

# History of Amphibians and Reptiles Conservation in Hispaniola

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**Historia de la Conservación de Anfibios y Reptiles en la Hispaniola**

Why me?



Por qué yo?



**1968**



**2013**

# Amphibians and Reptiles in Hispaniola



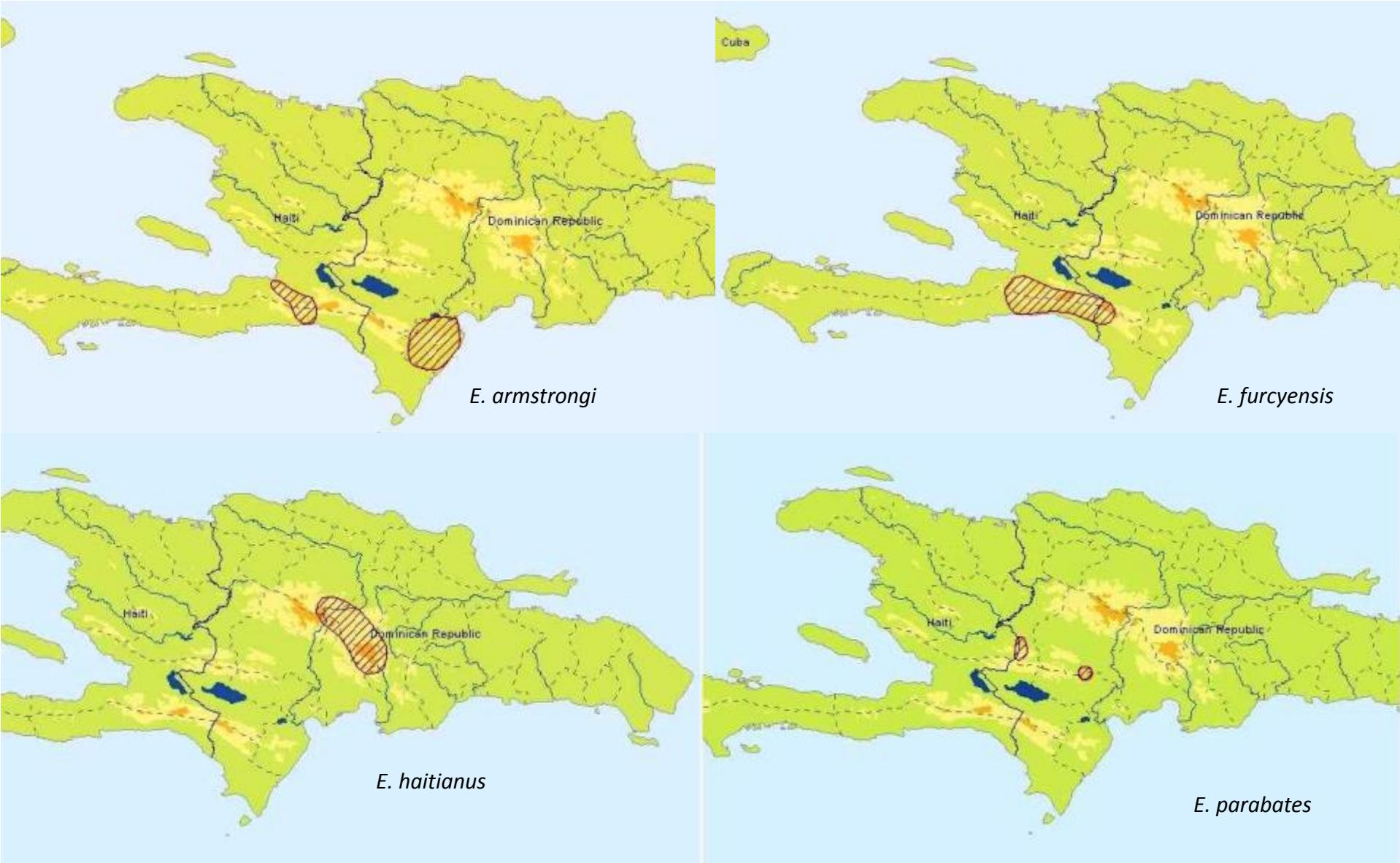


**Amphibians 74**  
**Haiti 56 Dominican Republic 44**



**Reptiles 170**  
**Haiti 120 Dominican Republic 116**





**High levels of endemisms**

**Many species of restricted distributions**

**High levels of threats**

(Maps: IUCN Red List)



