2010 Cycura ricordi Conservation Activities in Haiti

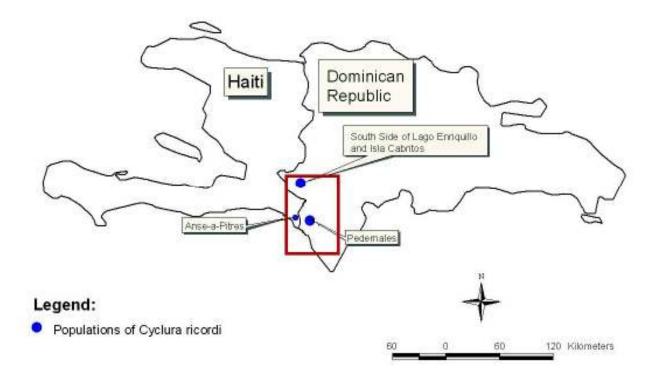
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Introduction

The only subpopulation of *Cyclura ricordi* (Ricord's iguana or Ricords) known to exist in Haiti is located ~0.5km west of the town of Anse-a-Pitres, Haiti, on the southern shore near the southern Haitian-Dominican border. The species is ranked as Critically Endangered by the IUCN on the island of Hispaniola, as only 4 subpopulations exist, 3 being found in the Dominican Republic. While Ricords have been given due attention for years in the Dominican Republic, the species is in grave peril in Haiti, and work to conserve the species is in its infancy. Last year we conducted over 500 surveys with a group a local youth, as part of a socioeconomic study of the human impact on *Cyclura ricordi* in Anse-a-Pitres.

The information obtained through last year's socioeconomic study brought much to light to the plight of iguanas as a direct result of human activity. Hunting for consumption and nest poaching activities are an enormous threat to the species, as 17% of those surveyed admitted to regularly hunting iguanas, and nearly 30% consume iguana meat. The study revealed areas in Anse-a-Pitres where local inhabitants were documented to have a higher tendency to hunt and consume iguanas, and this often correlated with education and income level.



This year's activities were focused on habitat monitoring and surveillance, local education of the local authorities, a species conservation education initiative, and a proposal to the local government for the creation of a Municipally Protected Habitat for the rare Ricords habitat as, and the illegalizing of iguana hunting and poaching. This vigorous and dynamic approach is essential to prevent the complete disappearance of Ricord's iguanas in Haiti.

Cyclura ricordi Habitat in Anse-a-Pitres, Haiti

This year we began monitoring activities by attempting to measure the nesting site. The south side (ocean side) of the Ricord's nesting site in Anse-a-Pitres was measured using a 25m rope and a 5-meter measuring tape. The southern shore measures ~193meters (X1, see Table 1). A satellite image of the nesting site and surrounding habitat was obtained, and on this image the nesting site was observed to be roughly rectangular in shape. The length and width of this parallelogram measure 5,2cm and 3.1cm, respectively. The nesting site measures approximately 22,195m2 or 16.4acres. This information will be very helpful as we are preparing a proposal to the local government to declare this site as a Municipally Protected Habitat. A more accurate GIS measurement should be obtained.

TABLE 1: Nesting site measurements and calculations

X1 = X2 or 193m = 5.2cm Y1=11,505cm or 115meters

Y1 Y2 Y1 3.1cm

 $193 \text{m X } 115 \text{m} = 22,195 \text{m}_2 \text{ or } 16.4 \text{ acres}$



Satellite image of the La Saline C. ridordi habitat in Anse-a-Pitres, Haiti

Habitat monitoring and surveillance

The nesting activity of Haiti's subpopulation of Ricord's iguanas was documented from March to June 2010, which correlates with the nesting period for *Cyclura ricordi* in the Dominican Republic. The nesting site is located in a region known locally as La Saline. During the nesting

period, only 9 nests were documented in the sandy habitat, and the location of each nest was identified by with GPS coordinates (Magellan Explorist 400). Contrasting Haiti, the subpopulation in Pedernales, D.R. had nearly 300 nests this year. Studies of the reproductive biology of Ricords in the Dominican Republic have shown that most nesting occurs from March to May, and the incubation period of Ricords to range from 90-100 days. This data was very helpful and guided our vigilance on the scarce nests in Haiti. Several nests (6) were poached during this nesting season, despite our daily surveillance. Fortunately, emergence holes were found for 2 of the poached nests (N1, N9), and both were verified by excavation and found to have successfully hatched. Additional emergence holes were found for two previously undocumented nests. Three nests were verified by excavation in September, and all three were found to have successfully hatched. A per nest bonus was paid to all the participants of the habitat monitoring and surveillance program for each successfully hatched nest that was verified by excavation. The grave state of the subpopulation of C. ricordi in Haiti is very evident with the monitoring of nesting activity this year.





