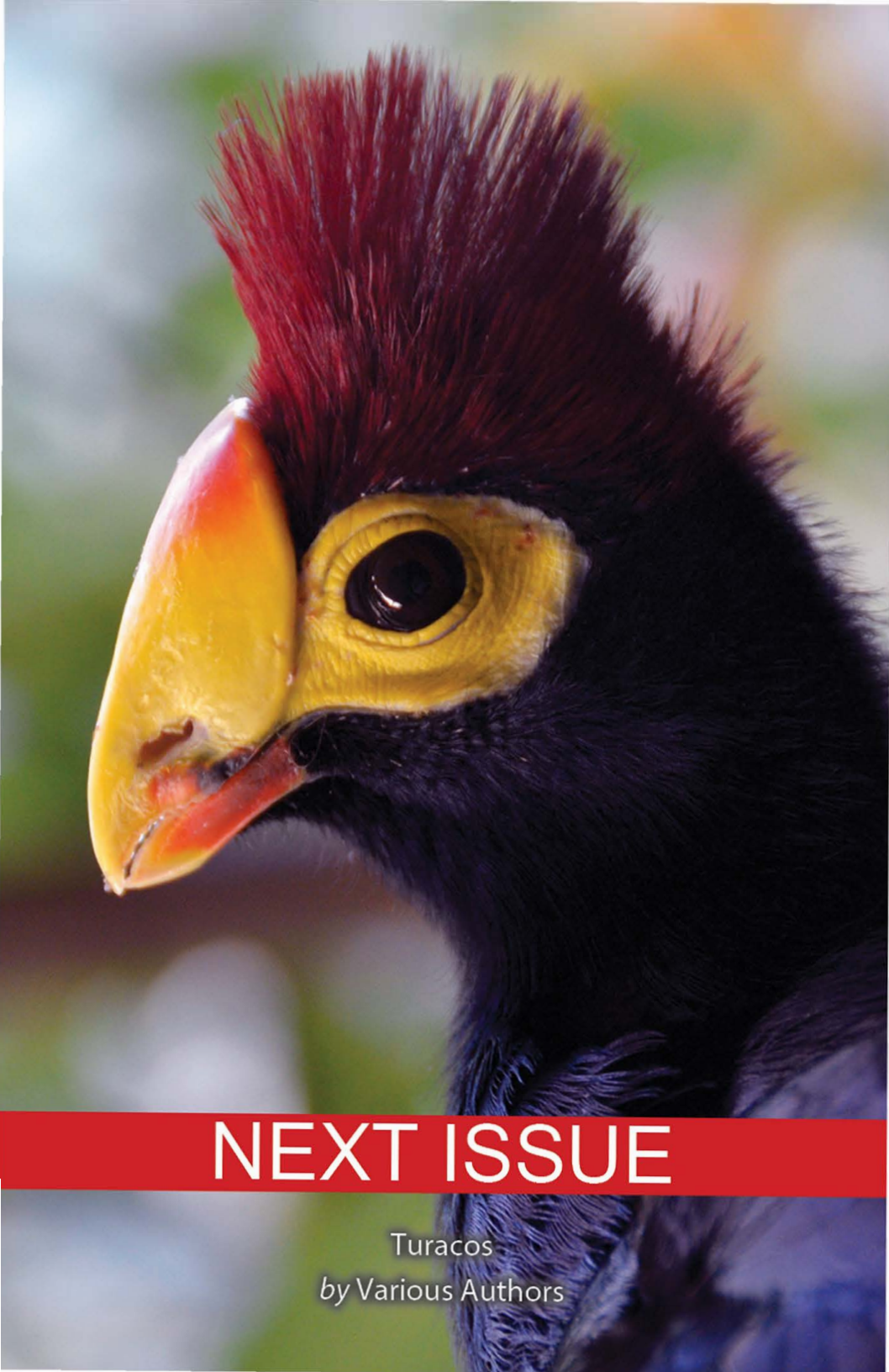


# ASA

Avicultural Bulletin



A JOURNAL FOR BIRD BREEDING, CONSERVATION, RESTORATION AND EDUCATION  
SEPTEMBER/OCTOBER 2015



# NEXT ISSUE

Turacos  
by Various Authors

The purposes of the Society are the study of foreign and native birds to promote their conservation and protection; the dissemination of information on the care, breeding, and feeding of birds in captivity; the education of Society members and the public through publications, meetings, and available media; and the promotion and support of programs and institutions devoted to conservation.

