

Blue-billed Curassow Conservation Update



Culture

- Definition of culture by Franz Boas the father of American Anthropology.
- Culture –The system of shared beliefs, values, customs, behaviors, and artifacts that the members of society use to cope with their world and with one another, and that are transmitted from generation to generation through learning.

How does this incorporate animals?

- In almost all cultures animals play an important part of cultural knowledge systems (e.g. foodstuffs , religious, and cultural symbolism).
- But what happens when a species goes extinct?
- What knowledge is lost? Do the ancestors pass with the species?



The Story of Something

AZA History

- First Blue-billed 2.0 housed at the Philadelphia Zoo in the 1900s.
- 1.0 housed at the San Diego Zoo in the 1950s
- 0.1 housed at the Houston Zoo in the 1960s.
- No mates were available for these birds so no breeding occurred.

AZA History Cont.

- The Cracid TAG recommended this species for intensive management in 1994.
- Trey Todd of the Houston Zoo managed the program from 1994 till 2007.







Joel Sartore/www.joelsartore.com

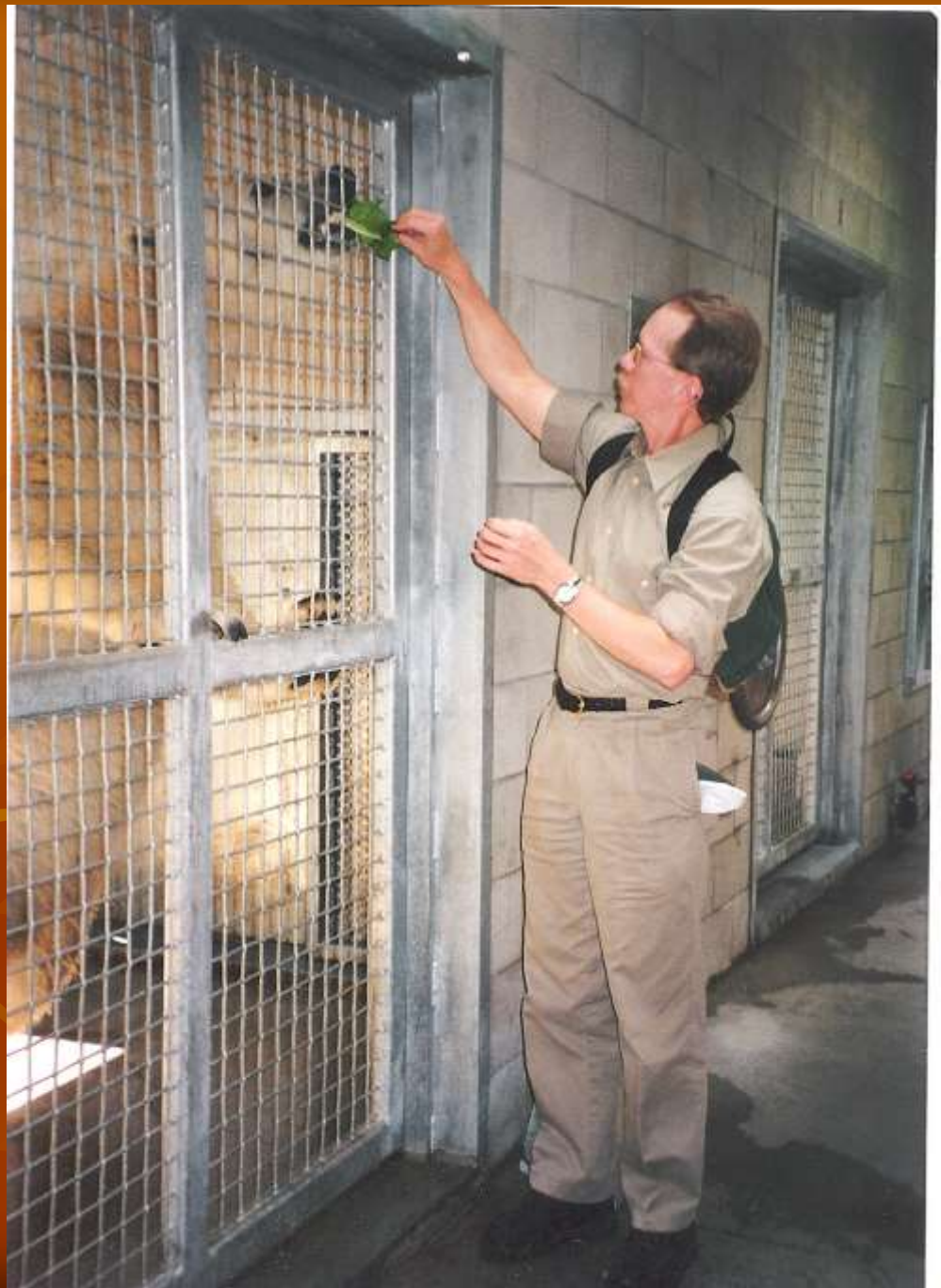






Critically Endangered

ACTION URGENT







2003 Population

Four founders

- 2.1 removed from the wild in the 1960s
- 1.0 removed from the wild in the 1980s
- The population was at 6.4 birds. Two of the hens had already become post-reproductive.