# Conservation Status

Taxa	CS <sup>1</sup>	Haiti	Dominican Republic	
		IUCN RL <sup>2</sup>	IUCN RL <sup>2</sup>	DR NRL <sup>3</sup>
Amphibia	CR	31	10	13
	EN	11	15	20
	VU	7	7	4
Total		49/56	32/44	37/44
Reptilia	CR	3	4	33
	EN	7	3	29
	VU	5	7	10
Total		15*/120	14*/116	72/116

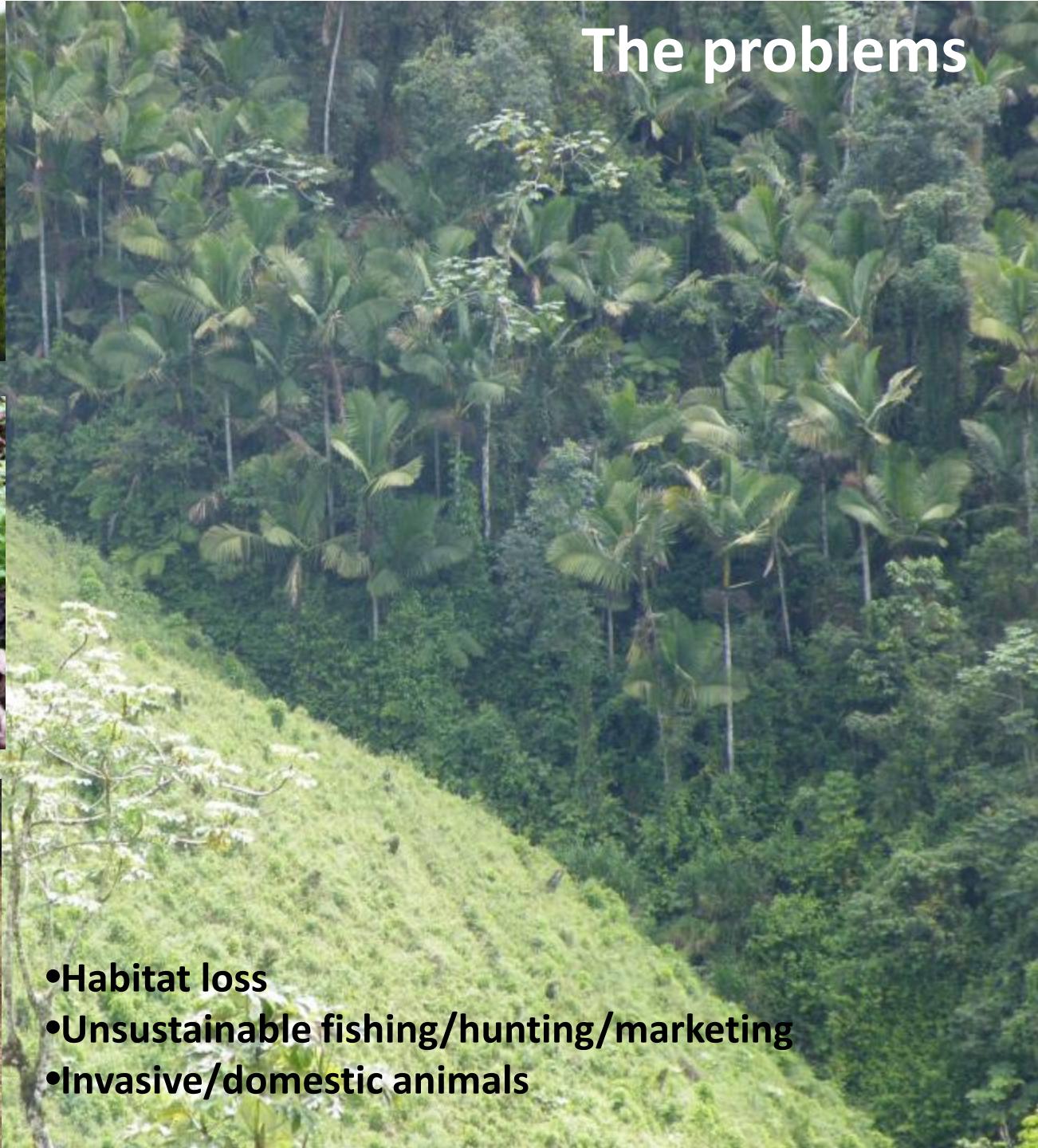
<sup>1</sup> Conservation Status

<sup>2</sup> IUCN Red List

<sup>3</sup> Dominican Republic National Red List

IUCN Red list downloaded 11 March 2015

# The problems



- Habitat loss
- Unsustainable fishing/hunting/marketing
- Invasive/domestic animals



# Amphibians and reptiles conservation

# Institutional framework for amphibians and reptiles conservation

<b>Haiti</b>		<b>Dominican Republic</b>	
	Ministere de l'Agriculture des Resources Naturelles et du Developpment Rural (MARNDR)	1950s	Departamento Caza y Pesca/SEA
1994	Ministere de l'Environnment	1974	Direccion Nacional de Parques
		1980	Departamamento Vida Silvestre/SURENA/SEA
		2000	Secretaria Medio Ambiente y Recursos Naturales
		2010	Ministerio Medio Ambiente y Recursos Naturales



# Legal framework for amphibians and reptiles conservation

Haiti		Dominican Republic	
	Ministere de l'Agriculture des Resources Naturelles et du Developpment Rural (MARNDR)	1950s	Hunt and Fishing Law
1994	Ministere de l'Environnment	1974	Hunt and fishing seasonal ban; minimum capture size; internal regulations and presidential decrees
		2000	Secretaria Medio Ambiente y Recursos Naturales
		2010	Ministerio Medio Ambiente y Recursos Naturales