Front Cover: Southern Ground Hornbill baby (Kipling) *Bucorvus leadbeteri* Photo: Dick Schroeder

Inside Cover: Lady Ross Turaco *Musophaga rossae* Photo: Carol Stanley

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Every organization, whether it is amateur or professional, commercial or nonprofit can always use more money, regardless of whether it is financially sound or highly leveraged and in danger of bankruptcy. Additional funds allow organizations to expand and grow and provide for engaging in additional productive activities.

The Avicultural Society of America is no different than any other organized body. That is why I believe every member should consider how he or she can help the Society and through its programs, the world's birds, who with all wild-life are endangered by constantly expanding human activity.

Members can help by increasing their level of membership, recruiting new members, or by making a donation to the ASA Trust Fund. They can also help by remembering the Avicultural Society in their will or living trust.

I do not mean that you should leave your entire estate to ASA. Simply remember it with a donation you think appropriate. It can be in the memory of a friend or loved one.

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You will feel fulfilled when you do.

Ivo Lazzeroni  
President, Avicultural Society of America

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## ASA Meetings

Get the latest meeting info online at : [www.asabirds.org/meetings.htm](http://www.asabirds.org/meetings.htm)

ASA Regular Meetings are generally held the first Sunday of the Month in southern California. Everyone is welcome to attend. Check the website for updates on speakers and their topics as well as to reconfirm dates and times etc. Come as you are and bring a friend!



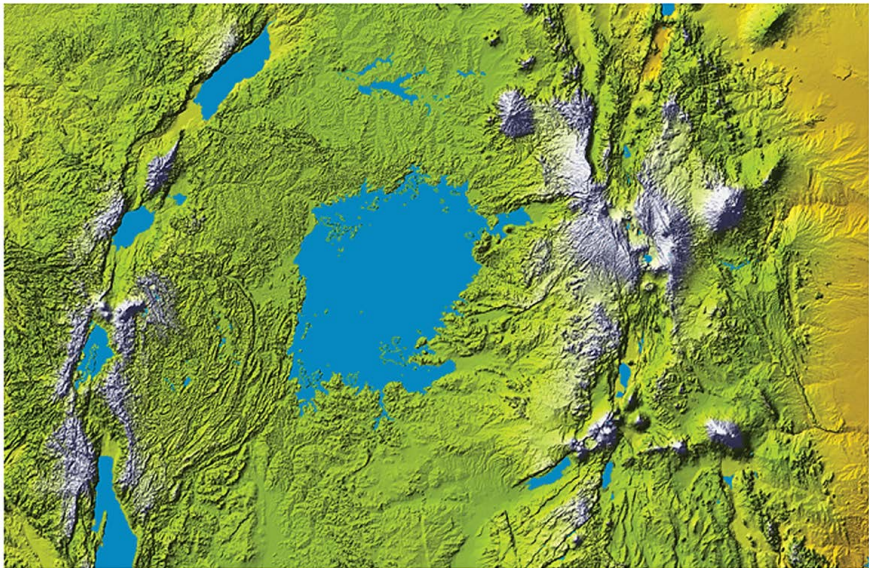


Southern Ground Hornbills  
*Bucorvus leadbeateri*

Dick Schroeder  
Escondido, California

Southern Ground hornbills are one of only two species in the genus *Bucorvus*, the other being the slightly smaller Northern Ground Hornbill, *B. abyssinicus*, often referred to as the Abyssinian Ground Hornbill. As the common names imply, one species (Abyssinian) is found only north of the equator and the Southern is entirely south of the equator. Their ranges do not overlap although they do become very close near Lake Victoria, one of the African Great Lakes bordering Kenya, Uganda and Tanzania. The