Emergency hole in Anse-a-Pitres (left) and Masani Accimé and field assistant Nelson Jean with 20 eggs excavated from nest #1 (right).

We attempted to estimate the population of *C. ricordi* of the habitat by documenting active dens in the hills surrounding the La Saline nesting site. Four active dens were documented in the limerock on the northern edge of the nesting site between March and April. All 4 dens had the characteristic A large adult Ricord was sighted scurrying into one of these dens. Certainly the extra cover was probably great for Ricord's iguanas to hide and feed! Unfortunately, the vegetation became so dense after the first raining season that it was nearly impossible to penetrate the thick forest of cactus, acacia and other thorny plants, nor could we monitor the hills with binoculars from a distance. It may be useful to begin using rapid-fire camera-traps at the entrance of these dens in Haiti next year, so that active dens can be properly identified, and Ricords's activities documented.

TABLE 2: Ricord's iguana nests documented March-Sept 2010, La Saline Anse-a-Pitres, Haiti

				Total eggs/	
NEST #	POACHED	EMERGENCE HOLE	VERIFIED	Hatched/ not hatched	GPS COORDINATES
N1	yes	yes	yes	20/20/0	205855E/1997528N
N2	no	no	no	-	205899E/1997548N
N3	yes	no	yes	0	206144E/1997439N
N4	yes	no	no	-	205855E/1997529N
N5	no	yes	no	-	205887E/1997531N
N6	no	yes	yes	0	206010E/1997555N
N7	no	yes	no	-	205947E/1997519N
N8	yes	no	yes	0	205889E/1997753N
N9	yes	yes	yes	5/5/0	205870E/1997533N
Unmarked 1	no	yes	yes	4/4/0	205847E/1997558N
Unmarked 2	no	yes	no	-	205870E/1997533N

In April, we conducted a field expedition to Savann Laflè (Savanne La Fleur in French), a fondo ~3.5km northwest of the La Saline nesting site and falls within the municipality of Anse-a-Pitres. The soil in this large fondo in Savann Laflè was very much like that of the Ricords habitat in Pedernales, D.R., with red clay-like soil, and the vegetation was also very similar. During this time many species of cacti were producing large fruit abundantly, which likely sustains iguanas well. An adult iguana was found dead in a trap during this trip. All that remained of the decayed carcass was the skeleton some desiccated muscle, and very small amount of truncal skin. The iguana was assumed to be a Ricord by the absence of a protuberance, or 'horn', over the nose. We also found evidence of previous years' iguana nests in a large plain surrounded by high limerock hills. However, it was not certain if these were Ricords nests or those of Rhinoceros iguanas (*Cyclura cornuta*), and they did not appear to be nests from this year. With the unusual, daily heavy rains in this semi-arid region from May to September this year, it was difficult to coordinate a second excursion to search for Ricord's nests in Savann Laflè, or to verify emergence holes for any of the nests that we identified. More investigation will be necessary during the following next year to confirm the presence of Ricord's iguanas in Savann Laflè.



Fruit from a large cactus in Savann Laflè (left) and a view of the habitat (right)

Savann Laflè is a heavily forested area where the charcoal industry is budding. The narrow, winding path leading there can only be traveled by foot or with pack animals. The trap in which the dead iguana was found, it was later discovered, belonged to three Anse-a-Pitres boys whose families are producing charcoal in the area. It would be very important to investigate this as an additional Ricord's nesting site in Haiti, so that the distribution of the species in Haiti could be more accurately described, and for its inclusion in the species recovery plans.

A surveillance team consisting of field assistants and members of the local youth groups OJAA and KOSRA Jenès was put in place since January of this year to regularly patrol the nesting site and surrounding habitat for traps, nest poaching, and tree-cutting. The group engaged in this activity several days weekly, and team increased vigilance by patrolling daily from March to August. Unfortunately nest poaching was not completely prevented, though other activities such as tree-cutting for charcoal production was significantly reduced, according to local herdsmen whose cattle graze in the region. I even suspect that a disgruntled member of the team, Nelson Jean, may have been sabotaging the work during a period when he was excluded from the monitoring program because of some infractions on his part. The surveillance team participants intervene regularly when people are found cutting trees, and when boys are found hunting wildlife. While local groups are able to provide some measure of protection the habitat, and deterred human invasion to some degree, the help local government of Anse-a-Pitres will be needed to fortify the conservation initiative.