# Other Institutions

## Dominican Republic:

### 1960's

School of Biology

### 1970's

National Museum of Natural History

National Botanical Garden

National Zoo – ZOODOM

### 1980's

National Aquarium

Grupo Jaragua, others

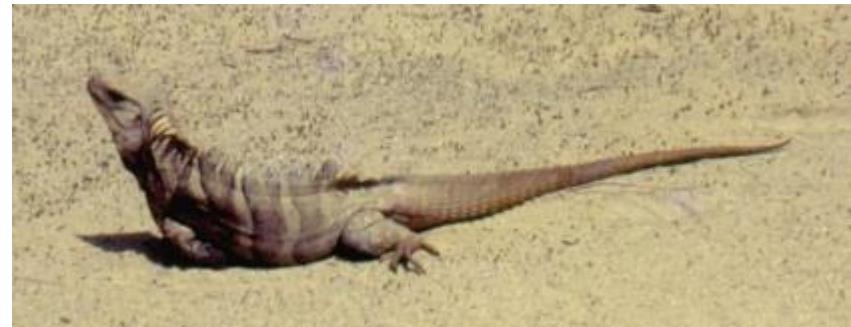
## Haiti

### 1990's

Fondation pour la Protection de la Biodiversite Marine

### 2000's

Societe Audubon Haiti, others



# Instruments for amphibians and reptiles conservation

**IUCN Red List**

**CITES 1973/1987**

Appendix I and Appendix II species: marine turtles, rock iguanas

Dominican Republic

**Convention on Biological Diversity (CBD) 1992/1996**

Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets 2010

Dominican Republic and Haiti

**Estrategia para la Conservación de la Biodiversidad de la República Dominicana 1994-2003.**

**Grupo Jaragua.**

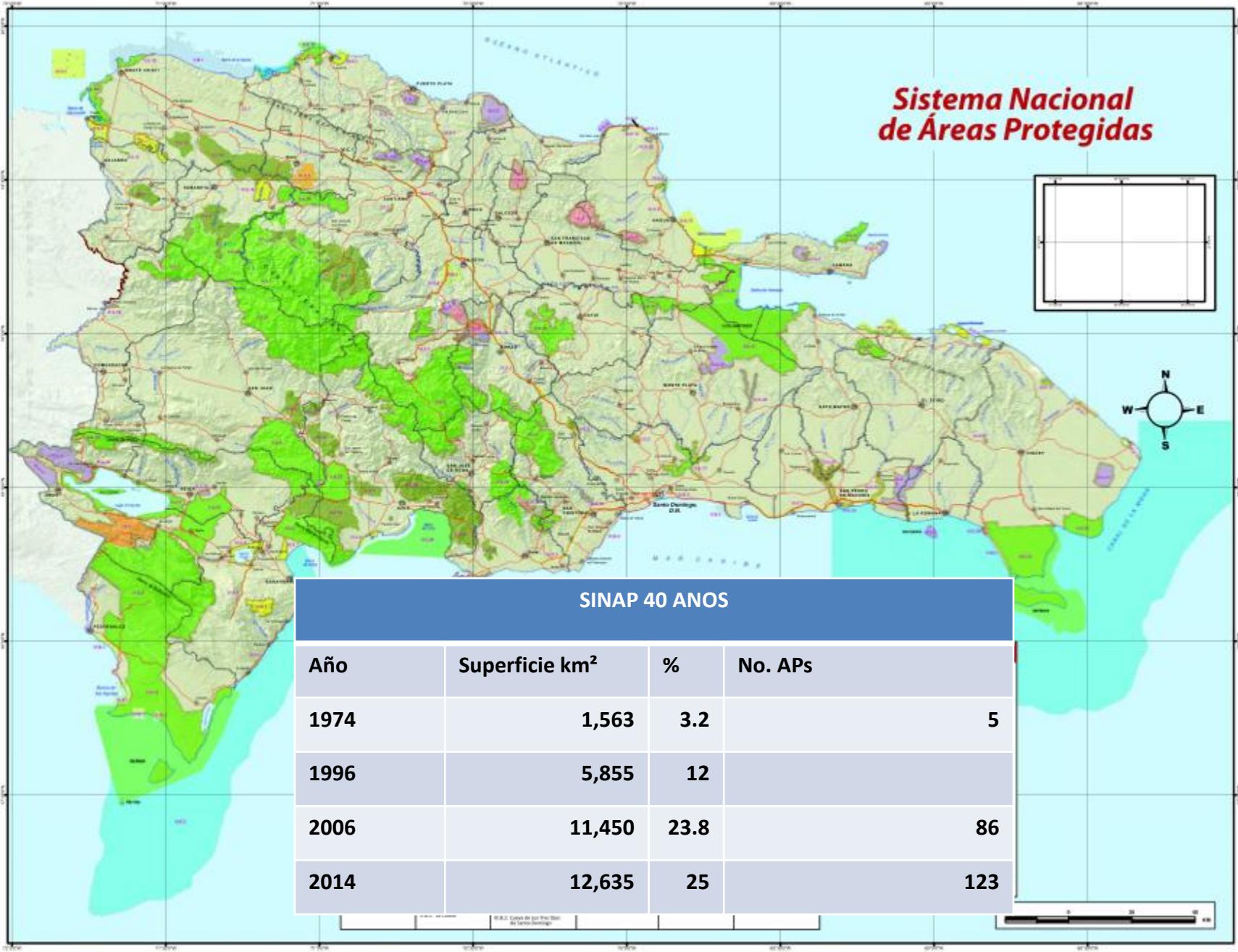
**Estrategia de Monitoreo para Especies Amenazadas de la Reserva de Biosfera Enriquillo-Bahoruco-Jaragua. 2011. Grupo Jaragua.**

**National Strategy for Conservation and Sustainable Use of Biodiversity 2010**

**National Red List 2011**



## *Sistema Nacional de Áreas Protegidas*



# The taxa

# Los taxa





**2004 Global Amphibians Assessment  
Caribbean meeting in SD**

**2011 Joint IUCN AArk meeting in SD  
Reassessment of Red List**

**2012 Conservation needs assessments**

**2012 Anfibiaro ZOODOM Barrick Pueblo  
Viejo/Toledo Zoo**

**2012 AARK/ZOODOM Amphibians husbandry**

**2013 RANA RD Amphibians biology and  
conservation**

**2013 Cornell/UASD Bioacoustics course**

**2014 Barrick Pueblo Viejo/LAVECEN  
Amphibians diseases in captivity**

# **Amphibians conservation initiatives Iniciativas para la Conservación de anfibios**

## **2008 Proyecto RANA RD**

FONDOCYT/GJ/MNHNSD/MHNLH/ZZC  
Amphibians Reassessment  
Vulnerability to CC  
National Conservation Strategy  
Field Guide  
Amphibians book

