



El estudio del comportamiento animal

M. en C. Alejandro Rodrigo

Centro de Estudios e Investigaciones en Comportamiento

Universidad de Guadalajara

rodrigo.gutierrezt@alumno.udg.mx



Contenido

¿Qué es la conducta? y su importancia

Etogramas

- ¿Qué son?
- ¿Qué deben contener?
- Importancia
- ¿Cómo hacer un etograma?
- Tipos de etogramas

Uso de apps para el registro conductual

- Boris – Patrones de forrajeo del zanate mexicano
- Animal Behavior Pro – Evaluación de programas de entrenamiento

¿Qué es la conducta?

- Es el estudio de las relaciones entre los animales y el medio ambiente que les rodea.

Las cuatro preguntas de Tinbergen.

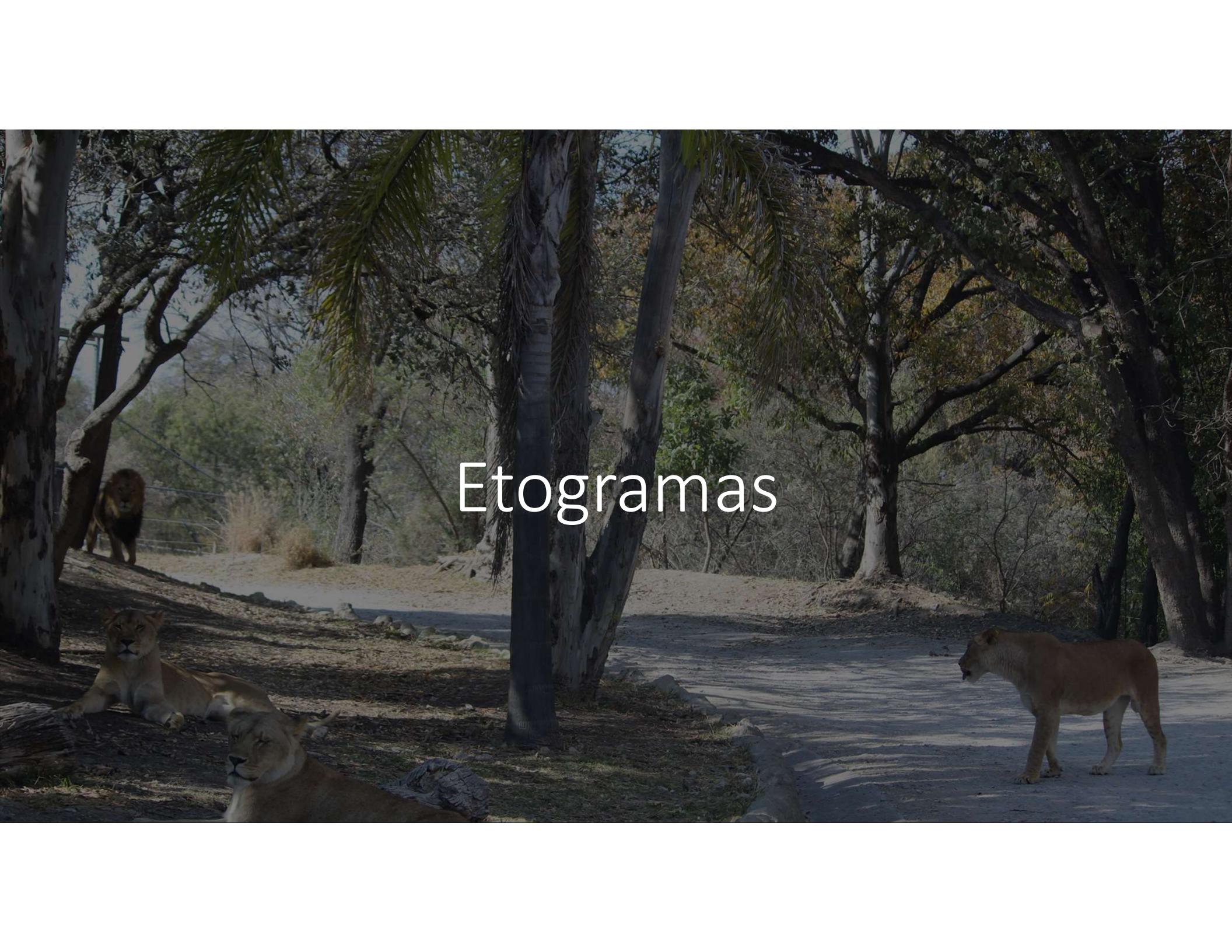
1. ¿Cuál es la causa del comportamiento?
2. ¿Qué papel juega la ontogenia en el desarrollo de dicho comportamiento?
3. ¿Cuál es la función del comportamiento?
4. ¿Cómo ha evolucionado el comportamiento a lo largo del tiempo?



¿Por qué es importante estudiar el comportamiento animal?

- Entender el mundo que nos rodea
- Predicción y aplicaciones prácticas
- Conservación
- Academia

¿Cómo estudiamos la conducta?

A photograph of lions in a naturalistic enclosure. In the foreground, a lioness lies down on the left, another stands on the right, and a third is walking away in the background. The setting is a dirt path surrounded by trees and foliage.

Etogramas

¿Qué son?

- Es una lista descriptiva de todos los patrones de comportamiento que tiene un animal en su repertorio.





¿Qué debe contener un etograma?

Definición clara de las conductas a observar

Table 6

A standardized ethogram for the Felidae including definitions for all base behaviors. Definitions are provided for all words listed in bold font.

Title	Definition
Allogroom	Cat licks the fur of another cat's head or body.
Arch back	Cat curves back upwards and stands rigidly.
Approach	Cat moves toward (modifier) while looking at it.
Attack	Cat launches itself at (modifier) with extended forelegs and attempts to engage in physical combat.
Avoid	Cat moves, or changes direction while moving, in order to keep away from (modifier).
Bare teeth	Cat opens its mouth slightly while pulling lips back to expose teeth.
Bite	Cat snaps teeth at and is successful in biting (modifier).
Body rub ^a	Cat rubs any part or entire length of body against (modifier).
Body shake	Cat rotates its abdomen from side to side.
Carry	Cat picks (modifier) up off the ground and moves it to another location.
Charge	Cat rushes toward (modifier).
Chase	Cat runs rapidly in pursuit of (modifier).
Chew	Cat grinds an object in its mouth using the teeth.
Clawing	Cat drags front claws along an object or surface, likely leaving visual marks behind.
Climb	Cat ascends and/or descends an object or structure.
Copulation	Male mounts female and intromission is achieved.
Crouch	Cat is alert and positions the body close to the ground, whereby all four legs are bent, and the belly is touching (or raised slightly off of) the ground.
Cuff	Cat strikes at (modifier) with forepaw and contact is made. Claws are usually extended.
Defecate	Cat releases feces on the ground while in a squatting position.
Dig	Cat breaks up or moves substrate around with its paws.
Displace	Cat provokes an avoidance behavior from another cat.
Drag	Cat moves (modifier) from one location to another without picking it up off the ground.
Drink	Cat ingests water (or other liquids) by lapping up with the tongue.
Ears back	Ears are held at the rear of head (UKCBWG, 1995).
Ears erect	Cat points its ears upward (UKCBWG, 1995).

Categorías funcionales

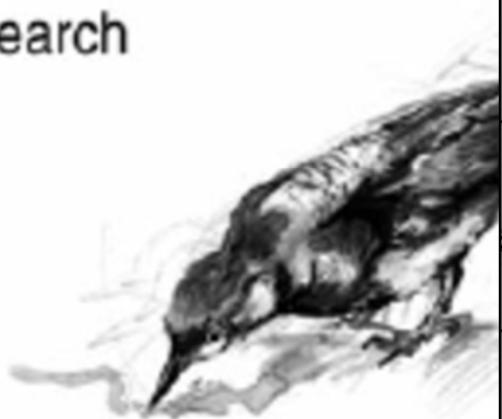
Table 7

Base behaviors that fall within each behavioral category. Definitions for each category are listed in the online supplementary material.

Active	Affiliative	Aggressive	Agonistic	Calm	Exploratory	Fear
Carry	Anogenital sniff	Attack	Approach	Ears erect	Chew	Avoid
Clawing	Follow	Bare teeth	Arch back	Groom	Dig	Crouch
Crouch	Gurgle ^a	Bite	Avoid ^a	Kneading	Drag	Ears back
Defecate	Head butt ^a	Charge	Bare teeth ^a	Lying ^a	Ears erect	Excess salivation
Drag	Huddling ^a	Chase	Bite	Purr	Ears forward	Flee
Drink	Lick	Crouch	Chase	Scratching	Explore	Flinch ^a
Ears erect (alert)	Nuzzle	Cuff	Cuff	Sitting	Flehmen	Freeze ^a
Ears forward (alert)	Play	Ears back ^a	Displace	Stretching	Investigate	Groom
Eat	Prusten ^a	Ears flat	Ears back	Yawn ^a	Lick	Head shake
Explore	Puff ^a	Fight	Fight		Manipulate object	Hiding
Fight	Play roll on back ^a	Ground slap ^a	Flee		Paw	Hiss
Forage	Sniff nose	Growl	Ground slap ^a		Rear ^a	Retreat
Groom	Social groom/allogroom	Kill bite ^a	Growl		Sniff (any)	Tail under
Hunt	Social roll	Piloerection	Hiss		Watch ^a	Trembling
Investigate (all types)	Social rub/allorub	Pounce	Piloerection ^a			
Locomotion (all types)	Social sniff	Rake ^a	Raise paw ^a			
Play	Stutter ^a	Rear ^a	Retreat			
Rear	Tail up ^a	Snarl	Roll on back			
Roll (solitary)	Touch noses	Spit	Snap bite			
Rub (object)		Strike at	Snarl			
Scratching		Tail slap ^a	Social stare			
Sniff (all types)		Tail swish	Strike at ^a			
Allogroom		Tail twitch	Tail over			
Standing		Threaten	Tail under			
Stretching		Yawn ^a	Yowl			
Urinate						

Behavioral category

Search



Behavioral category	Description
Search	 Focal bird searches for food using either vision or touch. Tactile search refers to probing the mud with the tip of the bill (knots) or rooting through seaweed (turnstones).
Handle	 Focal bird is in physical contact with a prey item. A distinction is made between prey previously undiscovered, prey previously rejected (knots) and prey stolen from others.
Interact	 Focal bird either initiates an interaction by taking up a threatening position or by moving quickly towards the opponent, or responds to a threatening or attacking non-focal bird by moving away from this opponent.
Vigilant	 Focal bird is looking around (head up): vigilance encompasses alertness directed at other birds (actually a form of interaction) and that towards some other aspect of the environment, as no distinction could reliably be made.
Other	 Focal bird is preening its feathers or pecking its identification mark.

searches for food
or vision or touch.
search refers to probing
with the tip of the bill
rooting through
seaweed (turnstones).

Importancia de los etogramas

- Herramienta
- Comunicación
- En el zoológico



¿Cómo hacer un etograma?

1. Observaciones preliminares
2. Genera un etograma general
3. Formula pregunta e hipótesis
4. Decide que conductas serán registradas
5. Investiga la biología general de la especie

¿Donde encontrar esta información?

Búsqueda de bibliografía

- Google Scholar: <https://scholar.google.com.mx/>
 - Microsoft Academic: <https://academic.microsoft.com/home>
 - Biblioteca digital de la Universidad
-
- Connected papers: <https://www.connectedpapers.com/>
 - Publish or perish: <https://harzing.com/resources/publish-or-perish>

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Observational study of behavior: sampling methods.

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Origin paper

Observational study of behavior: sampling methods.

Jürgen Altmann 1974

Social development of stumptail macaques (Macaca arctoides): Momentary touching and...

Helen Hendy-Neely, Ramon J. Rhine 2006

An Ecological Model of Female-Bonded Primate Groups

Richard W Wrangham 1980

The observational study of behavior

Jeanne Altmann 1974

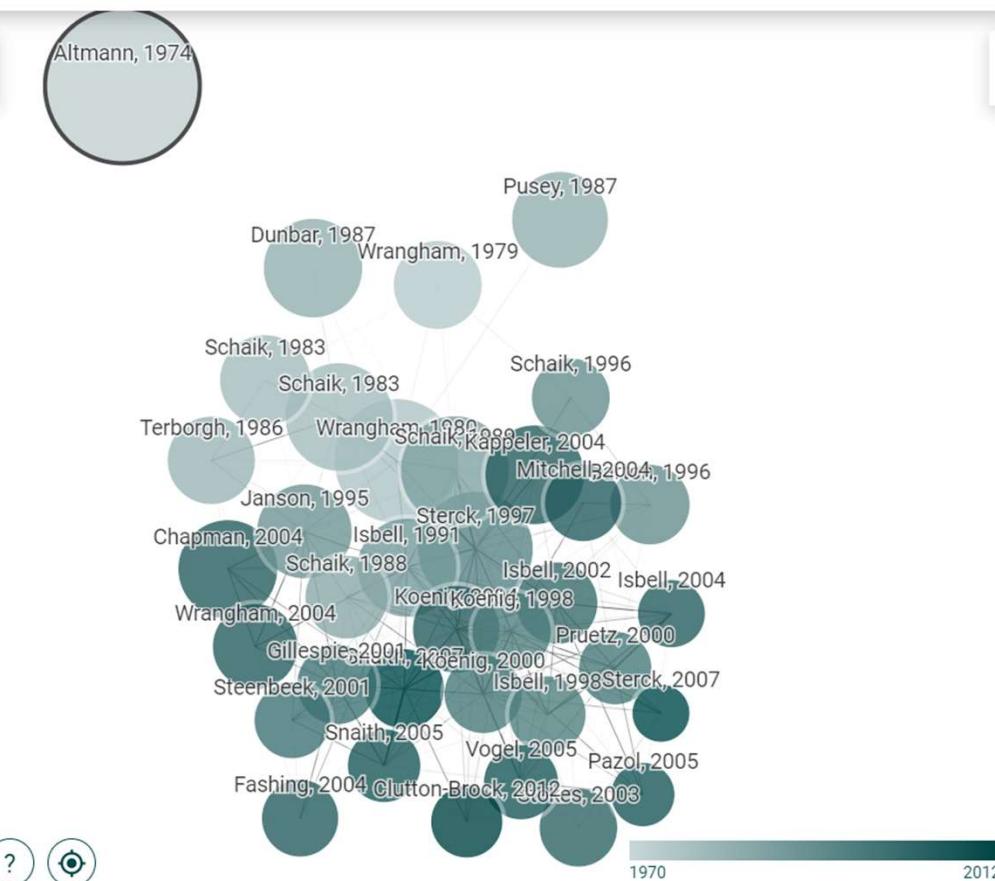
The evolution of female social relationships in nonhuman primates

Elisabeth H M Sterck, David P. Watts, Carel P V... 1997

The ecology of social relationships amongst female primates

Van Schaik 1989

Social development of stumptail macaques (Macaca arctoides): Momentary touching, play



The observational study of behavior

Authors: Jeanne Altmann.

1974.

145 Citations, 0 References.

[View graph](#) [Paper details](#)

Organic compounds are prepared by a novel method of conjugate addition in which a donor compound including a carbanion derived from an activated methyldyne group is treated with an acceptor compound including a carbon-carbon unsaturated bond conjugated with an onium ion derived from a polar functional group. The method has particular application as a step in the production of novel intermediates and novel pharmacologically active compounds as disclosed in the Applicants' co-pending application of even date.