Iguana found dead in a trap in Savann Laflè, Anse-a-Pitres, Haiti

Local Authorities' Workshops

In May, the Mayor of Anse-a-Pitres, Benjamin Permission, traveled to Santo Domingo with Dr. Accimé to begin important discourse regarding the status of Ricords on the island of Hispaniola and in Anse-a-Pitres, and the essential role the local government will play in the successful recovery of the species in Haiti. A small workshop was conducted with Yvonne Arias, president Grupo Jaragua, Inc, the leading conservation organization coordinating the *Cyclrua*

ricordi Species Recovery Plan in the Dominican Republic. These introductory steps are essential for the realization of the Municipally Protected Habitat in Anse-a-Pitres. Grupo Jaragua's experience in facilitating the local government of Pedernales for the declaration of Ricord's protected habitat will be invaluable in our next steps in Haiti.

A second workshop was conducted for the local authorities and stakeholders of Anse-a-Pitres 10-11 September. The main objective of this workshop was to propose that a Ricord's Iguana Municipally Protected Area be declared in Anse-a-Pitres. On the first day of the workshop, members of Grupo Jaragua and Dr. Accimé presented the current status of Ricord's iguanas in Haiti, current work being done for their conservation on Hispaniola, and the group was engaged in discussion on the subject of declaration of a Municipally Protected Habitat for to prevent the disappearance of *C. ricordi* in Haiti. In addition, the importance of biodiversity of the island of Hispaniola, some other key endangered species of the central region of the island, as well as the Caribbean Biological Corridor were presented during the workshop.



Local authorities of Anse-a-Pitres & Grupo Jaragua staff at the Municipal Protected Habitat workshop

Some notable workshop attendees were the Justice of the Peace Mr. Anglade Payoute, the Inspector of the Anse-a-Pitres Police Mr. Jean Dominique, the local representative of the Ministry of Environment Mr. Jean Payoute, the local representative for Human Rights, and several candidates for Mayor. A special emphasis was placed on the role of local authorities in their capacity to locally protect *C. ricordi*. The second day of the workshop was a series of field trips to the protected Ricords habitat Los Olivares in Pedernales, to the National Park Bahoruco in the mountains of southwest D.R., and a trip in to the habitat being proposed for legal protection in Anse-a-Pites, Haiti.

In Haiti, the Mayorship of the Municipality of Anse-a-Pitres consists of one Principal Mayor and 2 Adjunct Mayors. The Principal Mayor has the authority to create municipal laws that would then be enforced by the Justice of the Peace and the local Police Department. The three branches of government have the authority to create local laws, and this can be initiated by the Principal Mayor. We are currently working on a proposal for the local governing body for Ricords protection in Anse-a-Pitres, with the support of several local organizations, including

OJAA, KOSRA, and the women's organization Asosiasyon Fanm Vanyan. If successful, this protected habitat would be the first of its kind in Haiti, where there is little wildlife and environmental protection.

The local authorities seem to be responding favorably, particularly the current Mayor. The construction work in the Ricord's habitat which he had planned last year, and which was halted with OJAA's protest has been discontinued. The Mayor has been very generous with his time, and has been open to frequent meetings to discuss the progress of our work, and to assist with any problems the team encounters. Mayor Permission will be in office until the fall of next year, and it is hoped that during the last part of his term, we can work together take legislative steps towards the protection of Ricord's iguanas.



Working with the Mayor of Anse-a-Pitres to outlaw iguana hunting in the Municipality

Community Outreach

The *Cyclura ricordi* Local Education and Awareness Conservation Initiative Project in Anse-a-Pitres will be part of the initial and most critical steps for the conservation of the species in Haiti. The local education project will complement island-wide conservation programs and ongoing task set by the IUCN Iguana Specialists Group *C. ricordi* Species Recovery Plan in 2002, in order to ensure the survival of *C. ricordi* on Hispaniola. We hope to launch a local species conservation education and awareness program in Anse-a-Pitres, which will contribute to long-term goals of the Species Recovery Plan needed. I've begun doing some preliminary activities in the AMSAI Chemen Lajwa kindergarten, discussing iguanas, and coloring hand-outs.