## **2008 Barrick Pueblo Viejo**

Hylids assessments  
Natural history, populations  
Biodiversity offsetting  
Ex-situ conservation  
Amphibiarium, others

## **2010 Societe Audubon Haiti**

Frogs conservation  
Research/Pennsylvania State University-  
Blair Hedges-Philadelphia Zoo, others

## **2012 Bahoruco-La Selle-La Hotte frog project.**

CEPF-PZ-SAH-GJ. Capacity building.

Several publications, Hedges, Powell e  
Inchaustegui, others





# American Crocodile

**1970's M NHNSD Reproductive biology**

**ZOODOM Ex-situ conservation**

**1988. Status and ecology in Haiti. Florida State Museum/Thorbjarnarson.**

**1990 Wildlife Department**

**"Consejo del Cocodrilo"**

**Wildlife Department, ZOODOM, Grupo Jaragua**

**2000 Wildlife Department**

**ZOODOM**

**1970's**

**Highest density of the species in Enriquillo Lake**

**150 nesting per year**

**100+ adults in a single beach**

**1990's**

**15 a 51 nidos**

**2000's ??????????**

**Venegas, genetic sampling**

**Status: VU (IUCN) CR (DR)**

# Sea Turtles

1968 CIBIMA-UASD

Archie Carr's Caribbean Returtling Project

600 green turtles hatchling from Costa Rica released in Playa La Granja, Montecrisiti

Different regulations banning capture at nesting beaches, eggs, and size limit  
Law 64-00 Complete legal protection

1990s Grupo Jaragua/Departamento Recursos Naturales y Ambientales, PR  
Capture recapture and monitoring in Jaragua National Park

2000 Nesting in Saona Island

Ministry of Environment, nesting Catalina and Saona

More details in Leon et al at this meeting



# Antillean Fresh Water Turtles

1940 Barbour and Carr, Antillean Terrapins

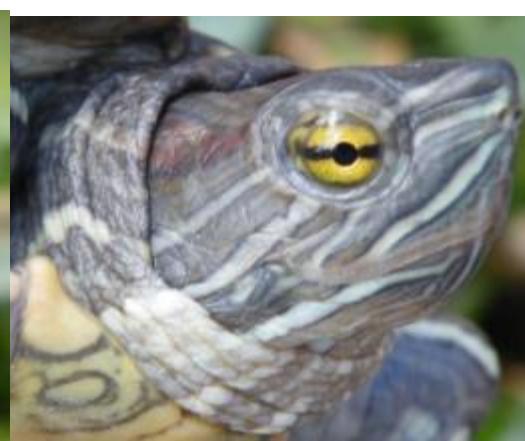


1975 UASD/Academia de Ciencias. Inchaustegui. Natural History.

1984 Seidel and Inchaustegui

2013 Parham et al genetic analysis of Antillean fresh water turtles

	IUCN RL	DR RL
<i>T. decorata</i>	VU	VU
<i>T. stejnegeri</i> <i>vicina</i>	NT	VU



# Rock Iguanas

1968 Carey and Inchaustegui

1975 Carey Florida State Museum

1970s Ex situ conservation ZOODOM

1980s MHNNSD

1990s Wildlife Department

IUCN/SSC Ottenwalder

2000 Grupo Jaragua

Jam Ramer

ZOODOM

Ex situ Ricords breeding program

2010s

Stesha Pasachn San Diego Zoo

Carreras INTEC

Genetics

Other presentations in this  
meeting



VU



CR

# Giant Galliwasp Lucias Gigante

*Celestus anelpistus* CR  
*Celestus warreni* NT  
1970s ZOODOM ex-situ  
1999 Mc Guinity  
Nashville Zoo  
Captive Breeding



# Lizards

24 CR

21 EN

06 VU

**51/85**



# Snakes



08 CR

03 EN

01 VU

**12/24**

# **1999 Henderson and Powell West Indian Herpetoecology**

**Thanks  
Gracias**