Harzing's Publish or Perish (Windows GUI Edition) 7.21.2812.7445

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Search terms	Source	Papers	Cites	Cites/ye...	h	g	hl,norm	hl,annual	acc10	Search date	Cache date	Last...
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Google Scholar search

How to search with Google Scholar

Authors: Years: 0 - 0

Publication name: ISSN:

Title:

Keywords:

Maximum number of results: (may be further limited by data source)

Results

Publication years: 1936-2020
 Citation years: 84 (1936-2020)
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 Cites/year: 62.11
 Cites/paper: 13.08
 Authors/paper: 2.35
 h-index: 37
 g-index: 62
 h_l,norm: 26
 h_l,annual: 0.31
 Papers with ACC >= 1,2,5,10,20:
 84,45,15,4,1

Cites	Per year	Rank	Authors	Title	Year	Publication	Publisher	Type
<input checked="" type="checkbox"/> 0	0.00	272	MG Amin	Micro-Doppler classification of ac...	2020	Radar Sensor Technology ...	spiedigitallibrary.org	
<input checked="" type="checkbox"/> 0	0.00	278	AM Lakstyal, KA ...	Motor patterns and swim path cha...	2020	Behavioral and Neural Gen...	Elsevier	
<input checked="" type="checkbox"/> 0	0.00	283	MW Kim, DH Jeon...	Sexual behavior and ethogram of ...	2020	Journal of Veterinary Beha...	Elsevier	
<input checked="" type="checkbox"/> 0	0.00	284	MW Kim, DH Jeon...	Hibernation behaviour and ethogr...	2020	Veterinární medicína	agriculturejournals.cz	
<input checked="" type="checkbox"/> 2	2.00	124	M Pierard, P McGre...	Reliability of a descriptive referen...	2019	Journal of Veterinary Beha...	Elsevier	
<input checked="" type="checkbox"/> 3	3.00	139	S Dyson, K Thoms...	Can veterinarians reliably apply a ...	2019	Equine Veterinary ...	Wiley Online Library	
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<input checked="" type="checkbox"/> 1	1.00	155	R Lindborg, E Neid...	An Ethogram Describing the Nesti...	2019	...	hljournals.org	
<input checked="" type="checkbox"/> 0	0.00	216	SJ Slater	Behavior of the Golden Eagle: An I...	2019	...	academic.oup.com	
<input checked="" type="checkbox"/> 0	0.00	217	Y Mao, W Zhang, ...	Driving Simulator Data Based Driv...	2019	2019 1st International ...	ieeexplore.ieee.org	
<input checked="" type="checkbox"/> 0	0.00	224	TA Flesner	California Sea Lion (<i>Zalophus calif...</i>	2019	...	irl.ums.edu	
<input checked="" type="checkbox"/> 0	0.00	296	FM Kusmarani, L Sj...	Application of digital ethogram in...	2019	AIP Conference ...	aip.scitation.org	
<input checked="" type="checkbox"/> 0	0.00	308	C Huang, Z Wu, S L...	Mating Ethogram of a Video-aide...	2019	Asian ...	search.proquest.com	
<input checked="" type="checkbox"/> 0	0.00	316	MK Ljubotina	Behaviour of <i>Helianthus annuus</i> L...	2019	...	era.library.ualberta.ca	
<input checked="" type="checkbox"/> 0	0.00	330	M Pierard, P McGre...	Developing a descriptive referenc...	2019	Journal of Veterinary Beha...	Elsevier	CITATION
<input checked="" type="checkbox"/> h 40	20.00	49	S Dyson, J Berger, ...	Development of an ethogram for ...	2018	Journal of Veterinary Beha...	Elsevier	
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<input checked="" type="checkbox"/> 6	3.00	110	FEA Coelho, AC Br...	Ethogram with the description of ...	2018	South American Journal of...	BioOne	
<input checked="" type="checkbox"/> 0	0.00	178	MJ Renner	Ethogram	2018	Encyclopedia of Animal C...	springer.iq-technikum.de	
<input checked="" type="checkbox"/> 0	0.00	222	A Hajjami	Ethogram Assignment–Animal Be...	2018	Animal Behavior	researchgate.net	PDF
<input checked="" type="checkbox"/> 0	0.00	281	KL Bildstein	Behavior of the Golden Eagle: An I...	2018	The Wilson Journal of Orni...	search.proquest.com	
<input checked="" type="checkbox"/> 0	0.00	289	H Xuesong, G Yumin	Establishing the Individual Behavi...	2018	Chinese Journal of Wildlife	en.cnki.com.cn	

Results

1. Motor patterns and swim path characteristics: the ethogram of zebrafish

AM Lakstygal, KA Demin, AV Kalueff (2020)
Behavioral and Neural Genetics of ..., Elsevier

*The popularity of the zebrafish (*Danio rerio*) grows rapidly in translational neuroscience and neurobehavioral research. Physiological and genetic similarity to mammals (including humans), easiness of genetic and pharmacological manipulations, low cost, rapid ...*

2. Sexual behavior and ethogram of the Asiatic black bear (*Ursus thibetanus*)

MW Kim, DH Jeong, SC Yeon (2020)
Journal of Veterinary Behavior, Elsevier

*Understanding and knowledge regarding basic sexual behavior constitute a logical starting point for captive breeding of the endangered Asiatic black bear (*Ursus thibetanus*, ABB) in the Republic of Korea. This study was therefore undertaken to create an ethogram for the ...*

PoP hI,annual: 0.31



Tipos de etogramas



Técnicas de muestreo

- Asignación de tiempo
- Total de acontecimientos (All occurrences sampling)
- Muestreo continuo o de barrido (Continuous/Scan sampling)
- Escaneo focal (Focal sampling)
- Escaneo grupal (Group sampling)
- Método 1/0

Total de acontecimientos (All occurrences sampling)

Definiciones de los comportamientos:

Movimiento de Cola	MC	El ciervo mueve su cola de lado a lado. Cada movimiento se considera como uno solo.
--------------------	----	---

Ficha de Datos del Muestreo - Totalidad de Acontecimientos.

Ciervo del Padre David (*Elaphurus davidianus*).

En el recuadro, mantenga una cuenta de cada comportamiento descrito en el etograma.

Fecha: _____ Observador:_____

Especie: Ciervo del Padre David (*Elaphurus davidianus*).



Total del Numero de Acontecimientos: _____



Totalidad de acontecimientos

Muestreo continuo o de barrido (Continuous/Scan sampling)

Eograma de Grulla cuelliblanca (*Grus vipio*)

Definiciones de los comportamientos:

Alerta / Cabeza arriba	AC	La grulla se mantiene estacionada o caminando, la cabeza se eleva por arriba del nivel del cuerpo; la grulla escanea visualmente los alrededores en lugar del agua.
Comer / Alimentarse	CA	La grulla se mantiene estacionada o caminando, activamente buscando alimento utilizando su pico para cavar en el estanque o deglutar el alimento, la cabeza se mantiene por debajo del nivel del cuerpo; la grulla escanea visualmente el agua.
Rascarse / Acicalarse	RA	La grulla usa sus patas para rascar su cuerpo o utiliza su pico para manipular su piel o plumas.
Correr / Volar	CV	La grulla corre alrededor del albergue o emprende el vuelo; rápidamente cambia de lugar.
No Visible	NV	La grulla sale por parcial o completamente de la vista evitando observar el comportamiento.
Otros	OT	cualquier otro comportamiento no descrito previamente. Debes incluir la descripción de cualquier otro comportamiento que se haya observado en la ficha de datos.

Ficha de Datos del Muestreo - Enfoque Continuo.

Grulla Cuelliblanca (*Grus vipio*).

Registra el tiempo de inicio de cada comportamiento en el etograma cada vez que ocurra.
Cada nuevo registro realízalo en líneas separadas.

Fecha: _____ Observador: _____

Especie: Grulla Cuelliblanca (*Grus vipio*).

Códigos de Referencia:

Alerta / Cabeza arriba	AC	Correr / Volar	CV
Comer / Alimentarse	CA	No Visible	NV
Rascarse / Acicalarse	RA	Otros	OT



Enfoque continuo

Escaneo focal (Focal sampling)

Etograma de Coyote (Canis latrans)

Definiciones de los comportamientos:

Comer	CO	El coyote utiliza su boca para masticar o tragar.
Alerta	AL	El coyote se mantiene estacionado o caminando en sus cuatro patas, la cabeza esta hacia arriba con los ojos abiertos.
Locomoción	LO	El coyote camina o corre a través del terreno , utilizando las cuatro patas para mover su cuerpo.
Frotarse la cara	FR	El coyote baja su cabeza hacia el piso o hacia la vegetación y frota los costados de su cara y cuello; esto puede llevar a frotar todo el cuerpo mientras se recuesta en el piso, pudiendo o no rodar.
Sacudirse	SA	Coyote esta parado en sus cuatro extremidades y sacude todo su cuerpo, comenzando a través de su cabeza y hombros.
No Visible	NV	El coyote sale parcial o completamente de la vista evitando observar el comportamiento.
Otros	OT	Cualquier otro comportamiento no descrito previamente. Debes incluir la descripción de cualquier otro comportamiento que se haya observado en la ficha de datos.

Ficha de Datos del Muestreo - Enfoque Animal.

Coyote (Canis latrans)

Coloca una señal en la columna debajo del comportamiento observado en cada intervalo de escaneo.

Fecha: _____ Observador: _____

Especie: Coyote (Canis latrans).

Escaneo	CO	AL	LO	FR	SA	NV	OT	Notas
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
Total								

Toma todos tus totales y dividelos entre 13, para conocer la proporción de tiempo utilizado en cada comportamiento. Así conocerás la cantidad de tiempo utilizado por el coyote en sus actividades durante la sesión de observación.

Scan 10:50 seconds NV

00:00:54

Escaneo focal

Escaneo grupal (Group sampling)

Etograma de Ciervo del Padre David (*Elaphurus davidianus*)

Definiciones de los comportamientos:

En tierra	ET	El ciervo esta parado en sus cuatro patas o echado completamente en el suelo.
En el agua	EA	El ciervo esta parado en sus cuatro patas o con el cuerpo sumergido completamente en el agua. si cualquier parte del cuerpo del ciervo se encuentra dentro del agua, se considerara como "En el agua"
No Visible	NV	El ciervo no es observado durante el escaneo o es imposible determinar si esta "En tierra" o "En el agua".



SCAN 5

5 water, 0 land

Escaneo grupal

Método 1/0

Etoograma de Tigre (*Panthera tigris*)

Definiciones de los comportamientos:

Alerta	AL	El tigre esta estacionado, echado, sentado o parado. La cabeza esta elevada con los ojos abiertos.
Caminar	CA	El tigre se esta moviendo alrededor utilizando las cuatro extremidades. Incluye caminar, correr o trepar.
Olfatear	OL	El tigre olfatea objetos en el suelo. La cabeza se mantiene baja hacia el objeto o el sustrato, la boca usualmente esta cerrada, la apertura de las fosas nasales puede observarse.
Lamer	LA	La boca del tigre esta abierta, la lengua se mueve a través de los objetos o los sustratos, puede ser repetitivo. También se incluye lamérse.
Descanso	DE	El tigre esta echado de costado o sobre su estomago, la cabeza esta cerca del suelo, los ojos pueden estar abiertos o cerrados. Los movimientos mínimos (ej: movimientos de cola, rodar) siguen considerandose descanso.
No Visible	NV	El tigre sale parcial o completamente de la vista evitando observar el comportamiento.
Otros	OT	Cualquier otro comportamiento no descrito previamente. Debes incluir la descripción de cualquier otro comportamiento que se haya observado en la ficha de datos.

Ficha de Datos del Muestreo - Uno-Cero.

Tigre (*Panthera tigris*)

Registra un 1 en la casilla por cada comportamiento que observes; registra un 0 si no observaste el comportamiento. Recuerda que en la muestra Uno-Cero, mas de un comportamiento puede ser observado en cada intervalo de escaneo.