The publication "Manual de las Iguanas de la Republica Dominicana, published by Grupo Jaragua, was translated to French last year. We have begun distributing the Manuèl des Lezards de la Republique D'Haiti. However, French is spoken by only about 10% of the Haitian population, and 100% speak Kreyòl. A Haitian Kreyòl translation of the manual is needed, as well as the development of appropriate classroom activities. We are currently seeking funding to support the local education program. Local teachers are being identified and interviewed for the assembly of the Ricord's Conservation Education Committee in Anse-a-Pitres. Planned activities in the education program are school-teachers are to translate the Iguanas of Haiti education

manual from French to Haitian Kreyòl, development of appropriate classroom activities, and implementation of these activities in their classrooms in the 2010-2011 school year. We plan to eventually incorporate the classroom activities into local kindergartens and a primary school as part of the education program. Other needed visual aids which could greatly enhance the species' visability would be pamphlets and posters for public distribution.

The youth group OJAA participated in many training workshops in Anse-a-Pitres, Pedernales and Oviedo. They have helped documents nests in both Pedernales and Anse-a-Pitres, and a few months later assisted in nest excavation and verification. They also enthusiastically began training in the first trials of telemetry work in Oviedo, and have had a chance to assist with camera-trap use in Pedernales. They have taken ownership of Ricord's conservation in Anse-a-Pitres, and proudly wear their new t-shirts. The t-shirt design has drawn a great deal of attention, and many people have requested t-shirts after seeing the logo. OJAA is an instrument for local awareness of the conservation initiative, and their influence is not to be underestimated.



Child coloring at the AMSAI school (left) and OJAA youth Berbelle proudly wearing Ricod's t-shirt

A field assistant and I made a special trip to the Departement de l'Agriculture in Port-au-Prince in April. We distributed copies of the iguana manual and met with members of the National Veterinary Laboratory to find out what would be needed to obtain a CITES in the future. Key contacts were made which will be very helpful for us in th future. We participated in a workshop being conducted in Anse-a-Pitres by Sadhana Forest, a reforestation organization based in India currently working in Haiti. Since they are farming and planning trees near iguana habitat, I felt it was important for them to be aware of the status of iguanas in Haiti, and the work being done to conserve both species. OJAA and I took them on a field excursion to the Ricord's habitat, and then I did a powerpoint presentation for the group. One of the workshop participants and the a BBC journalist, and she conducted interviews with myself and OJAA president Dieff Alexis and secretary Renée. We hope this media coverage will be accepted by the BBC and broadcasted.



OJAA members Dieff and Evanita training in the field (left) and Ernst with radiotracker (righ)

Acknowledgement

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Accimé, Masani (2009): Evaluation of C. ricordi Conservation Potential in Anse-a-Pitres, Haiti, IIF report.

Arias, Y., S.J. Incháustegui, and E. Rupp (2004): *Cyclura ricordii* on the Barahona Peninsula: A Preliminary Report. Iguana 11: 9-14.

Ottenwalder, Jose. (1999): Ricord's iguana *Cyclura ricordi* in: Alberts, Allison (comp. & ed): West Indian Iguanas: Status Survey and Conservation Action Plan. IUCN/SSC West Indian Iguana Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK. Pp. 51-55.

Pasachnik, Stesha, Accimé, M., Rupp, E. (2009): Report on the August 2009 Workshop for *Cyclura ricordi* Biology in Pedernales, Dominican Republic and Anse-a-Pitres, Haiti. IIF Report.

Ramer, Jan (2004): A Survey of Ricord's Iguanas (*Cyclura ricordii*) and Rhinoceros Iguanas (*Cyclura cornuta*) in Isla Cabritos National Park, Dominican Republic 2003: A Preliminary Report Iguana 11: 89-95.

Rupp, Ernst (2007): Update on Cyclura ricordii. IIF Report.

Rupp, Ernst (2009): Update 2009 on Cyclura ricordi in the Dominican Republic. IIF Report.

Rupp, E., S.J. Incháustegui, and Y. Arias. (2005). Conservation of *Cyclura ricordii* in the southwestern Dominican Republic and a brief history of Grupo Jaragua. *Iguana* 12:223–233.

Rupp E., S. J. Incháustegui, and Y. Arias (2007): Preliminary Report on the Distribution and Status of *Cyclura ricordii* along the Southern Shore of Lago Enriquillo. *Iguana 14*,3-7.

Rupp E., S. J. Incháustegui, and Y. Arias (2008): Conserving Cyclura ricordii 2007. Iguana 15, 2-8.