIT

Page 1 of 3

1. Original Permit/Certificate No.

18US62698C/9

2. Valid

03/05/2019

3. Permittee (name and address, country)

SAINT LOUIS ZOO
ONE GOVERNMENT DRIVE
ST. LOUIS, MO 63110
U.S.A.

4. Consignor (name and address, country)

GALAPAGOS NATIONAL PARK
CHARLES DARWIN AVENUE
PUERTO AYORA
SANTA CRUZ, GALAPAGOS ISLANDS 200350
ECUADOR

5. Special Conditions

ALL APPLICABLE FOREIGN, LOCAL, STATE, OR OTHER FEDERAL LAWS,
INCLUDING THOSE REQUIRING PERMITS, MUST BE OBSERVED.

MUST COMPLY WITH ATTACHED GENERAL AND SPECIAL PERMIT CONDITIONS.

U.S. ENDANGERED SPECIES [50 CFR 17.22].

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

PERMITTEE MUST COMPLETE BLOCK 11 PRIOR TO EACH SHIPMENT.

*-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

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
DIVISION OF MANAGEMENT AUTHORITY
BRANCH OF PERMITS, MS: IA
5275 LEESBURG PIKE
FALLS CHURCH VA 22041-3803

03/06/2018

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 Plant

A. Common Name
GALAPAGOS GIANT
TORTOISE

Scientific Name
CHELONOIDIS
NIGER

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

9. IMPORT: NASAL, OCULAR, AND CLOACAL SWABS,
WHOLE BLOOD AND BLOOD SMEARS COLLECTED IN
GALAPAGOS ISLANDS.

10. Appendix No. and Source

10. 1 W

11. Quantity (including units)

ML

12. Country of Origin
ECUADOR

B. Common Name

GALAPAGOS TORTOISE

Scientific Name

Chelonoidis niger

9. Whole blood

10. 191

11. Quantity (including units)

30 ml

12. Country of Origin

ECUADOR

C. Common Name

GALAPAGOS TORTOISE

Scientific Name

Chelonoidis niger

9. Blood Smears

10. 303

11. Quantity (including units)

9 ml

12. Country of Origin

ECUADOR

D. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin

E. Common Name

Scientific Name

9.

10.

11. Quantity (including units)

12. Country of Origin



United States Department of the Interior



FISH AND WILDLIFE SERVICE
International Affairs
5275 Leesburg Pike, MS-IA
Falls Church, VA 22041-3803

Page 2 of 3
PRT-18US62698C/9


SPECIAL TERMS AND CONDITIONS FOR SAINT LOUIS ZOO

1. Samples collected from wild-caught animals may be imported provided the conditions of paragraphs 2 through 8 below are met.
2. Animals may only be captured in cooperation with local wildlife authorities (e.g., samples may be collected in parks/nature reserves only with the knowledge and consent of the park/reserve manager). No samples may be obtained from animals that are removed from the wild for the sole purpose of collecting samples, or for other than scientific or management purposes approved and carried out by appropriate wildlife authorities.
3. No remuneration, either financial or in-kind, may be offered for the taking of animals from the wild (i.e., killing, trapping) or for the collection of samples from free-ranging wildlife. This condition does not preclude legitimate collection and transportation expenses (e.g., hiring staff, freight costs), but does prohibit the paying of bounties or incentive pay for taking of animals from the wild, or the collection of samples from animals in the wild. Explicit written approval for collection from wild animals must be obtained from appropriate wildlife authorities and retained in the applicant's files for a period of 5 years and must be supplied upon the Division of Scientific Authority's request.
4. No animals may be killed intentionally for the purpose of collecting samples.
5. Care must be taken when handling live animals to minimize any possibility of injury. If, for any reason, any animal dies or incurs a debilitating injury as a result of being restrained for sample collection, or while having the sample collected, further collection of samples must be suspended until methods are

evaluated and, if appropriate, modified to prevent further incidences of injury or death. If two or more animals die or incur debilitating injuries within a 6-month period, sample collection must be suspended and the Division of Scientific Authority contacted in writing within 7 days of the death of the second individual. Before further sampling will be authorized a written account of the details of the event, and recommendations to resolve the situation, must be submitted for a review of sampling procedures (point of contact: Dr. Rosemarie Gnam, Chief, Division of Scientific Authority, MS: IA, 5275 Leesburg Pike, Falls Church, VA 22041-3803; tel. 703-358-1708; fax 703-358-2276).