of Southern having red facial and throat skin, with the female Southern having a bright blue patch just below the lower mandible. In the Northern birds, the male is all red as with *leadbeateri* but the female is entirely blue in the face and throat. Also the Northern have a small casque, which is short but extends above the skull at the base of the bill. The Southern has more of a low ridge instead. Both species have white primary feathers but these are not evident until they take flight. Both species do fly well but prefer to strut about their habitat



"TOPOGRAPHY OF LAKE VICTORIA" CATALOGUED BY JET PROPULSION LABORATORY OF THE UNITED STATES NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

only hornbill fossil ever discovered was of a 15-million-year-old Ground hornbill in Morocco. The two species differ in a number of ways besides their range. *B. leadbeateri* is the larger of the two with adult males weighing as much as 6000 g, while large Abyssinian males might reach 4000 g. They differ in coloration as well with both sexes

searching for food. Another important difference is their breeding behavior and habits. *B. abyssinicus* breeds in pairs with no help from other birds and is generally found as single pairs in their habitat. *Leadbeateri* on the other hand are co-operative breeders and live in breeding groups of 2-11 birds, the average being around four. Only



the dominate hen nests and only breeds with the dominate male. The other birds in the flock are generally mature and immature male siblings from earlier nests; sometimes an immature female will be part of the group, but when the females reach maturity at 5- 6years, they go off to form new breeding groups. These are long lived birds, able to live 50 -60 years.

I have retained the first baby *leadbeateri* my pair produced in 2008. He is now seven years old and just last spring acquired nearly all of the red in his facial skin, having been a kind of cream color until the red takes over. He was hand fed from four days old but, when weaned (90 days), I placed him back with the parents to observe their reaction. There was not much reaction from the female but the male immediately brought food items to the chick and

attempted to feed it. I did this for a couple of days, always removing the chick if I was not going to be in close attendance. I soon realized that the parents were quite willing to accept back their family member and he has lived with pair since. To date, the pair has produced 13 chicks, all taken for hand feeding. It was not until 2013 that the young male chick helped feed the hen and hatchlings in the nest for the first time, obviously part of the learning process from observing the male.

Keeping them in captivity has some special requirements, mainly lots of space. In the wild they wander up to 11 km daily seeking food, which would be a bit difficult in captivity. My property is one acre, and with a number of other large aviaries, there is not a huge amount of space available. I did build an aviary that is nearly 500 square feet and 10 feet

NORTHERN GROUND HORNBILL OR ABYSSINIAN GROUND HORNBILL  
*BUCORVUS. ABYSSINICUS* PHOTO STEVE DUNCAN







BLOB'S MOM, DAD AND BLOB - SOUTHERN GROUND HORNBILL FAMILY  
*BUCORVUS LEADBEATERI* PHOTO DICK SCHROEDER

high. The framework was done by a local fence company, just the posts and top rails, which I covered with 1"x 2" galvanized wire.

Initially I had furnished the flight with a variety of South African plants which do well here in Southern California and it looked as good as anything you might find in a nice zoo. It also lasted about a week after the birds were introduced to the flight! If it was standing, it was flattened. If it could be pulled from the ground, it was. If it could break, it was broken. At least the birds had fun. Now I offer them small rotting logs, pieces of palm logs, even plastic plant containers from the nursery. All of it gets pounded to pieces but they do need that enrichment. I also provide sturdy dog toys for them. One is a rubber ball made in a mesh-like manner. I can stretch the openings in the mesh and insert a frozen mouse or two then toss the ball out into the flight. They spend a good deal of time extracting and eating the mice, even skipping the just served meal until they "capture" the mouse.