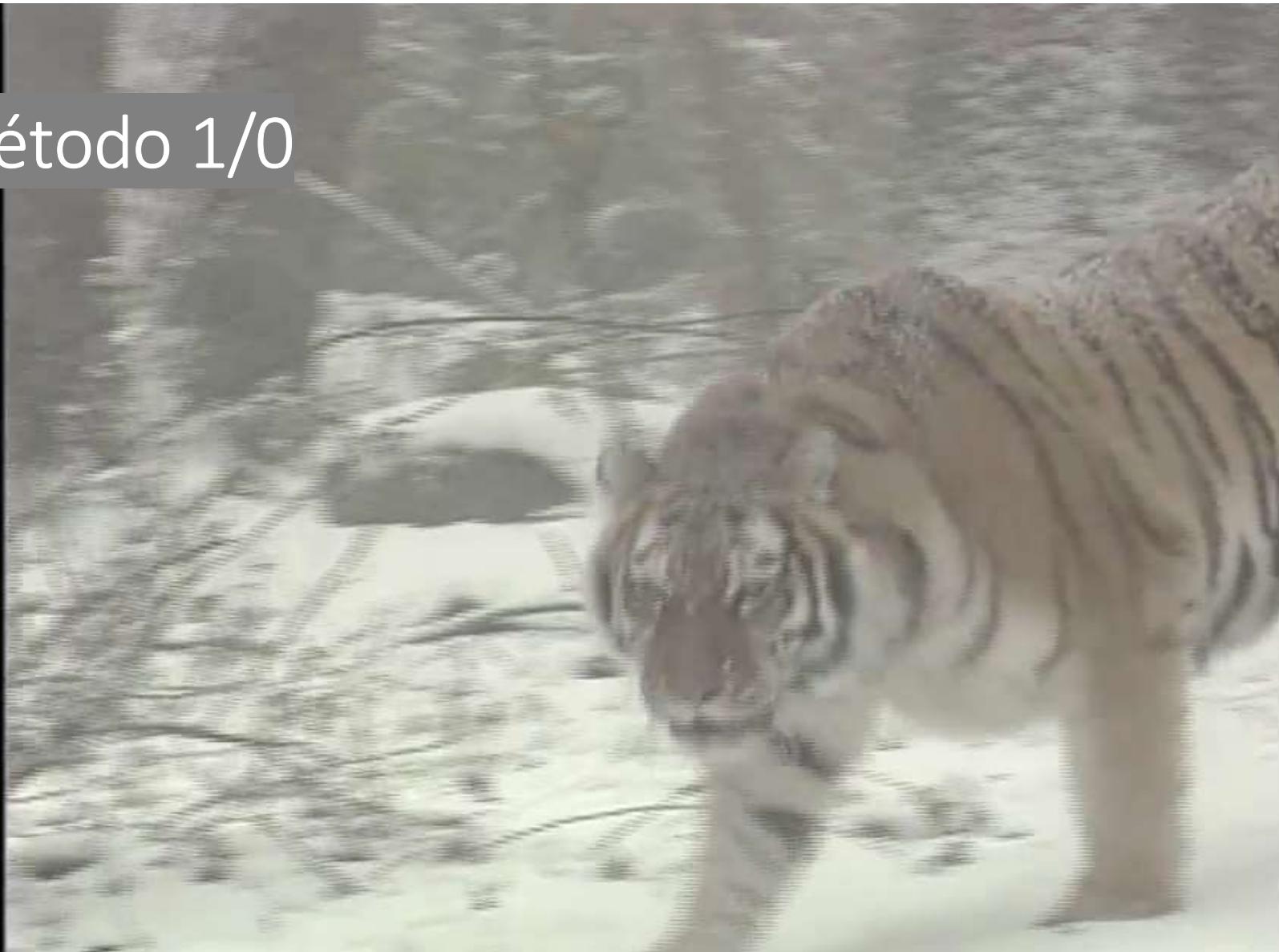
Fecha: _____ Observador:_____

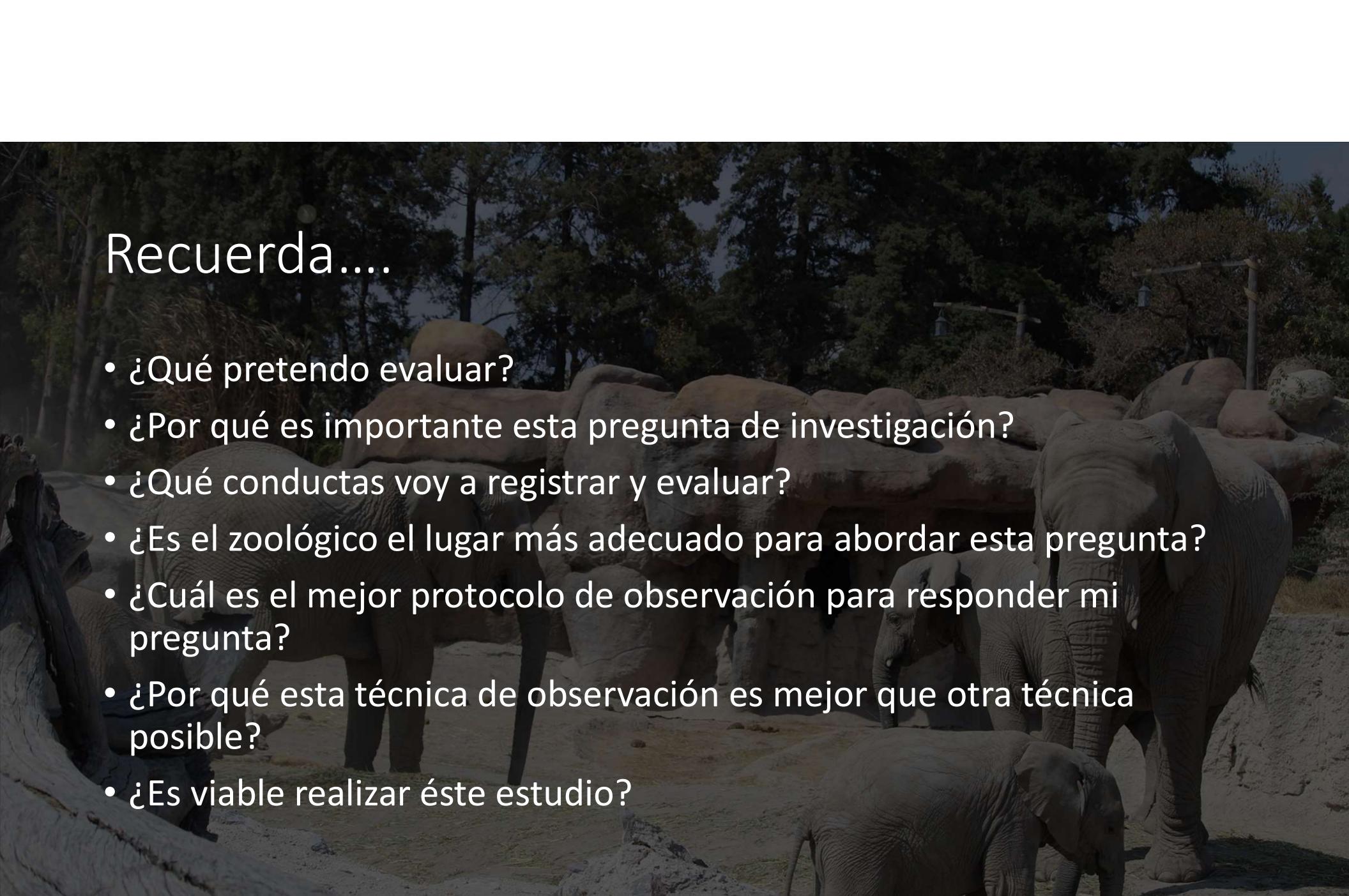
Especie: Tigre (*Panthera tigris*).

Escaneo	AL	CA	OL	LA	DE	NV	OT
1							
2							
3							
4							
5							
6							
7							
8							
Total							

Suma la cantidad de 1's en cada columna y despues dividelos el total entre 8. Esto te dará el promedio del numero de intervalos en que el comportamiento fue observado. que es una estimación del tiempo gastado para desarrollar cada comportamiento.

Método 1/0





Recuerda....

- ¿Qué pretendo evaluar?
- ¿Por qué es importante esta pregunta de investigación?
- ¿Qué conductas voy a registrar y evaluar?
- ¿Es el zoológico el lugar más adecuado para abordar esta pregunta?
- ¿Cuál es el mejor protocolo de observación para responder mi pregunta?
- ¿Por qué esta técnica de observación es mejor que otra técnica posible?
- ¿Es viable realizar éste estudio?



Uso de apps para el registro
conductual

Algunas Apps disponibles

- Animal Behavior Pro: <https://apps.apple.com/us/app/animal-behaviour-pro/id579588319>
- BORIS: <https://www.boris.unito.it/>
- Animal observer: <https://apps.apple.com/us/app/animal-observer/id991802313>
- Behayve: <https://www.behayve.com/>
- ZooMonitor: <https://zoomonitor.org/home>
- Lince PLUS: <https://github.com/observespport/lince-plus/releases/tag/v1.2.0>
- ChronoViz: <http://www.chronoviz.com/index.html>
- Cowlog 3: <http://cowlog.org/>
- Jwatcher: <http://www.jwatcher.ucla.edu/>
- The Observer XT: <https://www.noldus.com/applications/animal-behavior-observation>



Friard, O., & Gamba, M. (2016). BORIS: a free, versatile open-source event-logging software for video/audio coding and live observations. *Methods in ecology and evolution*, 7(11), 1325-1330.



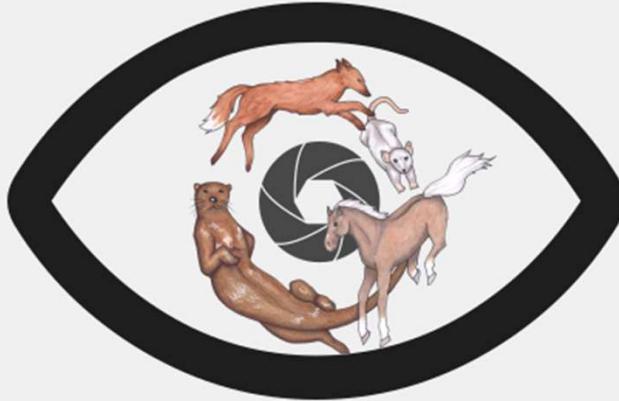
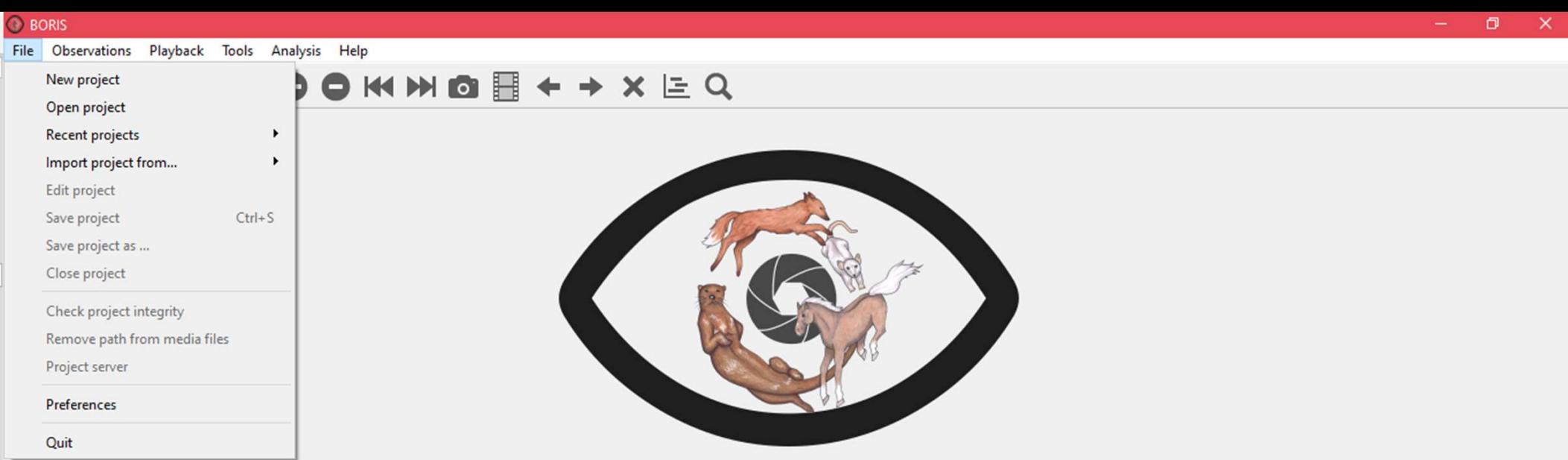
Guía Rapida:
<https://boris.readthedocs.io/en/latest/>

BORIS

File Observations Playback Tools Analysis Help



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DEGLI STUDI
DI TORINO



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DEGLI STUDI
DI TORINO

edit project

? X

Information Ethogram Subjects Independent variables Observations Behaviors coding map Converters

Project name

Regularity in the feeding patterns of the Great Tailed Grackle (*Quiscalus mexicanus*)

Project file path: C:\Users\aleja\Downloads\Great Tailed Grackle (*Quiscalus mexicanus*).boris

Date

2018-01-29 18:55:59

Description

The main aim of this observational study is determine if the Great Tailed Grackle (*Quiscalus mexicanus*) shows certain patterns of feeding behavior in an urban environment.

Time format

seconds

hh:mm:ss.mss

Cancel

OK

edit project

?

X

Information Ethogram Subjects Independent variables Observations Behaviors coding map Converters

Behavior type	Key	Code	Description	Category	Modifiers	Exclusion	Modifiers coding map	
1 State event	0	At the observation site	This states the moment where the ...			Searching for food		Add behavior
2 Point event	f	Fly	The focal animal flies away from the ...			Searching for food		Clone behavior
3 State event	s	Searching for food	The focal animal pecks the ground, ...					Remove behavior
4 Point event	j	Jump	The focal animal jumps or make a ...			Searching for food		Remove all behaviors
5 Point event	d	Displacement	The focal animal banish another bird ...	{'0': {'name': 'Displacement event...}}		Searching for food		Behavioral categories
6 Point event	o	Out of the sight	The focal animal is out of the sight for ...			Searching for food		Convert keys to lower case
7 Point event	1	One subject	Indicates that only one animal is at the ...					
8 Point event	2	Two subjects	Indicates that more than one animal is a...					
9 Point event	3	Three subjects	Indicates that more than one animal is a...					
10 Point event	4	Four subjects	Indicates that more than one animal is a...					
11 Point event	5	Five subjects	Indicates that more than one animal is a...					
12 Point event	6	Six subjects	Indicates that more than one animal is a...					
13 Point event	7	Seven subjects	Indicates that more than one animal is a...					
14 Point event	8	Eight subjects	Indicates that more than one animal is a...					
15 Point event	9	More subjects	Indicates that more					

[Cancel](#)[OK](#)

Regularity in the feeding patterns of the Great Tailed Grackle (Quiscalus mexicanus) - BORIS

File Observations Playback Tools Analysis Help

- New observation Ctrl+N
- Start observation Ctrl+O
- View observation
- Edit observation Ctrl+E
- Observations list Ctrl+L
- Close observation Ctrl+Q
- Import observations
- Export observations list
- Add event Ctrl+A
- Edit selected event(s)
- Shift time of selected event(s)

Explore project

Find in events

Find/replace in events

Check state events

Fix unpaired events Ctrl+U

Select events from interval

Delete selected events

Delete all events

Export events ▾

Create subtitles

Extract sequences from media files

Extract frames from media files

Create transitions matrix ▾



Type	Description	Category	Modifiers	Excluded
event	This states the moment where the ...			Searching for food
event	The focal animal flies away from the ...			Searching for food
event	The focal animal pecks the ground, ...			
event	The focal animal jumps or make a ...			Searching for food
event	The focal animal banish another bird ...		{'0': {'name': 'Displacement event...}}	Searching for food
event	The focal animal is out of the sight for ...			Searching for food

Description	Current state(s)

New observation

Observation id: Date:

Description:

Independent variables

Variable	Type	
1 Time of day	timestamp	2017-10-25 00:00:00
2 Location	text	20°38'09.2"N 103°24'42"E

Time offset: + 0 :00 :00 :000 hh:mm:ss seconds

Limit observation to a time interval

Media Live

Media files Data files

Player	Offset (seconds)	Path	Duration	FPS	Video	Audio
--------	------------------	------	----------	-----	-------	-------

Add media Add media without path Remove selected media Add all media from directory Add all media from dir without path

Visualize the sound spectrogram for the player #1
 Visualize the waveform for the player #1
 Stop ongoing state events between successive media files

Cancel Save Start

File Observations Playback Tools Analysis Help



Ethogram

Player #1

Events for "pba" observation

	Key	Code
1	0	At the observation site
2	f	Fly
3	s	Searching for food
4	j	Jump
5	d	Displacement
6	o	Out of the sight



time	subject

Subjects

	Key	Name	Description
1		No focal subject	

InkedDesplazamiento.mp4: 00:00:00.000 / 00:00:10.867 (paused)

No focal subject



x1.000

File Observations Playback Tools Analysis Help**Etho**
1
2
3
4
5
6New observation **Ctrl+N**Start observation **Ctrl+O**

View observation

Edit observation **Ctrl+E**Observations list **Ctrl+L**Close observation **Ctrl+Q**

Import observations

Export observations list

Add event **Ctrl+A**

Edit selected event(s)

Shift time of selected event(s)

Explore project

Find in events

Find/replace in events

Check state events

Fix unpaired events **Ctrl+U**

Select events from interval

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Type	Description	Category	Modifiers	Excluded
event	This states the moment where the ...			Searching for food
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event	The focal animal pecks the ground, ...			
event	The focal animal jumps or make a ...			Searching for food
event	The focal animal banish another bird ...		{'0': {'name': 'Displacement event...}}	Searching for food
event	The focal animal is out of the sight for ...			Searching for food

Description	Current state(s)

Tabular events

Aggregated events

as behavioural sequences ▾

as Praat TextGrid

for analysis with JWatcher

as behaviors binary table

Regularity in the feeding patterns of the Great Tailed Grackle (*Quiscalus mexicanus*) - BORIS

File Observations Playback Tools **Analysis** Help

Ethogram

	Key	Co	Category	Modifiers	Excluded
1	0	At the obse			Searching for food
2	f	Fly			Searching for food
3	s	Searching for food	State event	The focal animal pecks the ground, ...	
4	j	Jump	Point event	The focal animal jumps or make a ...	Searching for food
5	d	Displacement	Point event	The focal animal banish another bird ...	{'0': {'name': 'Displacement event...}}
6	o	Out of the sight	Point event	The focal animal is out of the sight for ...	Searching for food

Inter-rater reliability

- Cohen's kappa (time-unit)
- Inter-rater time ...
- Similarities
- Advanced event filtering

Subjects

	Key	Name	Description	Current state(s)
1		No focal subject		

A close-up photograph of a Great-tailed Grackle, showing its dark blue-black plumage, white wing patch, and yellow eye ring. The bird is standing on a dry, brownish ground surface, looking towards the left.