6. The applicant must maintain a record of all samples imported under this permit which must be made-available to the Division of Scientific Authority upon request. This record should include for each import: the species and type(s) of specimens, date(s) collected, the date shipped, the location(s) of collection and name of person who collected the sample(s), conditions under which samples were collected (salvage or wild-caught), authorizing government agency, and any mortalities or debilitating injuries that may have occurred as a result, directly or indirectly, of the collection activities.
7. The applicant must maintain copies of all CITES permits used to obtain and import all specimens and these documents must be made available to the Division of Scientific Authority upon request.
8. Prior to renewing or amending this application, the applicant must provide USFWS with a report that contains a record of all samples imported under this permit. The report must include the primary reason for the collection and the name and organizational affiliation of all individuals who conducted the sampling, as well as a copy of all relevant sample collection permits issued by the authorizing government agency, or individual in the case of private landowners. The report must include any mortalities or debilitating injuries that may have occurred as a result, directly or indirectly, of the collection activities. Finally, the report must include for each sample in each import: (a) the species and type of sample collected (e.g., blood, tissue etc.); (b) date of sample collection; (c) date of sample shipment and where the sample was shipped; and (d) the collection location.

3/6/2018
Date


Chief, Branch of Permits
Division of Management Authority

1. Date of Import/Export (mm/dd/yyyy): 08/04/2018
2. Import/Export License Number: *****
3. Indicate One: <input checked="" type="checkbox"/> import <input type="checkbox"/> export
4. Port of Clearance: MI
5. Purpose Code: S
6. Customs Document Number(s): m85-007523

U.S. FISH AND WILDLIFE SERVICE



DECLARATION FOR IMPORTATION OR EXPORTATION OF FISH OR WILDLIFE

7. Name of Carrier: AMERICAN AIRLINES
8. Air Waybill or Bill of Lading No.: Master: House:
9. Transportation Code: P
License No. State or Province:
10. Bonded Location for Inspection: AMERICAN AIRLINES
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 SAINT LOUIS ZOO ZOO #1 GOVERNMENT DRIVE ST LOUIS, MO 63110 305-5925656	14. (indicate one) <input type="checkbox"/> Foreign Importer <input checked="" type="checkbox"/> Foreign Exporter GALAPAGOS NATIONAL PARK PUERTO AYORA SANTA CRUZ, EC
13b. Identifier Number: 1480592 ID Type:	14c. Identifier Number: ID Type:
15. Customs Broker, Shipping Agent or Freight Forwarder: [REDACTED]	15b. Identifier Number: ID Type:
Phone Number / Fax Number / Email Address: [REDACTED]	15c. Contact Name: [REDACTED]

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
GEOF	CHELONOIDIS NIGER GALAPAGOS GIANT TORTOISE	18EC000001/PG 18US62698C9	SPE W	574.00 NO \$ 1	EC	<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 07/27/2018 - Confirm Num: 2018MI2264572

Dec Control Num: 2019481947

U S F I S H & W I L D L I F E S E R V I C E
N I T E D
Electronic Filing
CLEARED
T A T E S

Date: 01/11/2019

481947



Saint Louis Zoo
Animals Always

One Government Drive
St. Louis, MO 63110-1395

(314) 781-0900
fax (314) 647-7969

www.stlzoo.org

Jeffrey P. Bonner, Ph.D.
President & CEO

Saint Louis Zoo
Annual Report - PRT #18US62698C/9

1. General Information:

- 1.1. **Name of the Project:** Galapagos Tortoise Movement Ecology Programme (GTMEP), Investigation Permit Number PC-35-18.
- 1.2. **Name of Principal Investigator(s):** Dr. Stephen Blake and Dr. Sharon L. Deem.
- 1.3. **Research Team:** Ainoa Nieto Claudín, Freddy Cabrera, José Haro, Fernando Esperón, Kathleen Apakupakul, Jamie Palmer, and Irene Peña.
- 1.4. **Additional Information:**
 - 1.4.1. Galapagos National Park (GNPD) samples exportation number: 088-2018. Samples exported on August 4 2018 by Dr. Sharon L. Deem. Destination to Saint Louis Zoo Institute for Conservation Medicine (ICM), Saint Louis Zoo, Missouri, USA. A total of 383 blood smears and 191 FTA cards were exported. Exportation CITES n° 18EC000001/PG from Ecuador. Importation CITES n° 18US62698C/9 from USA.

2. Background

- 2.1. The main objective of the GTMEP is to assess how several factors (e.g., environment, tortoise physiology, health, life history) may interact and determine tortoise migrations, and how we may preserve this migratory behavior in the face of environmental and anthropogenic threats. As part of this programme, we do have an important health component to study the health of tortoises using a One Health perspective. Our aim is to better understand how anthropogenic activities may have impacts on tortoise health, and the health of other wildlife species, domestic animals, and humans.