Diet is a big expense as well. They eat only meat or meat-like items (prey items). If one were to breed their own mice in large enough numbers, expenses could certainly be reduced but then there is the added expense of setting up the mouse colony. Most colonies need heat or cooling depending on season, and a good deal of time spend feeding, cleaning and culling. I decided early on that this isn't for me; the urine smell alone determined that! When no young are in the nest, the three occupants

receive a daily diet of 15-20 adult mice, they receive two large handfuls of soaked dog kibble, 30-40 frozen crickets, and perhaps 100 large mealworms. I used to offer 1 lb of a product much like bird of prey diet but made with beef rather than horsemeat called Carnivore 5, the "5" indicating 5% fat. It was produced by a Los Angeles firm called Natural Balance but they no longer make it and I've yet to find a replacement. Often when I receive a new batch of crickets I will pour a couple of hundred live ones in the center of their flight before freezing the rest. There are lots of hiding places for crickets, given all of the things that the hornbills hammer to bits, so they can spend a day or two flipping over pieces of palm or logs to find their food. They also will capture anything that ventures into the cage, including small birds, gophers, voles, lizards and snakes. In the wild some of their favorite prey items are snakes, including the deadly puff adder. Even my wife has learned to carry a plastic bag in her car to pick up the occasional road kill in our drive or on the street.

In the wild they will eat anything that they can overpower including hares, large rabbits, tortoises, squirrels and snakes. Most often the food consists of arthropods, especially termites, beetles, and grasshoppers. Frogs, chameleons and scorpions as well as occasional carrion make up part of the diet, depending on their range. Like all hornbills, they do not drink water but obtain the necessary moisture from their food. Nesting in the wild takes place in



SOUTHERN GROUND HORNBILL "KIPLING - OWNED BY HILLARY HANKY" *BUCORVUS LEADBEATERI* WITH AUTHOR DICK SCHROEDER AND WIFE, RIKKI SCHROEDER PHOTO STEVE DUNCAN

a large tree hollow, an open tree crotch or among large boulders. These are the only hornbill species that do not seal themselves into the nest cavity, leaving only a small slit in order for the male to feed the hen. Probably, because of their size, they don't have the predator problems of the smaller species. The largest threat to the ground hornbills, besides man and his activities, are leopards and martial eagles.

I had my pair 10 years before I saw the first egg, mainly due to the fact that they would not accept any nest box that I offered. I tried anything that the successful zoos used but to no avail. In 2007 I attended an avicultural conference (International Symposium on Breeding Birds in Captivity) in Toronto, Canada and met a breeder from South Africa that only kept Southern ground hornbills. He kindly supplied me with what

worked for him (a box 2' square x 8' high with a false bottom 2' below the entrance). I had my first egg in 2008!

Breeding behavior consists of the pair visiting the nest site several times a day, often pounding on the sides of it. A lining of dried grass and leaves several inches thick is carried mostly by the male to the nest. Last year my young male also assisted in this. The hen will sit in the nest for several hours a day well before any eggs are laid. Once the first of two eggs has been laid, the hen is seldom seen again and food is provided by the male and any helpers. New nest material is given during the 129 day nest cycle, always with a food item included with it. The hen usually receives what is called a bolus, a variety of food items gathered in the beak of the feeder and offered as a package. The male works diligently stacking things up properly so he



SOUTHERN GROUND HORNBILL BABIES 8 & 9 (KIPLING AND HIS BROTHER) *BUCORVUS*  
*LEADBEATERI* PHOTO DICK SCHROEDER





SOUTHERN GROUND HORNBILL "BLOB" *BUCORVUS LEADBEATERI* A

can carry them in the tip of his bill. The eggs are laid three to five days apart, with the younger chick never surviving in the wild. They hatch at 60 g, but by day five, the older chick is over 100 g already and receiving all of the food. Wild flocks only produce one chick every nine years on average. Of course, in captivity we can pull both chicks or just the first one and they both survive. Incubation is 40 days and, after hatching, the chick will spend another 90 days in the nest. The ones