Daily Patterns of Foraging and Aggressive Behaviors in Great-tailed Grackle (*Quiscalus mexicanus*) at an Urban Patch with Availability or Absence of Resources

Rodrigo, Avila-Chauvet & Buriticá (en revisión)

Objetivo de la investigación

- El objetivo principal de la investigación era conocer los patrones de alimentación de los zanates mexicanos cuando la disponibilidad de alimento era abundante o reducida.
- También nos interesaba conocer si las conductas de agresión incrementaban o disminuían en relación con la disponibilidad.



En el sitio de observación (Entrada)



En el sitio de observación (Salida)

Volar



Búsqueda de alimento



Salto



Desplazamiento



Fuera de vista

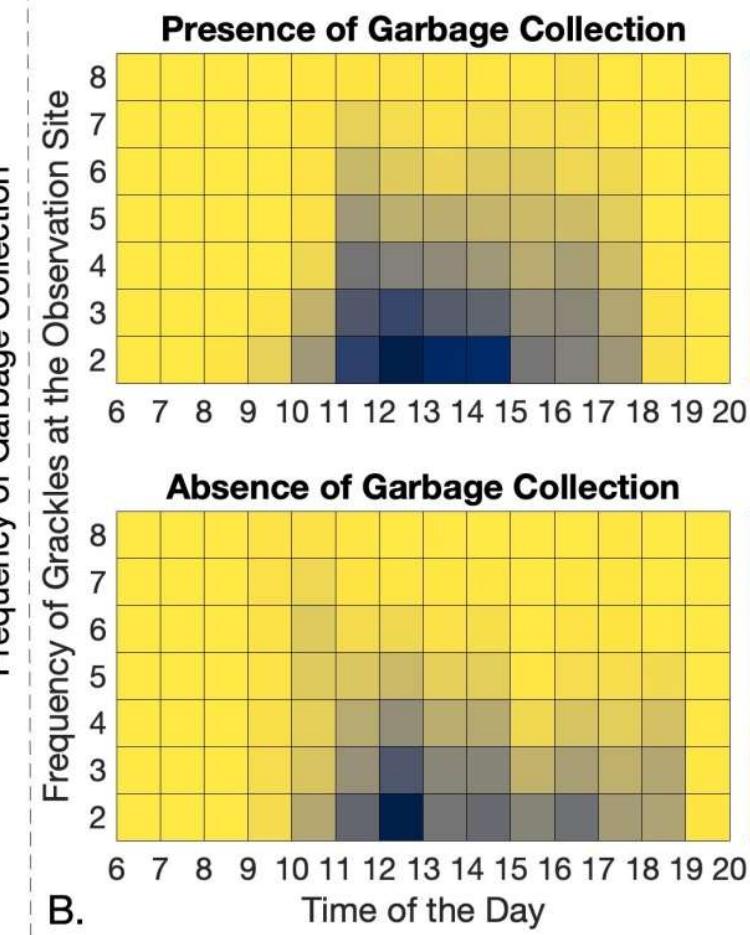
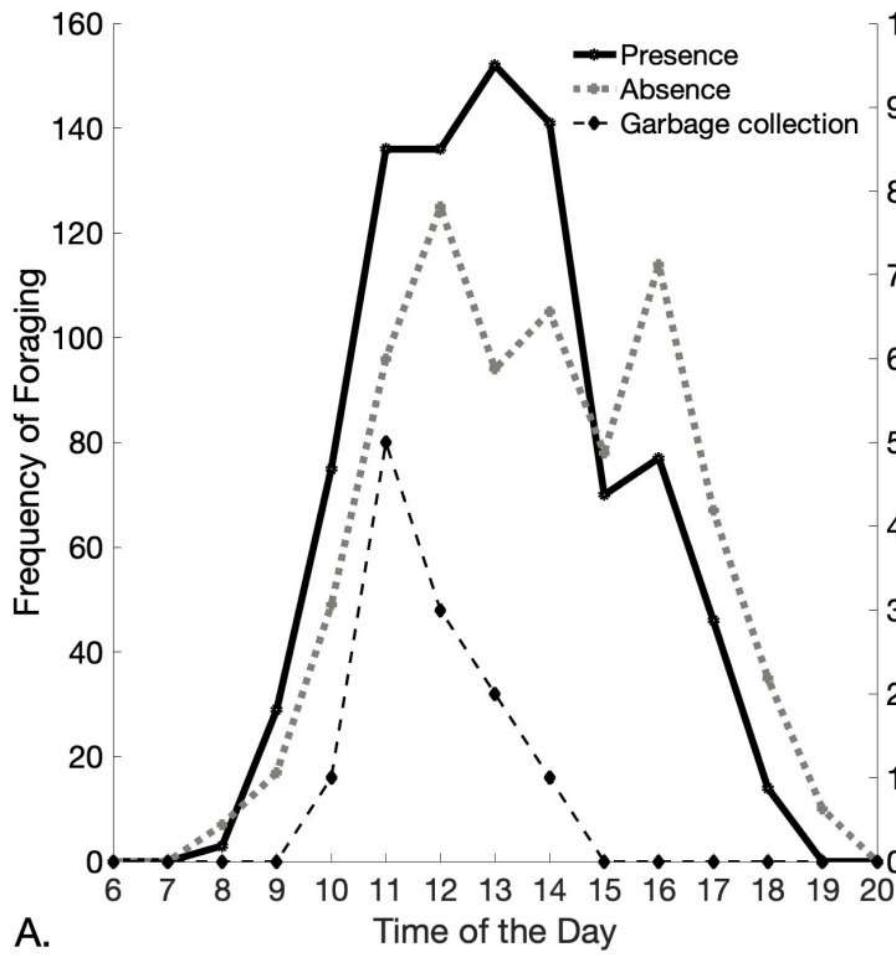


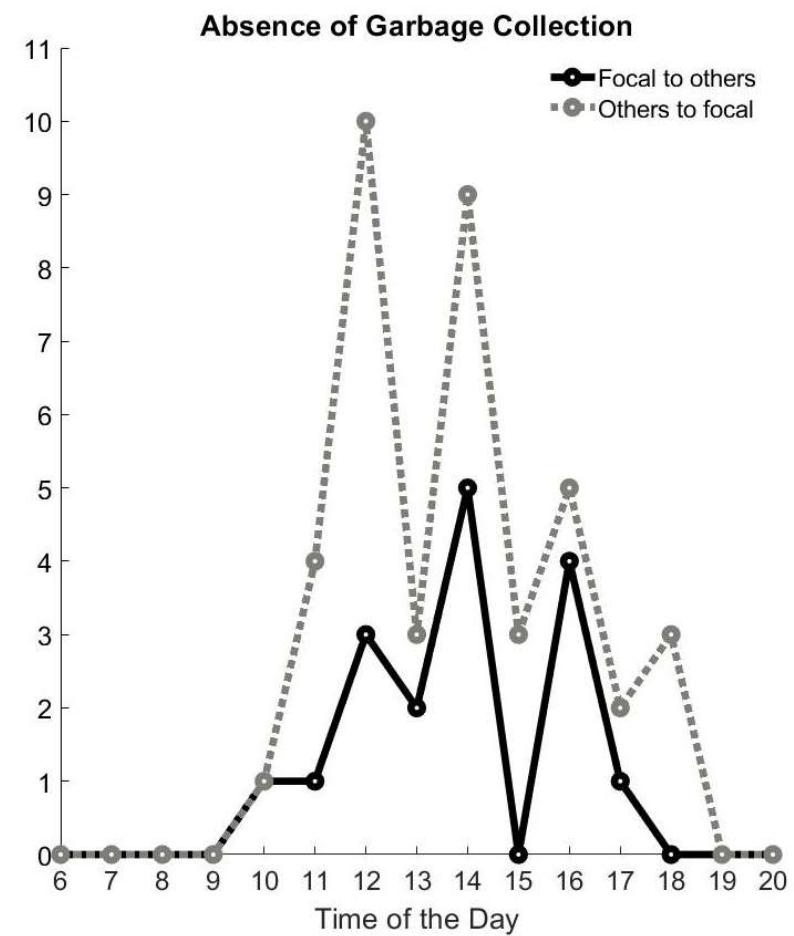
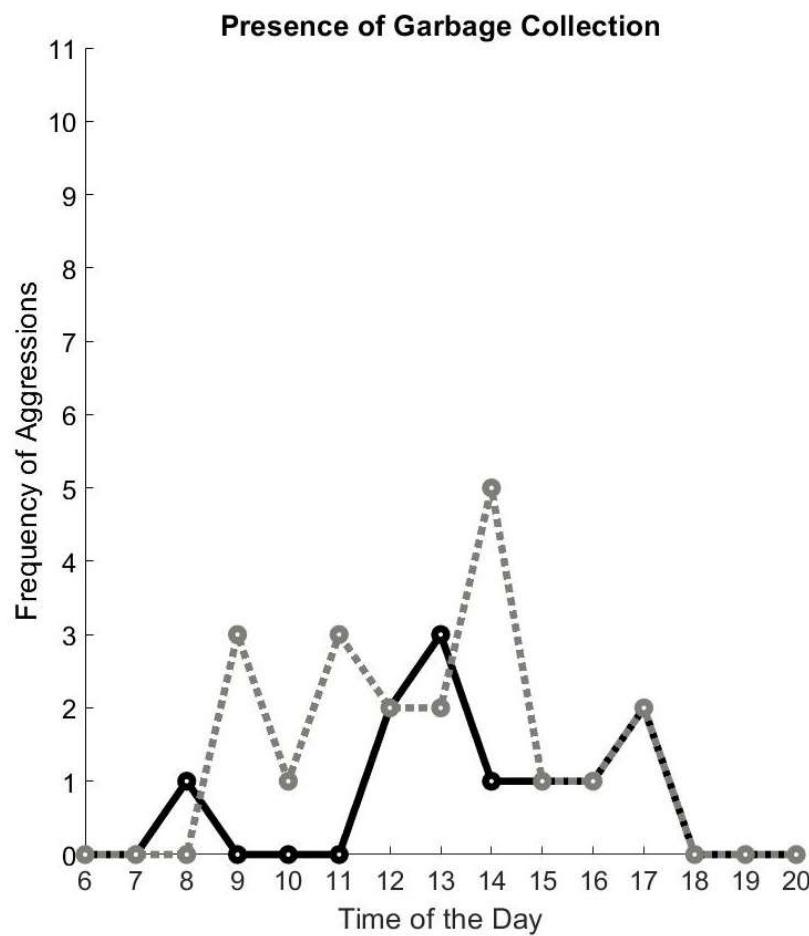
Basura

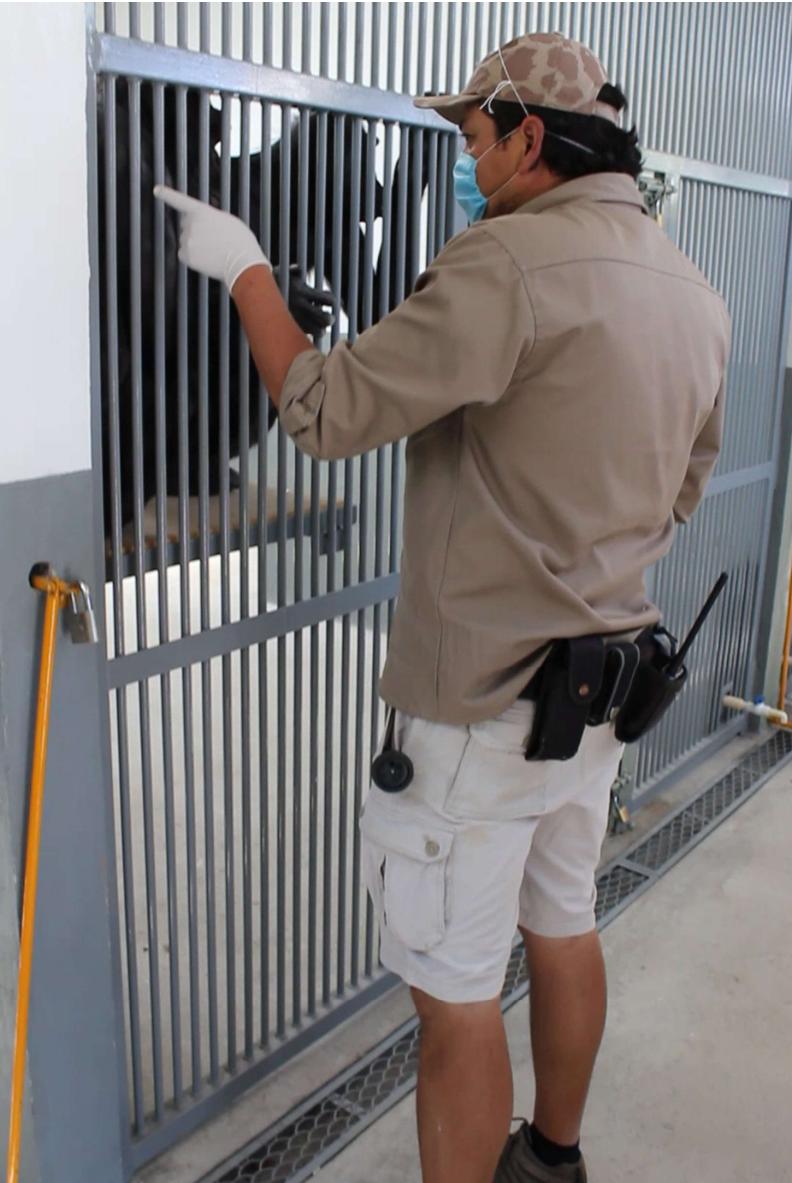


A close-up photograph of a black bird, likely a crow or raven, standing on a dirt path. The bird has dark feathers and a prominent white patch on its wing. It is looking slightly to the left. The background is blurred, showing a natural outdoor setting.