What to do if only one institution has all of the birds

- The Houston Zoo and White Oak Conservation formed a partnership to promote the growth of this species. For two years fertile eggs were transported by plane escorted by Houston Zoo Staff.
- A result of this partnership was 3.1 Blue-billed hatched at Houston which allowed White Oak more holding space for their own offspring.

Barranquilla 2007



Estudillo Imports 2009

- John Vanderharr and Dallas World Aquarium both imported birds from the collection of Dr. Jesus Estudillo.
- Vanderharr placed 0.2 on loan to Houston one died from a bad prolapse.
- As of 2013 both birds have had offspring and have added to founderbase of the AZA population.

Zoo Lourosa/ Houston Zoo Exchange 2010



Zoo Lourosa/ Houston Zoo Success!!!





2011 ACOPAZOA

In 2011 ACOPAZOA designated the Blue-billed Curassow as one of its first coordinated breeding efforts. As part of this initiative a regional studbook has been formed and a Symposium was held in August of 2012 at the Santa Fe Zoo in Medellin Colombia.





Blue-billed Curassow Symposium 2012

This three day workshop was attended by almost all of the holders of this species also in attendance were AZA representatives Chris Holmes (Houston Zoo) and Mike Taylor (formally of White Oak and now at Jacksonville Zoo).



Day 1



- Colombian holders gave updates on present holdings and also on historical holdings.
- Chris Holmes and Mike Taylor went over reproduction of this species in AZA institutions (Houston Zoo and White Oak).



The 15 Species of Curassow

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Day 2

- As a group we renovated four enclosures at the Medellin Zoo and briefly went over artificial incubation.







Obio Hiba
Fotografado em 2015
e armazenado em
Fotografado em 2015
e armazenado em

Day 3

- Concentrated on field research pertaining to this species. The Environmental Authority and ProAves gave presentations on their work.





Blue-billed Curassow

Crax alberti Colombian Institutions

- One of the major issues Colombian institutions are facing with the birds is that all are confiscated and the Government is not able to provide any information on where the birds originated from, or how they were housed previously.
- This is of concern as some of these birds are older at least in their teens at the time when they are transferred to the Zoos. Some have never seen a member of their own species which greatly affects the breeding outlook for some males.
- Birds that were housed as pets are often very imprinted and highly aggressive to other birds.

EAZA Cracid TAG/ACOPAZOA 2013

In 2013 Geer Scheres provided training at CBCC and Walsrode for 4 representatives from 4 ACOPAZOA institutions for three months.



**The first captive Blue-billed Curassow
hatched at the Aviario Nacional de Colombia
on January 16th 2014**



Congratulations to the staff of the Aviario Nacional de Colombia





Incubation Workshop 2014

- The incubation Workshop was hosted at the Aviario Nacional de Colombia.
- 21 Colombian representatives were trained from 10 different ACOPOZOA institutions.
- The Houston Zoo purchased 4 Grumbachs, 4 Candles, and 1 Hatcher.
- The Incubation Workshop was sponsored by the Houston Zoo, Dallas World Aquarium, and Nashville Zoo.





Incubation Workshop 2014





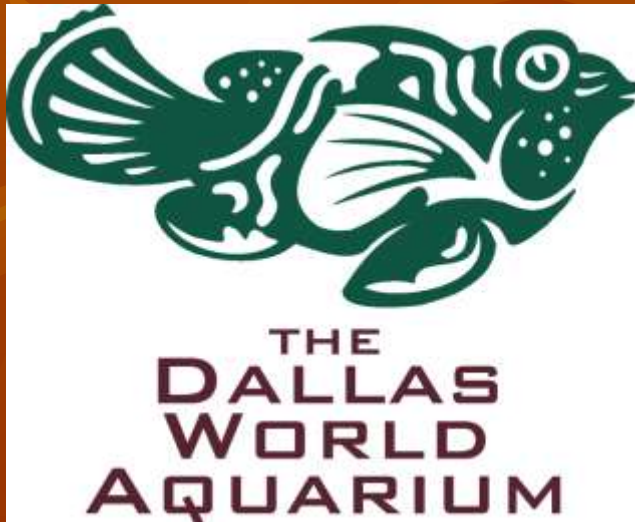
Incubation Workshop 2014



“The most fun workshop I have ever given” (S. Kasielke 2014)



Thank you to the sponsors!!!!