I have hand fed have always been self feeding at 90 days, but they certainly will not refuse a hand out later on. I won't go into a lot of detail regarding the hand feeding process but it is pretty straightforward. Very young chicks are kept in a brooder set at 95F (35C) and lowered one degree per day for 15 days where it will remain until the chick no longer requires heat. Diet starts with halved or quartered pinkie mice\*, depending on the age of the chick,

\*feeder mice are categorized by age/size. From smallest; pinkies, fuzzies, hoppers, weanlings, adults





AND SULCATA TORTOISES, *CENTROCHELYS SULCATA* PHOTO DICK SCHROEDER

dipped in warm water or Pedialyte for the first few days. Thereafter, I always dip the mouse in warm water to provide a bit of lubrication as well as keeping the baby hydrated. Very soon the chick will be eating 4-5 halved pinkies per feeding, every 4-5 hours. Soon it is on to fuzzy mice, halved at first and then whole. It is important that you crush the skulls at this point as young ground hornbills have impacted on mouse skulls. In US zoos, most reproduction is from wild caught adults and there are very few produced from the captive bred offspring. The problem is that these birds are extremely intelligent, enjoy

being around people if hand reared and are pretty spectacular to see in person given that they are about the size of a turkey. Most all of the zoo produced birds, as well as the few produced by the private sector, my own included, wind up in the bird shows either in zoos or private entertainment companies. Having never spent time with the adults as youngsters, they have failed to learn what is necessary for breeding behavior and parenting. Even if these birds moved to a breeding environment, few if any have been successful. I think that much of this can be overcome by keeping the



DAY ONE AND FIVE SOUTHERN GROUND HORNBILL  
*This is why the youngest never survives in*



WINGBILL BABIES *BUCORVUS LEADBEATERI* PHOTO DICK SCHROEDER  
in the wild. Taken right after I pulled them. 1 day & 5 days old.

*Steve's Photo Pick - Photo by Frank Tromp*

Black and White Mannikin (*Lonchura bicolor*) - Common throughout Equatorial Africa to the Eastern Cape. Their habitat includes open savanna, farmland, bush, forest edges and clearings, being absent from arid regions. Several subspecies are recognized, with the most distinct being the Rufous-backed Mannikin, sometimes considered a separate species (*Lonchura nigriceps*), from the eastern and southern parts of its range, characterized by a chestnut-brown mantle, back, shoulders and rump. In aviculture, the Black and White Mannikin is relatively hardy and easy to care for, but can be aggressive. It's best to house them in small flights, as individual pairs, or in a mixed aviary with birds that can defend themselves. They eat a standard finch fare of seeds, greens and higher protein nestling-type foods. For nesting, they will utilize covered wicker baskets and/or half open boxes.






weaned, hand fed youngster with the parents, but removing it as necessary for training and the shows. It will be readily accepted back by the parents as mine have demonstrated not only with my first chick but also with subsequent chicks that have remained here until weaned before

*The wild population  
in South Africa,  
mainly Kruger  
National Park, has  
dropped 70% to a  
population believed  
to be 1500-2000  
birds.*

shipping. I have placed them with the parents to see their reaction and in every case they try and feed the baby. It is worth a try and I'll try and set up another pair if I can find a young female that has been kept with the parents after weaning or was parent reared as some of the zoos are now doing.

The wild population in South Africa, mainly Kruger National Park, has dropped 70% to a population

believed to be 1500-2000 birds. This due mainly to human interference, cutting down nest trees, shooting for bush meat or being poisoned. In other parts of its range it is wide spread and fairly common. The Mabula Ground Hornbill Conservation Project\*\* is now placing nest boxes where large trees are scarce or nonexistent and these are being utilized by the wild flocks. Another important part of their project is pulling all of the second chicks that hatch, as they would not survive anyway. These are hand reared and released into a local non-breeding flock of other youngsters that forage locally until they become bush savvy, taking six months to a year, then relocated in groups as need to augment the breeding population.