Resultados





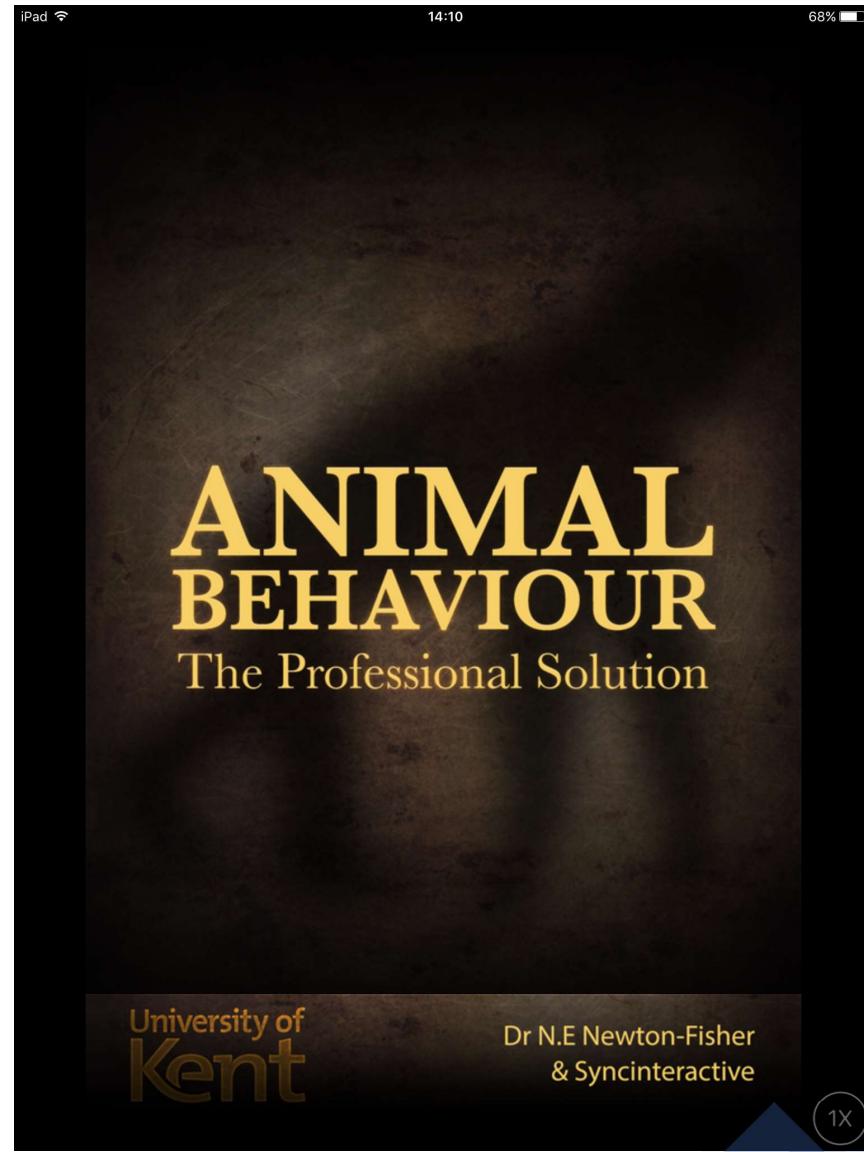


Evaluación de los programas de entrenamiento a través del uso de etogramas

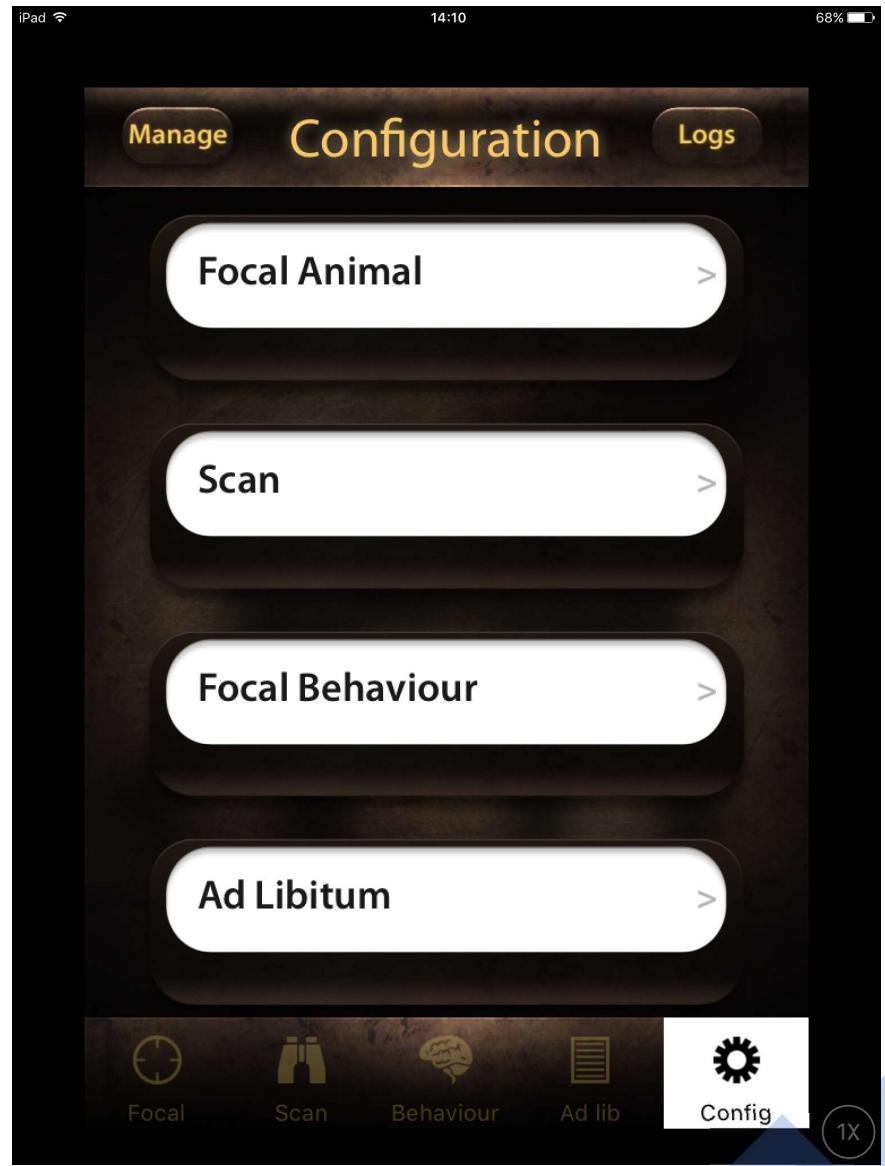
Longán, Rodrigo & Gomez-Medina, 2020

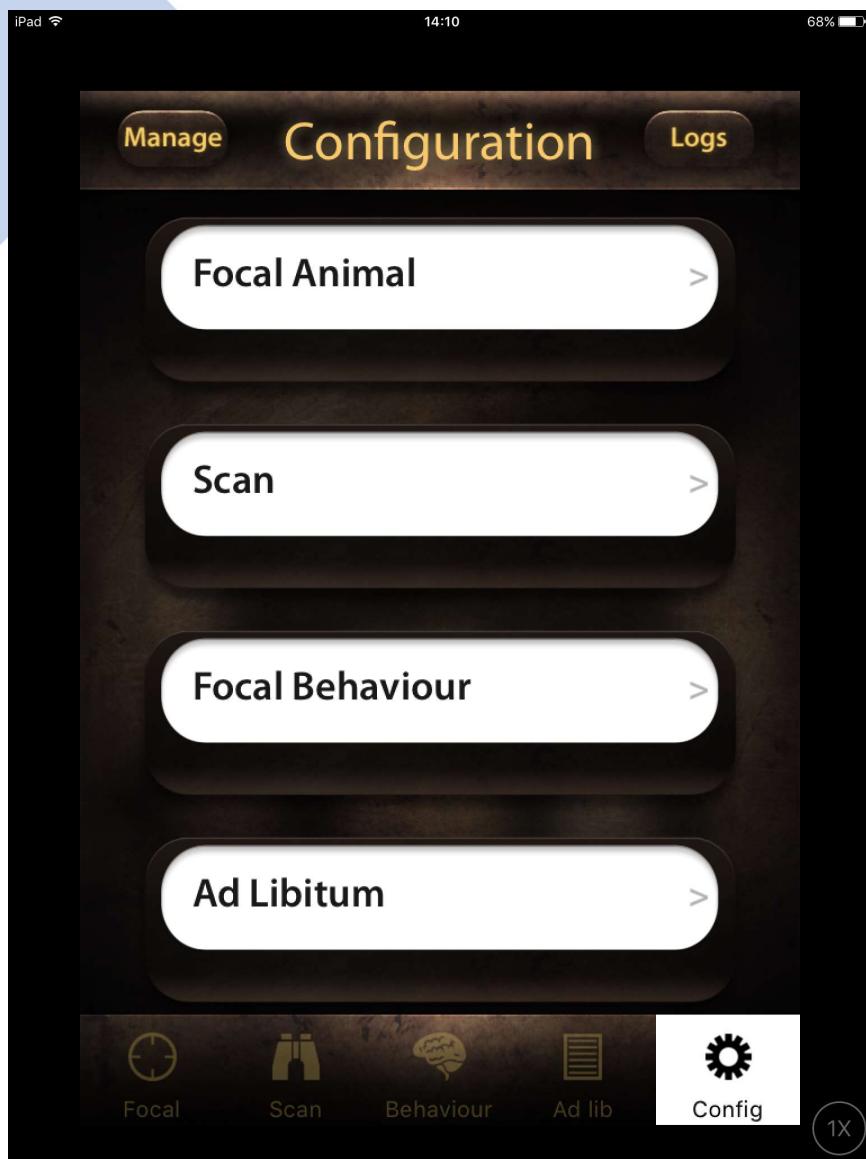
Objetivo de la investigación

- Proponer una forma objetiva de evaluar los programas de entrenamiento en animales de zoológico.
- 1) índice de correspondencia
- 2) duración de las sesiones de entrenamiento
- 3) variabilidad del repertorio conductual de las especies que se entrena
- El índice de correspondencia se calculó siguiendo los parámetros de la contingencia Skinneriana de tres términos (S-R-Er): los comandos emitidos por los entrenadores (S), los comportamientos realizados por los animales (R) y el número de reforzadores entregados (Er).



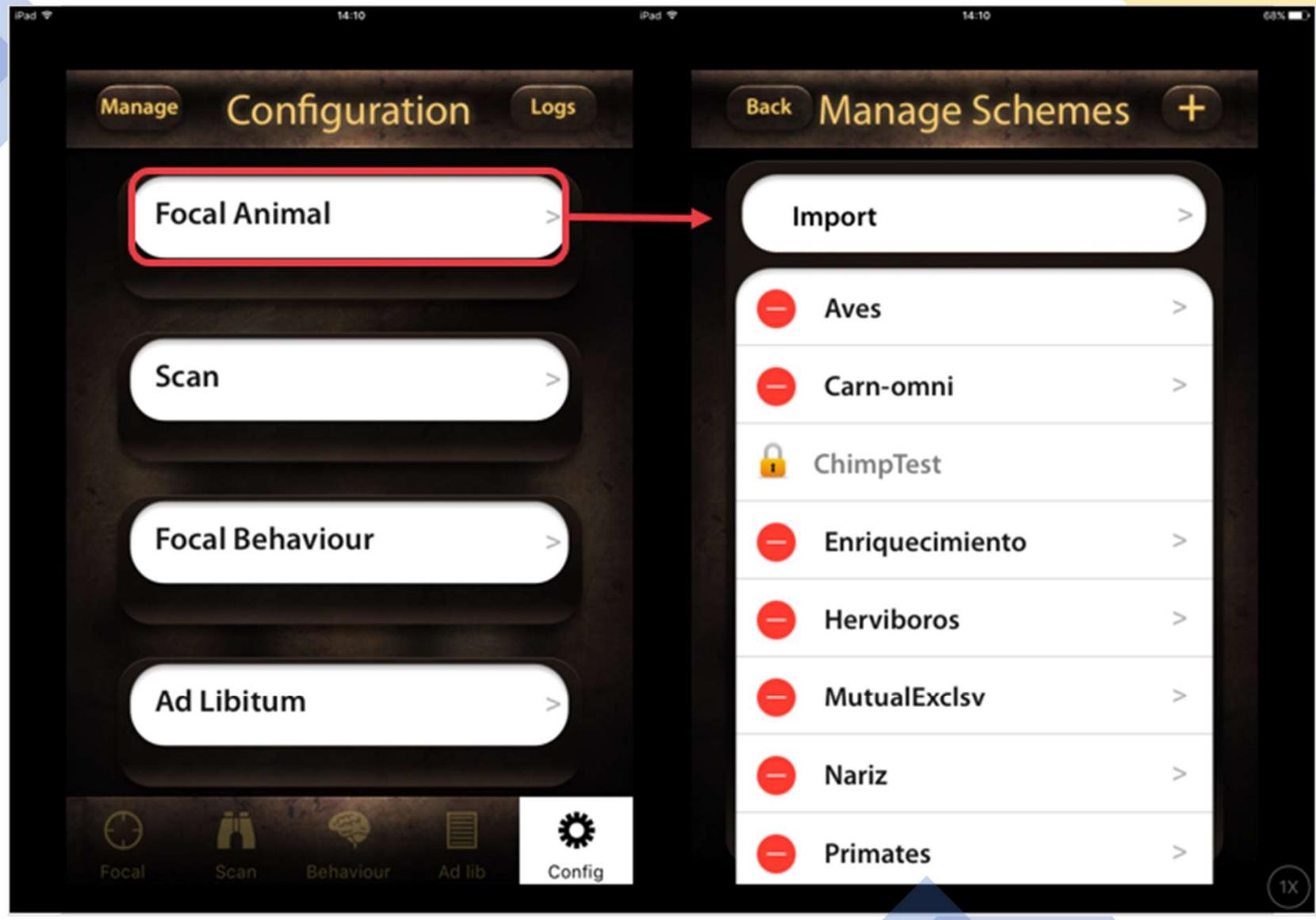
Guía Rapida
<https://www.youtube.com/watch?v=v9pLE9kpOnk>