3. Objectives:

- 3.1. Main objective: to export samples so we may perform laboratory diagnostics in order to establish a giant tortoise health baseline.
- 3.2. Specific goals:
 - 3.2.1. To establish a baseline database of tortoise hematologic parameters from tortoise blood samples.



- 3.2.2. To determine the presence of antimicrobial agents (e.g., viruses, bacteria) by molecular tools.

4. Methods:

- 4.1. Blood samples (FTA= 191 and Smears= 383) were collected in 2017 and 2018 from tortoises living on Santa Cruz Island and Alcedo Volcano (Isabela Island). Samples were collected under GNP investigation permits PC-36-17 and PC-35-18. Blood was collected with a 6ml syringe and a 20G needle, directly from the brachial vein. Blood smears were prepared immediately upon blood collection (within the field), air dried, and fixed with methanol. Additional blood smears were also made in the laboratory at Charles Darwin Research Station (CDRS) within 24h post blood collection. FTA cards were filled with 4 drops of fresh blood right after blood collection (in the field) and air dried. All samples were stored at room temperature at CDRS facilities until international transportation.
- 4.2. Smears are used to perform total and differential blood cell counts in order to determine a baseline for these species and to identify possible pathologies and blood parasites, as part of the health assessment for giant tortoises. Smears are stained with Diff-Quick staining solution and counts performed with a microscope 40x and 100x lens. Total cell counts are performed with 40x lens, counting 10 fields and multiplying the mean by 100 (number of cells/ul). To perform leucocyte cell differential counts we do use a 100x lens by counting a total number of 100 leucocytes to obtain a percentage with the composition of the different white blood cells (e.g., monocytes, heterophils, lymphocytes).
- 4.3. Blood smears and FTA cards are very durable materials that have a number of advantages for sample storage since they can be stored at room temperature for long periods of time.

5. Preliminary results:

- 5.1. We imported the following materials on August 4, 2018 – See Appendix I for cleared U.S. Fish and Wildlife Service (USFWS) Declaration of Import/Export.

Galapagos tortoise (*Chelonoidis niger*): Whole blood on FTA cards (191)

Galapagos tortoise (*Chelonoidis niger*): Whole blood smears of slides (383)



Sample type	Island of Origin	Species: Galapagos giant tortoise	Quantity of samples	Amount of blood for all samples	Method of preservation
Whole Blood	Santa Cruz, Galapagos	<i>Chelonoidis niger</i> spp.	105 (<i>C. n. porteri</i>)	16 ml	FTA cards
			15 (<i>C. n. donfaustoi</i> Fatal)	3 ml	FTA cards
			206 (<i>C. n. porteri</i>)	5 ml	Blood slides/smears
			35 (<i>C. n. donfaustoi</i> Fatal)	1 ml	Blood slides/smears
Whole Blood	Volcano Alcedo, Isabela Island, Galapagos	<i>Chelonoidis niger</i> sp.	71 (<i>C. n. vandenburghi</i>)	11 ml	FTA cards
			142 (<i>C. n. vandenburghi</i>)	3 ml	Blood slides/smears

- 5.2. Blood smears are being processed at the ICM laboratory by MSc. Jamie Palmer. We anticipate results by mid-2019.
- 5.3. FTA cards are being stored at the Saint Louis Zoo ICM facilities and will be processed in the near future to complement pathogen analysis that are being performed in-country within CDF facilities in the Galapagos Islands.

6. Conclusions and Recommendations

- 6.1. GTMEP is currently conducting periodic health assessments of giant tortoises from different islands and species. To this end, an updated census of the current populations of the different species of Galapagos tortoises would be of much interest and will help us better understand population dynamics and survival. We strongly encourage the GNPD to conduct a census of *C. porteri* in Santa Cruz Island to improve our understanding of this species dynamics and help us to better calculate sample sizes for research purposes.
- 6.2. We also recommend a health assessment of the critically endangered *C. donfaustoi*, a species recently described from Santa Cruz Islands. Currently there is no health information regarding this species; a species limited to less than 500 individuals.
- 6.3. We are currently working to develop a health assessment for Española giant tortoises (*C. hoodensis*) to be performed in July-August 2019. Accurate health information of wildlife species is mandatory to ensure long time conservation plans and future research goals and objectives.



- 6.4. We strongly recommend to perform extensive education and outreach campaigns with the local community regarding wildlife health. A better understanding of the threats that tortoises are facing in the Galapagos will in turn help not only to protect these emblematic species but also to create local awareness regarding wildlife health.

Respectfully Submitted by:

Sharon L. Deem, DVM, PhD, Diplomate ACZM
Director, Saint Louis Zoo Institute for Conservation Medicine

Enclosures: 2018 Declaration of Import/Export, cancelled CITES permit, CITES export permit