These are wonderful birds to work with and I feel very fortunate to have had this opportunity. Perhaps they are the best birds I've kept over the past 45 years, although the Bali Starling, *Leucopsar rothschildi*, is a close second. 

**References:**

Kemp, Alan (1995) *The Hornbills: Bucertiformes*, Bird Families of the World, Oxford University Press, Oxford, U.K  
Schroeder, D. (2012) 'Breeding Southern Ground Hornbills', ZAA Conference, Pigeon Forge, TN  
Sweeney, R., 'Captive Management of Ground Hornbills for a Sustainable Population', *Capstone Project Report*

\*\*See *The Mabula Ground Hornbill Project website for more information:*

<http://ground-hornbill.org.za/>



DICK SCHROEDER COMMISSIONED ARTIST DON RAMBADT, WHO'S STUDIO IS IN WI, TO CREATE THIS BEAUTIFUL WELDED BRONZE SCULPTURE OF A SOUTHERN GROUND HORNBILL.

PHOTO CAROL STANLEY

# Boom in the Bushveld

Mabula Ground Hornbill Project



Recent highlights from the newsletter of the Mabula Ground Hornbill Project

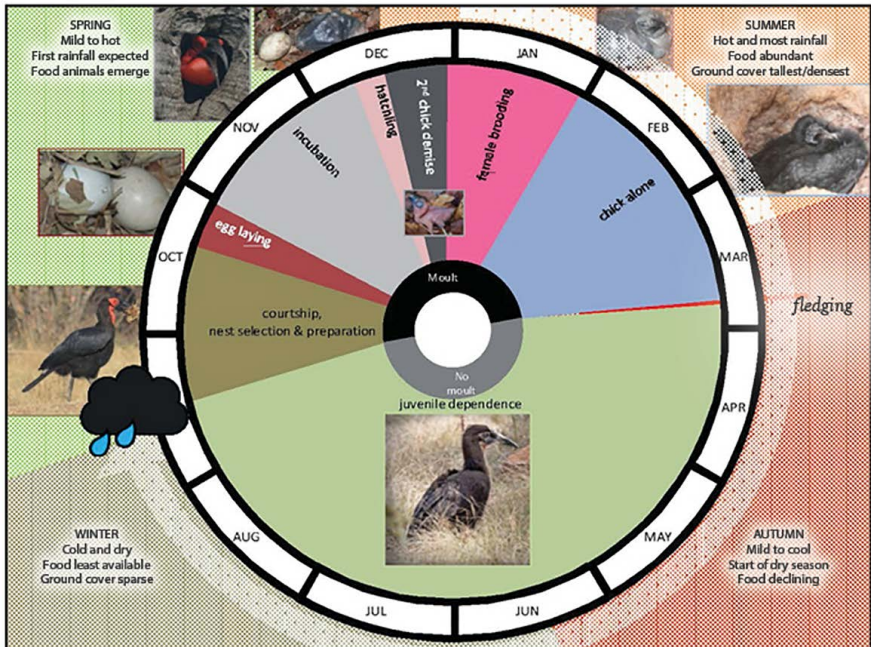
## Ann Knutson Named Studbook Keeper

Anne Knutson, San Diego Zoo, has taken on the SSP and Studbook programme for the Southern Ground-Hornbill species for the States. We are very excited to have her on board for the species and can't wait for her to be able to come and see everything first hand.



Editor's note: Ann has graciously provided articles in the past for the Avicultural Society of America Avicultural Bulletin.

Congratulations, Ann!







These beautiful sterling silver pieces of art are available in the US for \$30 + \$5 postage and handling through Roger Sweeney at Virginia Zoo. Contact Roger Sweeney Assistant Director Virginia Zoo 3500 Granby Street Norfolk, VA 23504 E-mail: roger.sweeney@norfolk.gov for more info and to order. All funds go to Mabula.

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Emson Murjur created the beautiful Ground-hornbill original in wax from which a rubber mold was made.