Recent Updates





International Studbook Update

- **ACOPAZOA** as of 3/2014 there were 14.12 birds in 6 institutions and 0.4 birds held in 2 nature reserves. For a population total of 14.16 birds.
- **AZA** as of 3/2014 there were 16.16 birds in 7 AZA institutions with no private sector population.
- **EAZA** as of 5/2012 there were 6.4 birds in 2 EAZA institutions.
*This does not reflect the full population for this region. Geer is the expert on this region and is researching private populations. There might be over 80 birds in the EAZA region.
- **JAZA** as of 9/2013 there were 2.1 birds in 1 institution there are no known birds in the private sector of this region.



Founder Totals by Region

- ACOPAZOA- 22 (12.10) potential founders
(2.2) founders
- AZA – 4 (3.1) founders
- EAZA- 4 (0.0.4) founders 1.0 potential founder
- Dr. Estudillo- At least 2 founders historic population largely unknown.
- JAZA- 2 (1.1) founders
- 12 total founders
- 23 potential founders



Overall Future Goal of the Captive Program

- The overall goal of the program is to achieve captive breeding of this species in Colombia and make sure all already established bloodlines are represented in the Colombian captive population.
- In the future we will be working towards reintroduction to accomplish this capacity building of knowledge and facilities in Colombia needs to occur.



Special Issues

- Limited founderbase of 12. Most of these genetic lines are well represented and all were bred outside of Colombia.
- The population of ACOPAZOA contains the most genetic diversity but is the hardest population to manage. Most if not all of the birds are imprinted confiscated ex-pets or birds meant for the table. These birds present unique challenges and due to these issues captive breeding has yet to be achieved in this region.