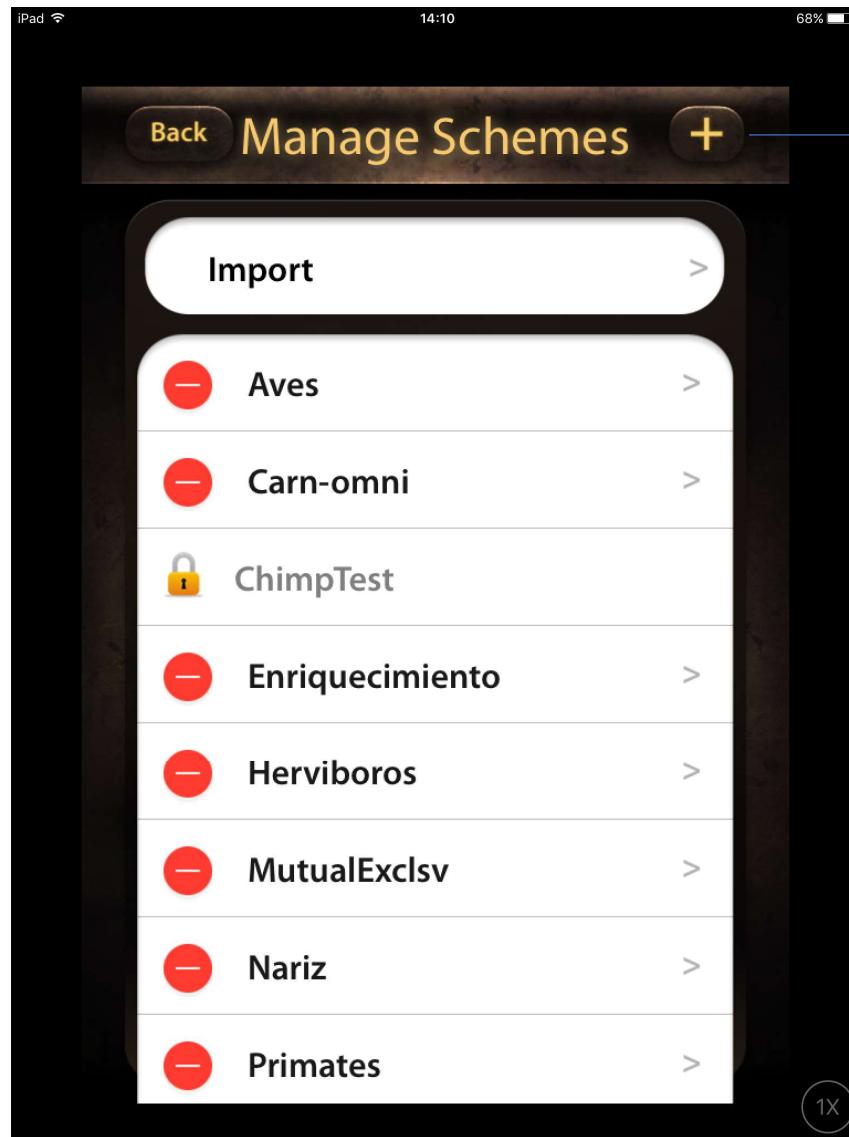




Almacenamiento de registros conductuales

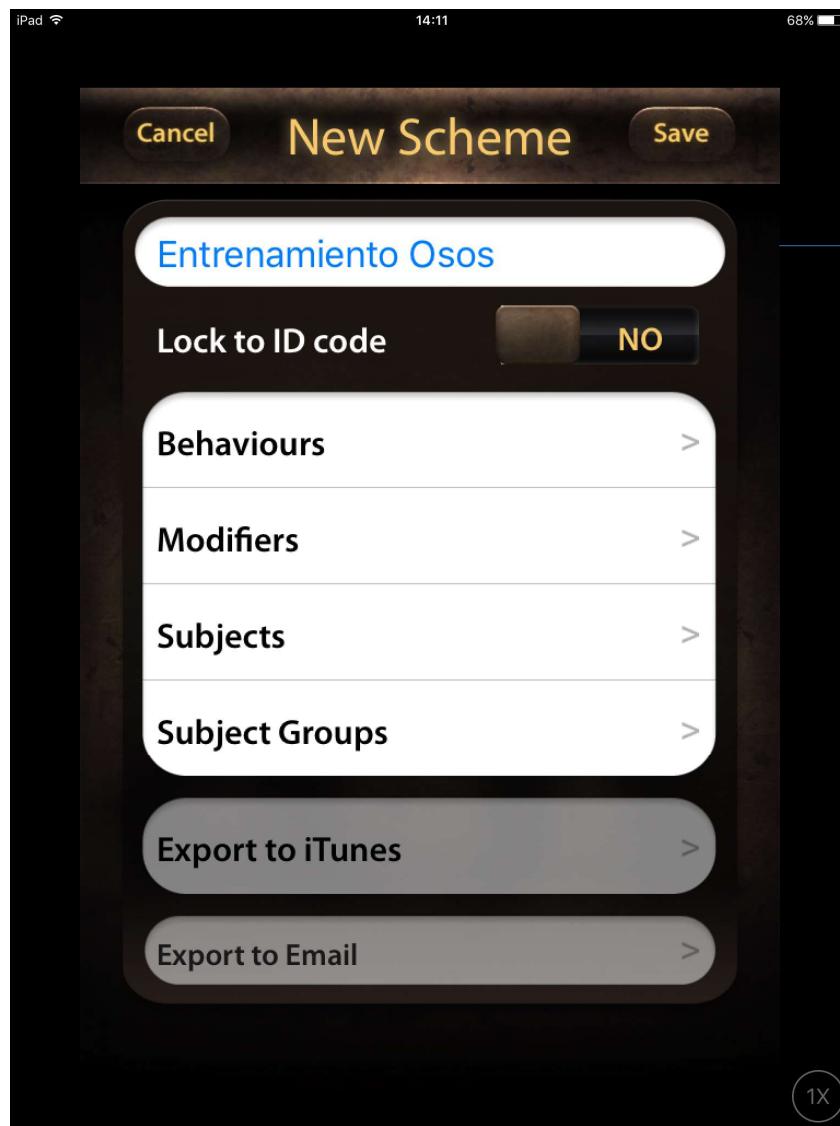
Tipos de registros observacionales





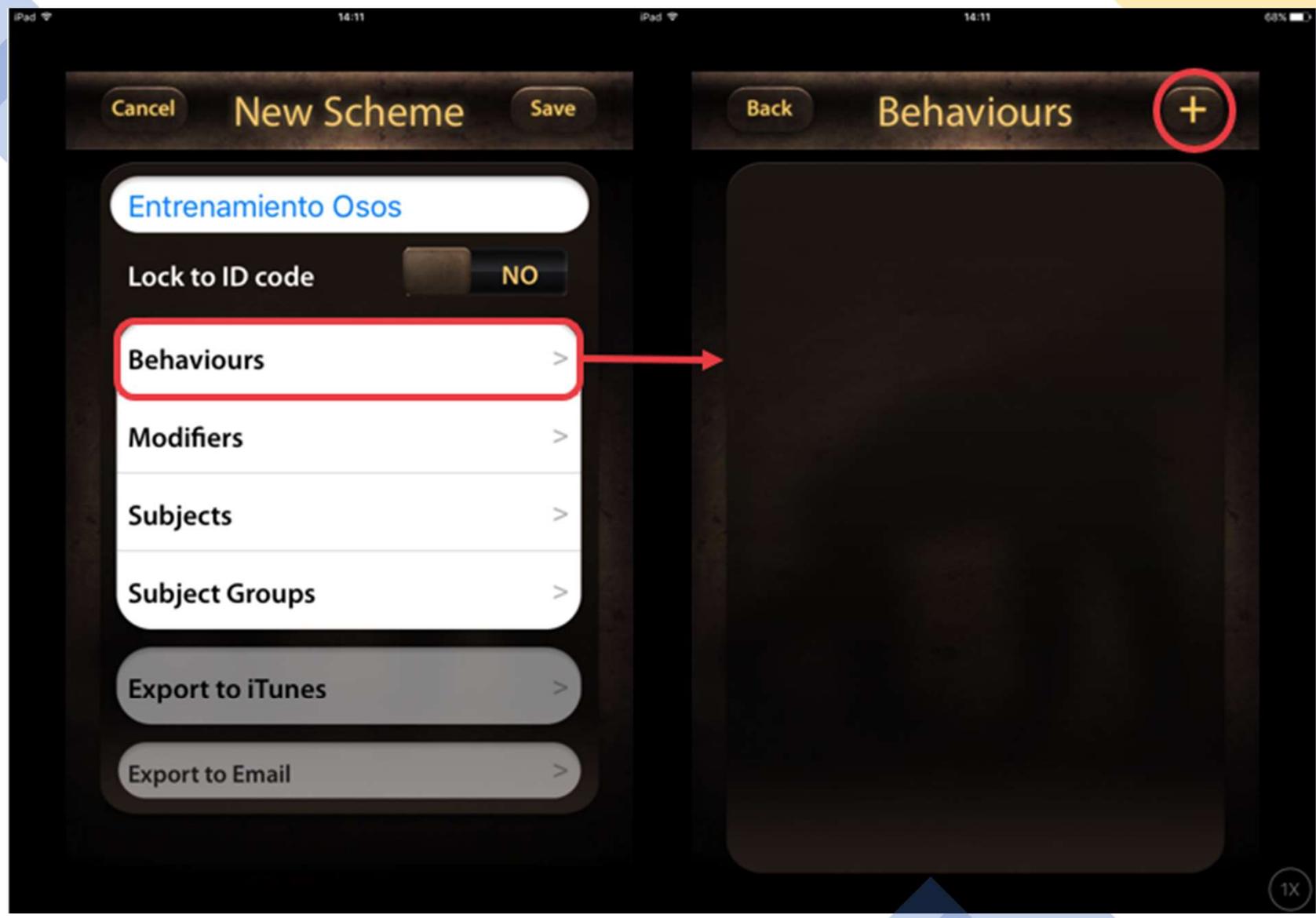
Agregar un etogramma nuevo

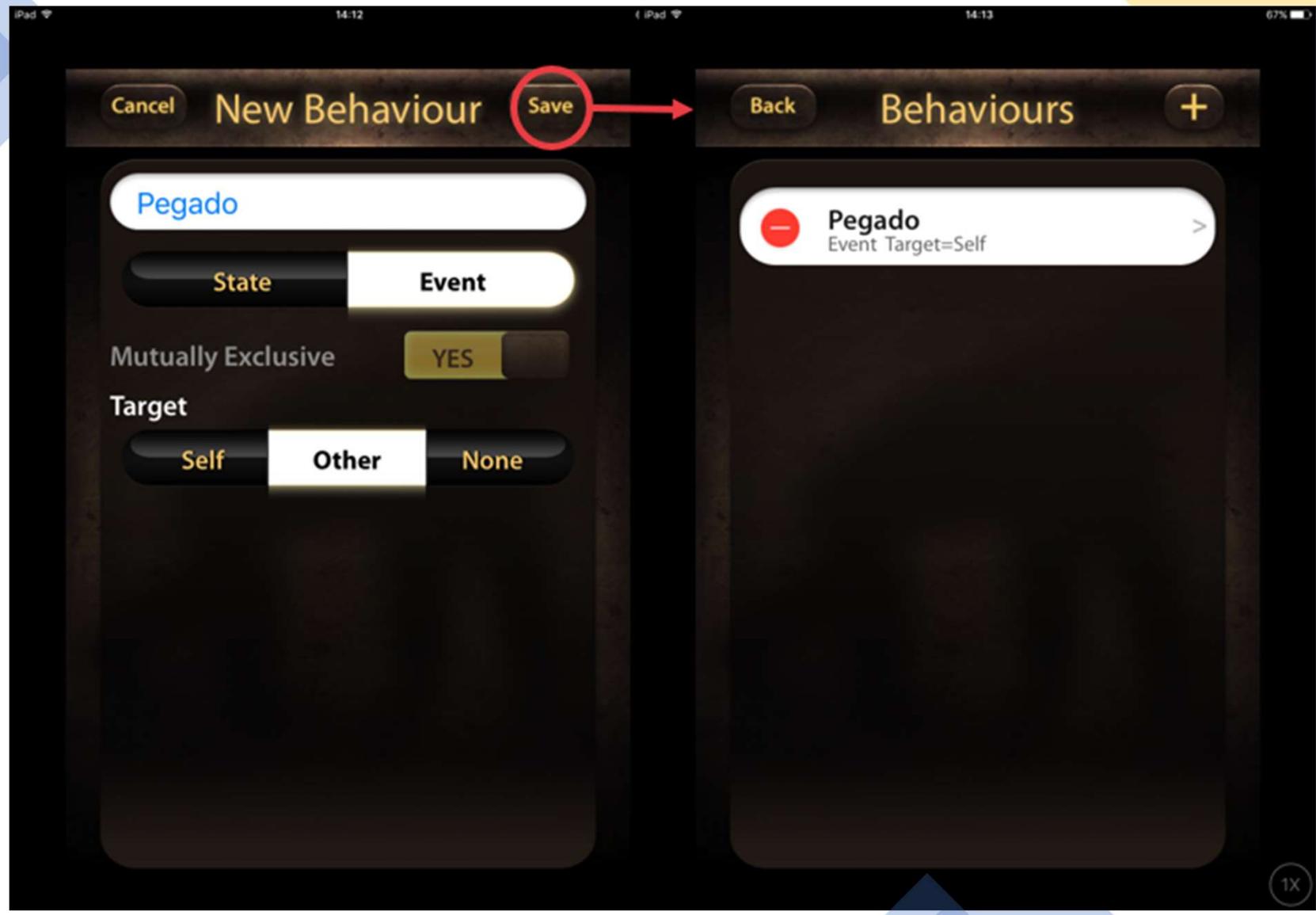