Fellow artisan Jerum Dube made sure all the Ground-hornbill waxes were perfect. Your purchase helps support both these artists and the Mabula project.



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KING EIDER *SOMATERIA SPECTABILIS* - PHOTO JOHN DEL RIO



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# Birds identify good nuts by listening to them

by  
GrrlScientist

Wild birds identify “good” seeds without first opening the shells by weighing them and by listening to the sound produced when clicking their beaks on the shell, according to a recent study.



A previous study suggested that birds prefer seeds or nuts that are heavier or denser (Heinrich *et al*, 1997), but there has been very little research in the ensuing twenty years into which sensory cues are used by birds to make these important decisions.

To investigate, an international team of scientists from South Korea and Poland conducted field studies with Mexican jays, *Apelocoma wollweberi*, to better understand how these food-caching birds identify nutritious seeds without first opening the shells to inspect the contents.

Mexican jays are largish songbirds that have a long blue tail, blue wings and head, a blue-grey mantle, a pale grey breast and underparts. Mexican jays are cooperative breeders where several subadults help tend the nestlings produced by the dominant pair in the group. Most of these helpers are offspring of the dominant pair from earlier years, but unrelated individuals will also join a group and help raise the young. Although Mexican jays are omnivorous, they do cache acorns and nuts throughout the late summer and autumn that serve as their primary food during the winter. The research team studied nine such groups of Mexican jays living on the arid eastern slopes of the Chiricahua Mountains in Arizona. These birds are individually colour-banded and have been trained to approach their own particular feeding arena in response to the sound of a police whistle. Sunflower seeds, acorns and peanuts are provided at each feeding arena that the birds can carry away and cache nearby.



A MEXICAN JAY, *APHELOCOMA WOLLWEBERI*, APPEARS TO EVALUATE THE CONTENT OF A PEANUT BY WEIGHING IT IN ITS BEAK AND BY LISTENING TO THE SOUND CREATED WHEN CLICKING ITS BEAK ON THE POD. PHOTOGRAPH: MACIEJ FUSZARA



### **Three experiments tested how the birds evaluated peanuts.**

The team designed three tests that were repeated hundreds of times (using tens of thousands of peanuts) in 2008, 2009 and 2012 in the nine jay groups, to evaluate the sorts of information that the birds might be learning by handling peanuts.

First, the team tested whether the birds could identify if similarly-sized peanuts contained nutmeats simply by looking at them. To do this, they gave the jays 20 similarly-sized peanuts, ten of which had been emptied of nutmeats and the pods superglued closed, whilst the other ten had been opened, the nutmeats glued to the pod interior to prevent rattling, and their pods superglued closed. In this experiment, the "normal" peanuts were 4 times heavier than the empty peanuts.

Second, the team tested whether the jays could distinguish between similarly-sized peanuts with a normal mass or with a slightly heavier mass than normal. To do this, they provided the birds with 20 similarly-sized peanuts that had been weighed. Ten of these peanuts were of "normal" mass and had been opened, the nutmeats glued to the pod interior and superglued closed, and ten peanuts were 1.6 times (1 gram) heavier than "normal". The heavy peanuts were prepared by putting non-toxic clay inside each pod before they were super glued closed.

Third, the team tested whether the jays chose peanuts visually based

solely on size. They provided the jays with 20 peanuts, ten of which were small, containing only a single nutmeat, and ten of which were large, containing three nutmeats. As before, the team opened each peanut, glued the nutmeat to the pod interior and superglued the pods closed. But before resealing the pods of the "triple" peanuts, they removed two of the three nutmeats so all peanuts, regardless of size, had similar masses.

### **Slow motion videos revealed how the birds handled peanuts**

The team filmed the jays with a portable high-speed camera (250 frames per second, and occasionally 500 or 1000 fps) to capture minuscule details of how the birds handled peanuts. The team later analyzed the films to identify whether (and by how much) the birds opened and closed their beaks when handling a peanut, and estimated the velocity of the beak when it closed on the peanut pod.