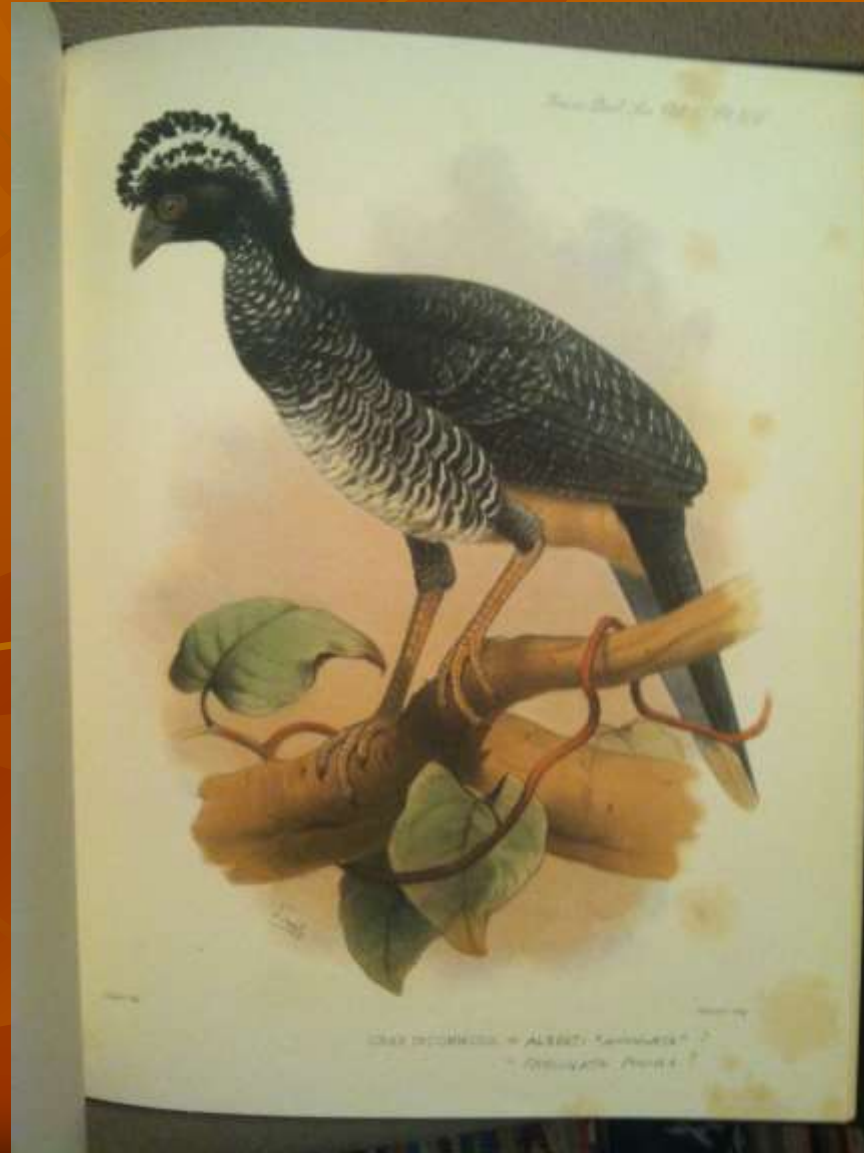


The “Barred” Morph Formally

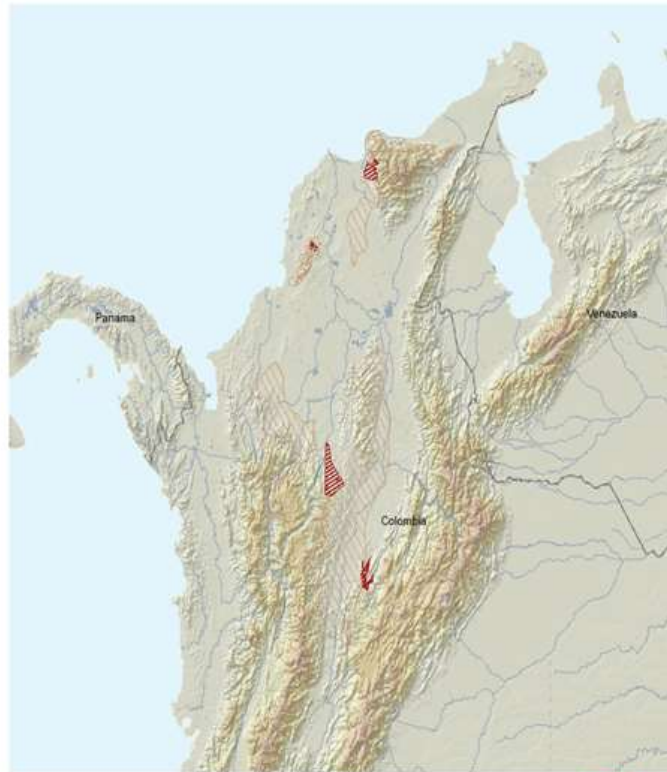
Crax annulata

- The “Barred” morph of this species is only found in the Santa Marta region (southern portion of the species range).
- Little is known of this unique color morph which is only displayed in the hen. This population occupies a different altitude than the seemingly more common “Rufous”Morph.
- The “Rufous” Morph has a stronghold in the ProAves reserve El Paujil which is dedicated to this species. The “Barred” Morph has no such stronghold and this population is of increasing conservation concern.
- Only one “barred” morph is currently in captivity.
- Photo Credit on the following slide to Franz Kaston.

Crax annulata



Southern Population “Barred” Morph and Northern Population “Rufous” Morph



Crax alberti

range type

- native (resident)
- native (breeding)
- native (non breeding)
- reintroduced
- introduced
- uncertain origin
- possibly extinct
- extinct

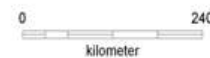
- national boundaries
- subnational boundaries
- lakes, rivers, canals
- salt pans, intermittent rivers

data source:
BirdLife International, 2008



azimuthal equal area - central point: 0°, 0°

map created 09/15/2008



THE IUCN RED LIST
OF THREATENED SPECIES



“Rufous” Morphs (top) and “Barred” (below)



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“Rufous” Morphs (top) and “Barred” (below)



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“Rufous” Morphs (top) and “Barred” (below)



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Living Specimens “Barred” and “Rufous” Morphs



Photo Credit: Franz Kaston



Photo Credit: Houston Zoo

Crax annulata Male



Moving Forward

- Christian Olaciregui of the Barranquilla Zoo would like to start a field study of this species in the wild.
 - This study would seek to determine what the cultural pressures are on this population (e.g. pet trade, hunting, or habitat loss).
 - What areas of the range in the El Congo Watershed are important to this species.
 - If the scientific description of this species is correct.
- Currently he is looking for partners to help fund this survey so if you have interest in partnering on this project please contact Christian directly at c.olaciregui@zoobaq.org or Chris Holmes at cholmes@houstonzoo.org

In Conclusion

- Tell your Keepers things are impossible and see what happens. They may surprise you!
- The Blue-billed Curassow is the only program in AZA that is Memaw approved!
- Please contact me if you are interested in housing this species!



2004 Wild population est.

1,500-2,500



2011 Wild population est.

999-1,500



2013 Wild population est.

250-999



**What will it be in five
years?**

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