Lista de etogrammas programados

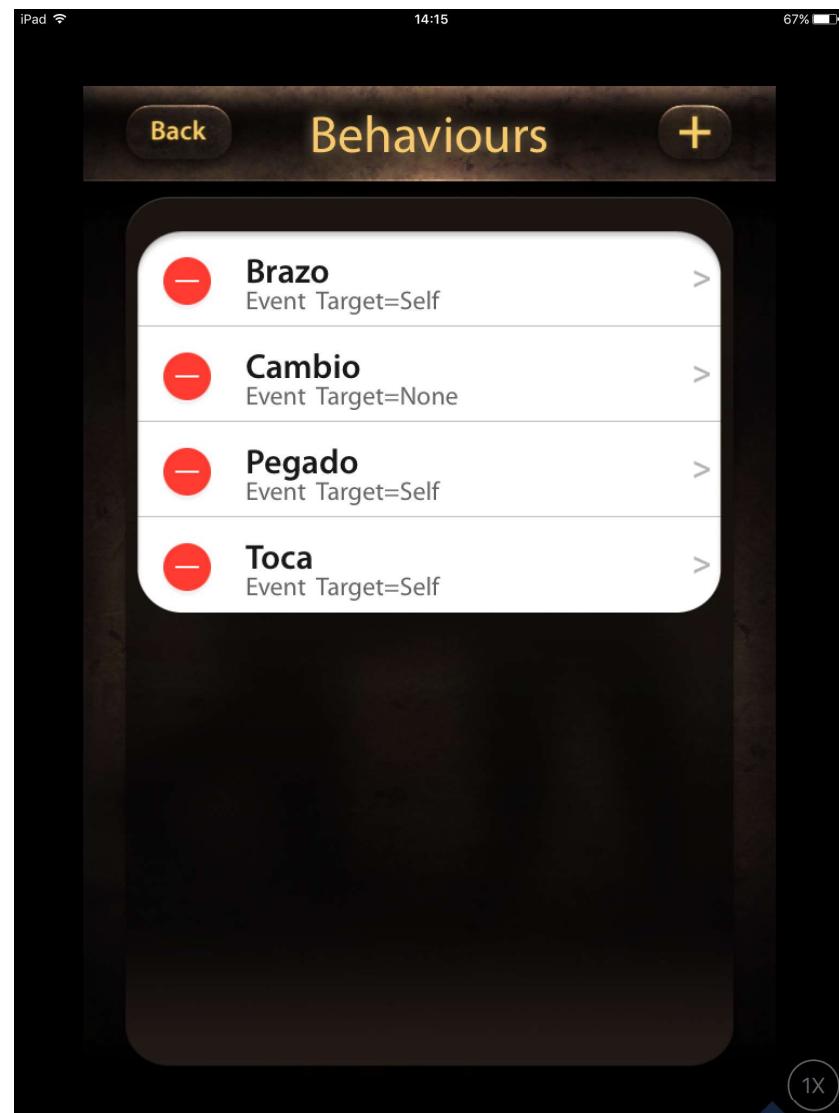


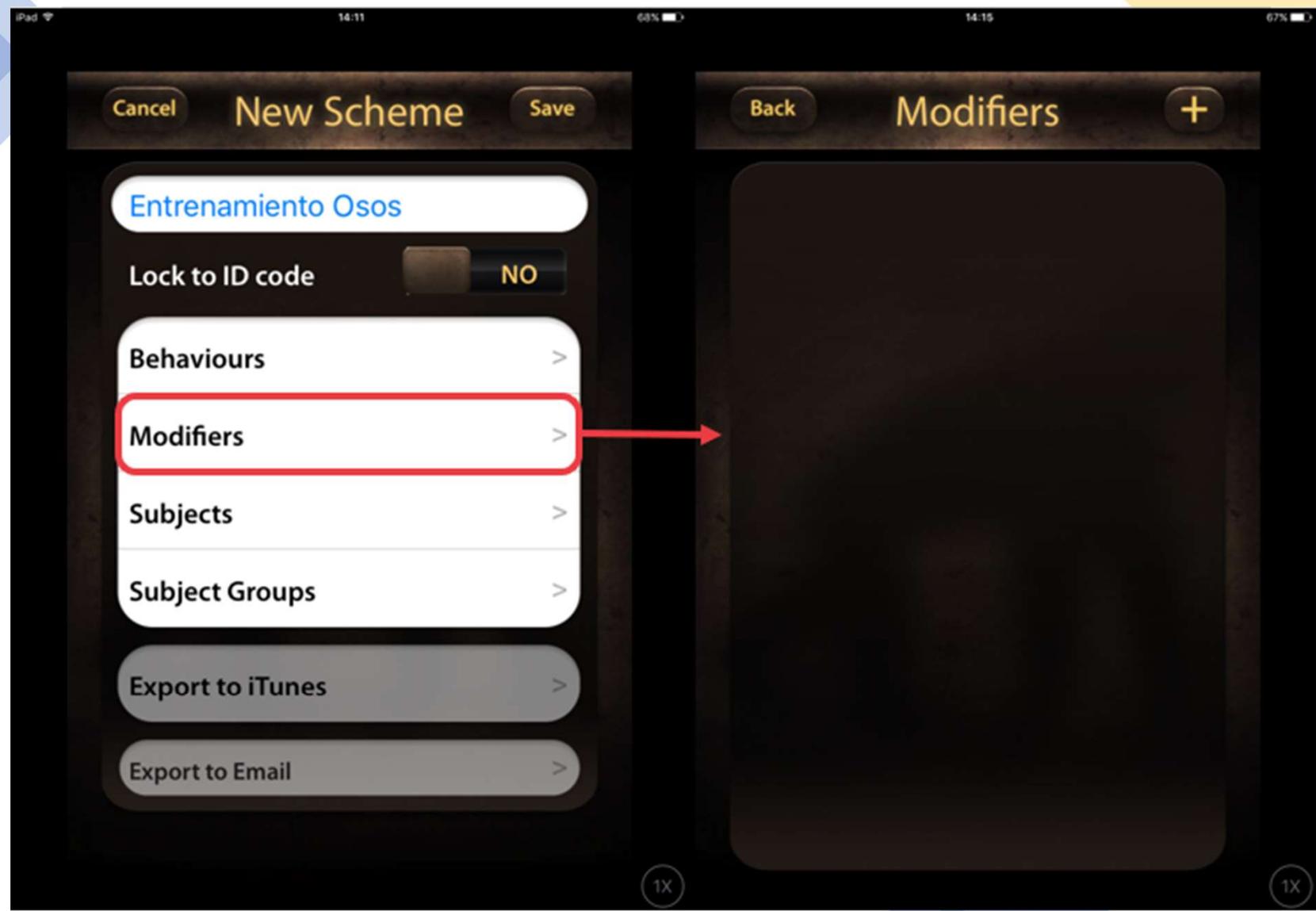
Nombre del etograma

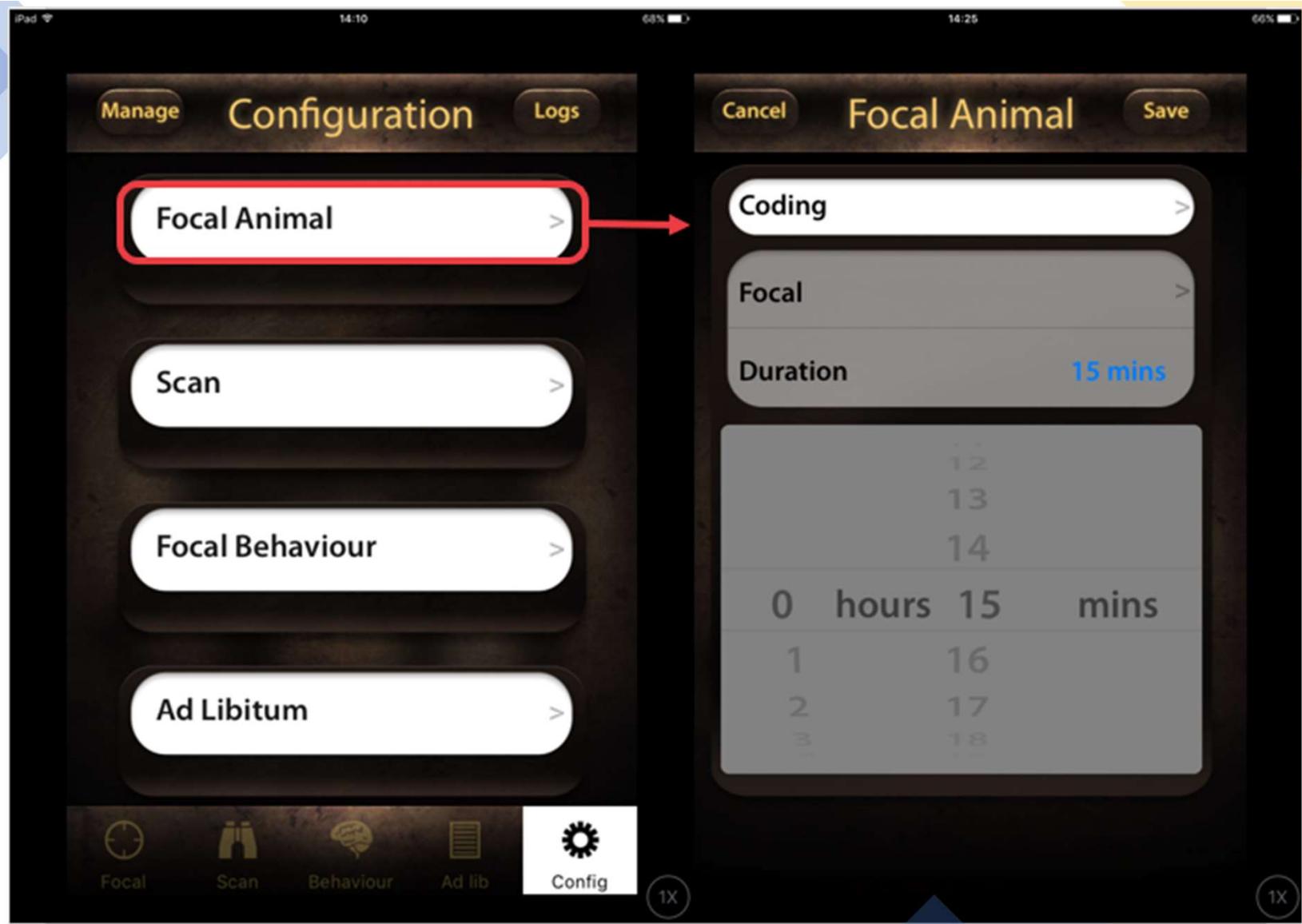
Lista de comportamientos, modificadores y sujetos a incluir en nuestro etograma

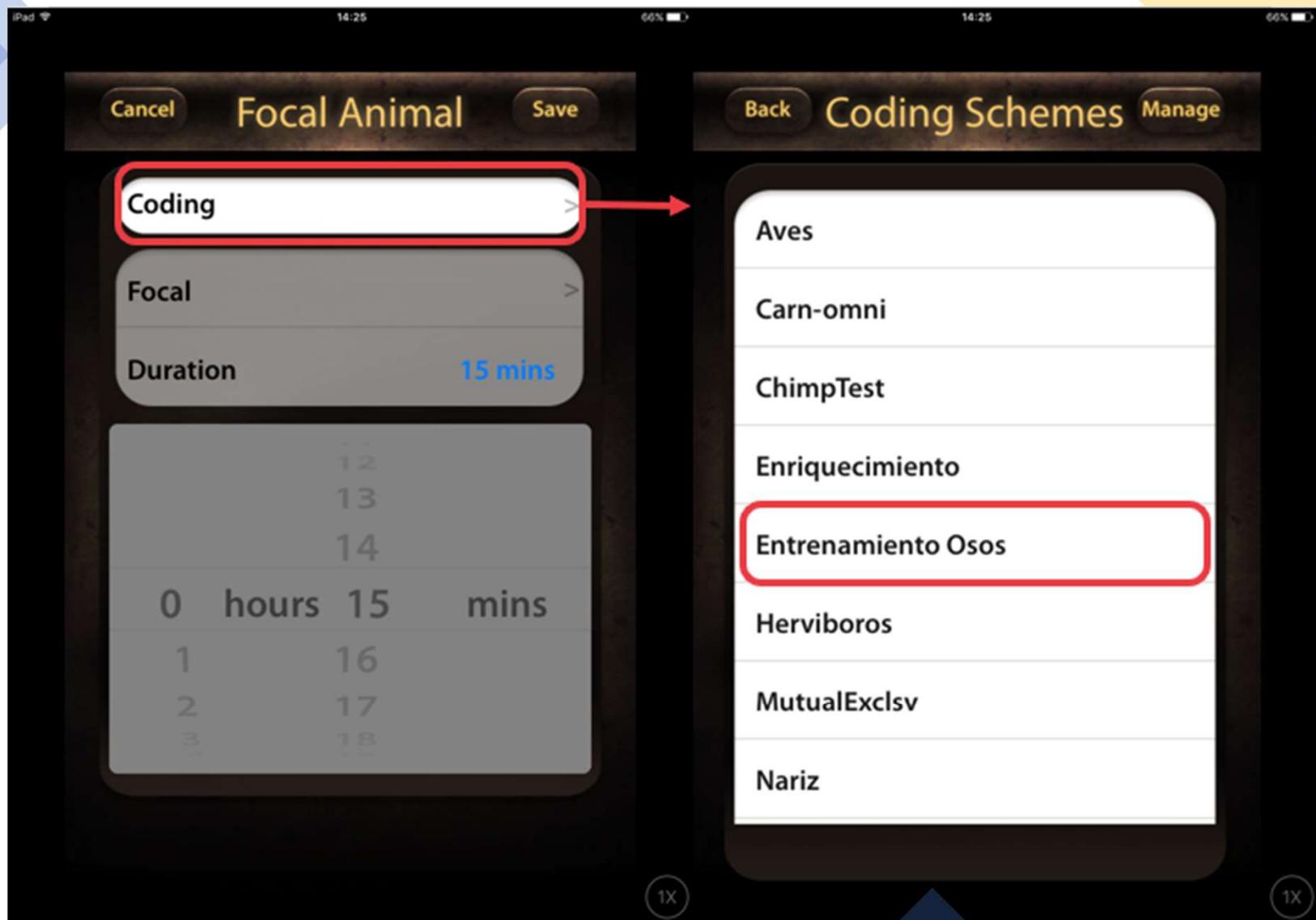


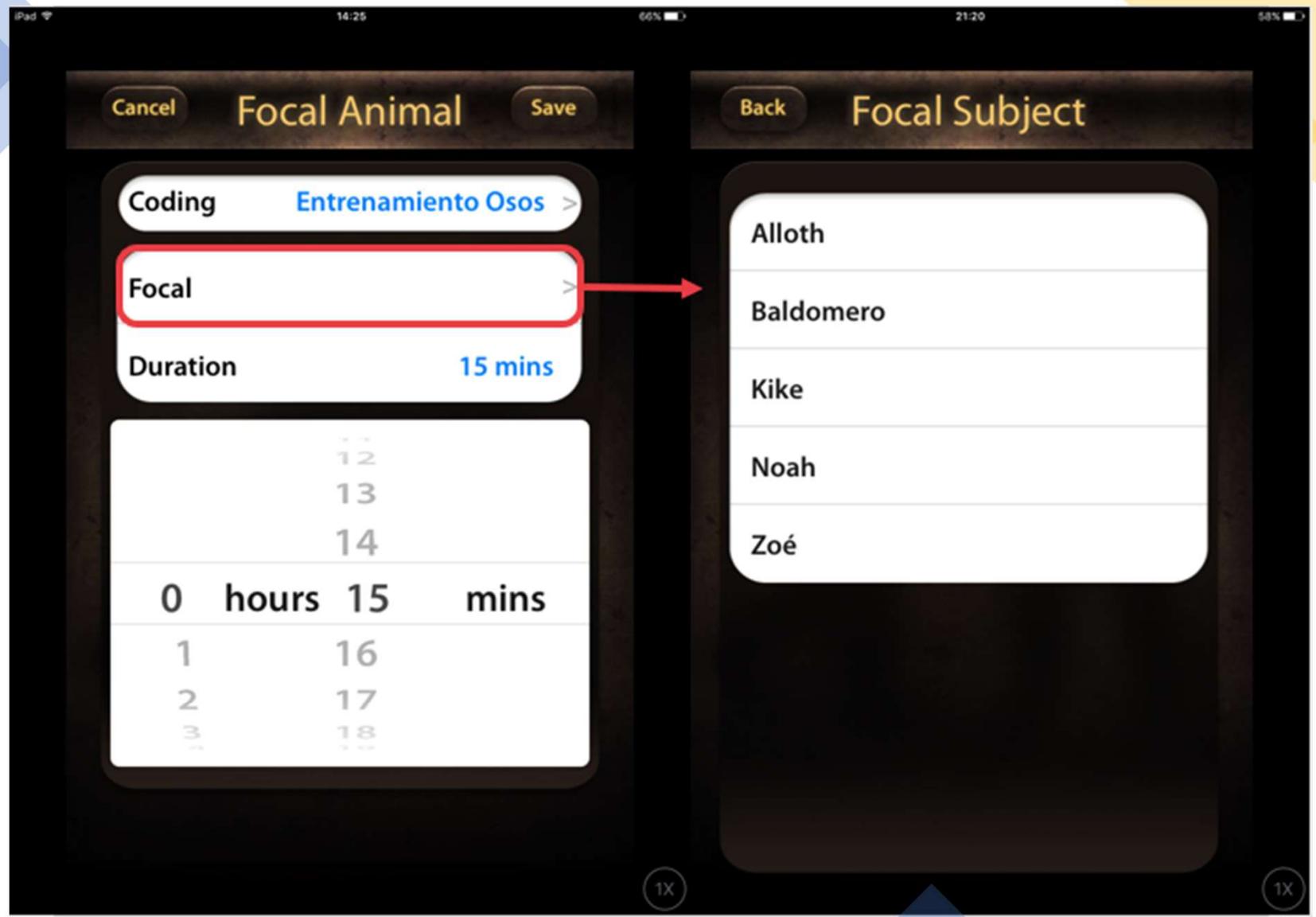


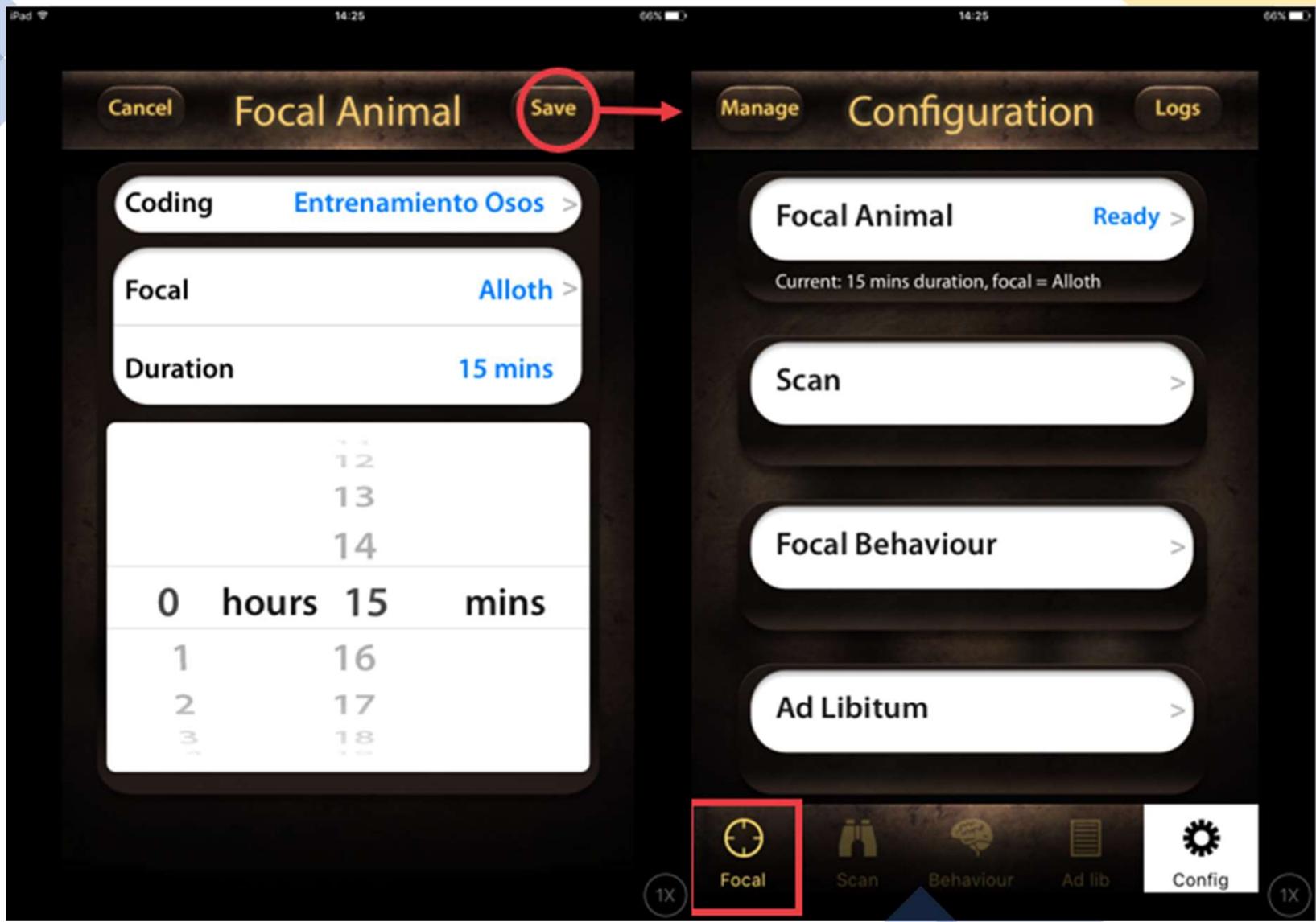






















Configuration

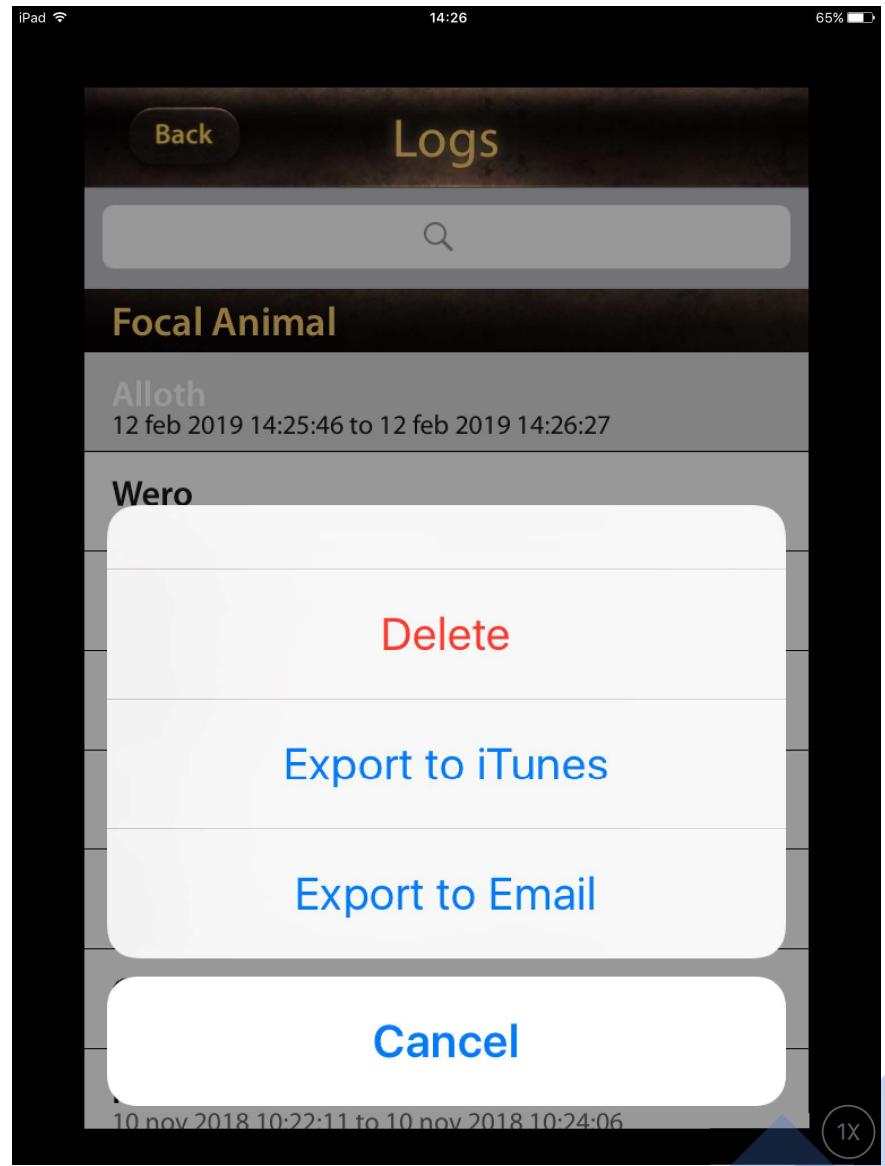
- Focal Animal >
- Scan >
- Focal Behaviour >
- Ad Libitum >

Logs

Logs

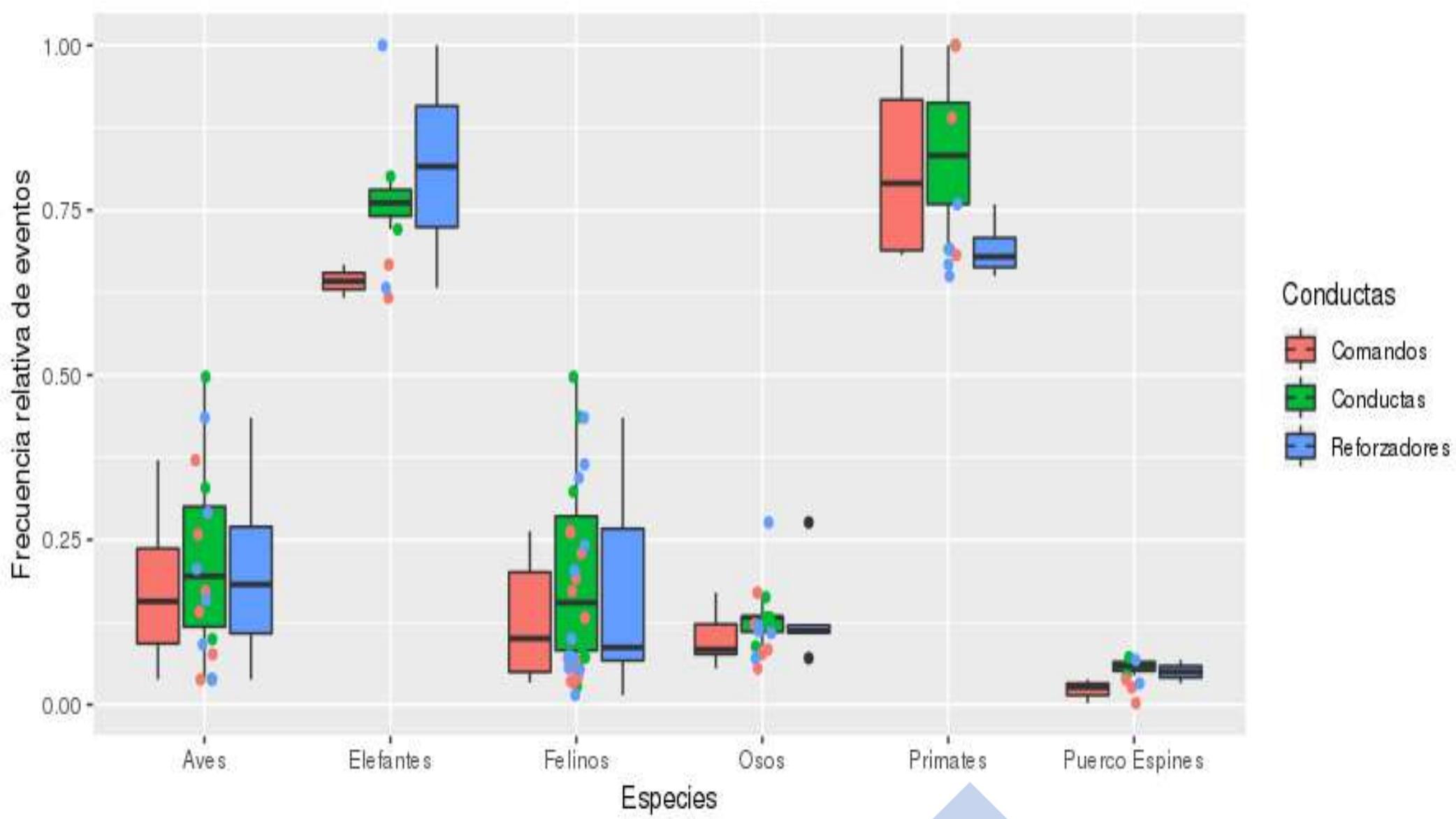
Focal Animal	Date Range
Alloth	12 feb 2019 14:25:46 to 12 feb 2019 14:26:27
Wero	13 nov 2018 17:31:37 to 13 nov 2018 17:37:36
Cristina	11 nov 2018 10:58:07 to 11 nov 2018 11:00:54
Rebeca	11 nov 2018 10:55:07 to 11 nov 2018 10:57:44
Judo	11 nov 2018 10:52:05 to 11 nov 2018 10:54:36
Wero	11 nov 2018 10:42:13 to 11 nov 2018 10:47:07
Cristina	10 nov 2018 10:25:08 to 10 nov 2018 10:26:49
Rebeca	10 nov 2018 10:22:11 to 10 nov 2018 10:24:06

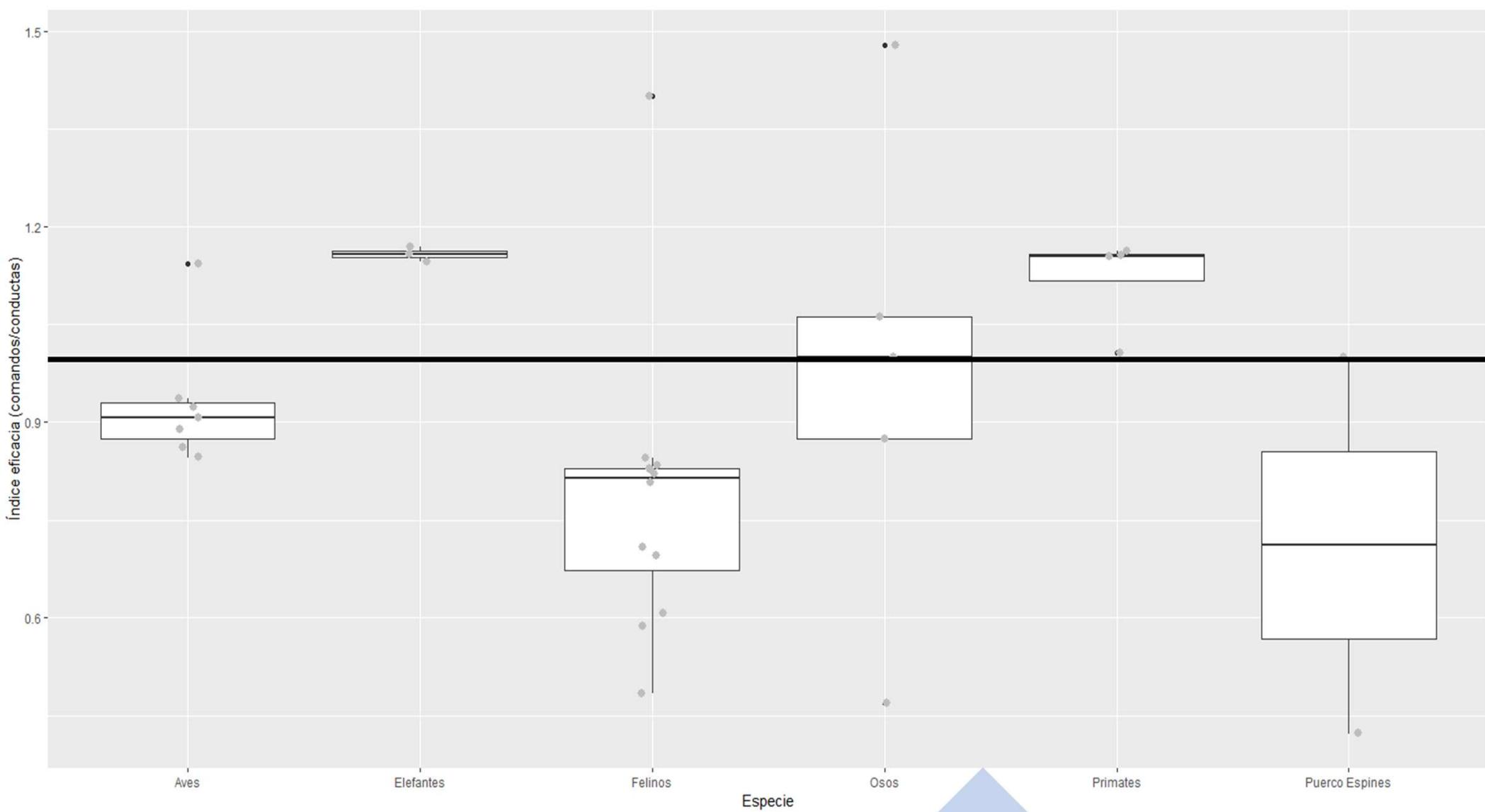
1X





Resultados





En conclusión

- El registro y análisis del comportamiento nos ayuda a conocer mejor a los animales que se encuentran bajo cuidado humano, respondiendo preguntas acerca de la causa, función, desarrollo y evolución de la conducta.
- Nos ayuda a conocer cuál es estado de salud de nuestros individuos.
- Nos permite implementar técnicas de evaluación de los programas de bienestar animal, incluidos el programa de enriquecimiento y entrenamiento animal.



¡Gracias por su atención!

M. en C. Alejandro Rodrigo

Centro de Estudios e Investigaciones en Comportamiento

Universidad de Guadalajara

rodrigo.gutierrezt@alumno.udg.mx