The videos revealed that the jays evaluated each peanut whilst handling it by using very fast beak and head movements. In the first and second experiments, the birds consistently chose heavier peanuts. When provided peanuts that were obviously different in size, as in the third experiment, the jays handled the larger peanuts before rejecting them and choosing the smaller peanuts.

Mexican jays choosing the most nutritious peanuts. See video on [youtube.com](https://www.youtube.com):



<https://youtu.be/IXZyHJugzmY>

"The jays figured out that the larger pods did not weigh as much as they should and the birds preferred the smaller pods, which weighed as expected for their size", said the study's co-author Elzbieta Fuszara, a biologist at the University of Warsaw, in a press release. She noted that, basically, the birds behaved as if they knew that "something is wrong" with the larger nuts.

**Birds listen to sounds created by clicking their beaks on a peanut**

Preliminary analyses of the data suggest an alternative explanation for how the jays decided which peanut to cache.

*In short, birds choose the best seeds and nuts to store away for a snowy day by using the same sensory cues used by melon-thumping humans in a supermarket.*

"Although the peanuts in our experiments had similar mass and look, they produce different sounds

during handling", write the authors in their paper. Further, despite gluing the nutmeats inside the pods to prevent them rattling, the birds created sounds by rapidly clicking their beaks on the peanuts.

"If heavy/full peanuts have consistently different auditory features than light/empty ones, then the jays would also reject the artificially lighter triple peanuts, if they follow only the auditory cues without any cognitive processes about the match between weight and visual size."

In short, birds choose the best seeds and nuts to store away for a snowy day by using the same sensory cues used by melon-thumping humans in a supermarket.

Source:

Piotr G. Jablonski, Sang-im Lee, Elzbieta Fuszara, Maciej Fuszara, Choongwon Jeong, Won Young Lee. "Proximate mechanisms of detecting nut properties in a wild population of Mexican Jays (*Aphelocoma ultramarina*)", *Journal of Ornithology*, published online in advance of print in 2015; doi:10.1007/s10336-015-1193-6 [X]

Also cited:

Bernd Heinrich, Chris C Joerg, Sean S Madden, Emory W Sanders (1997). 'Black-capped Chickadees and Red-breasted Nuthatches "Weigh" Sunflower Seeds', *The Auk*, 114(2):298-299 [Open Access PDF] When she's not watching birds, GrrlScientist is very active on twitter @GrrlScientist.

# Test Your Avicultural Knowledge

All photos courtesy Steve Duncan

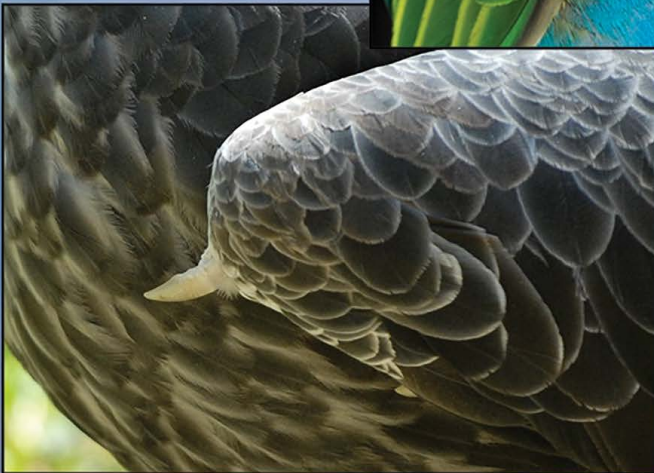


1. I am a resident breeding bird in tropical South America, from Colombia, Trinidad and Tobago south to Peru, Bolivia and central Brazil. What am I?

2. I am a parrot found in forest, woodland and mangrove in the south-east Asian islands of Maluku, Raja Ampat, Talaud, Sangir, Sarangani, the Lesser Sundas, and nearby small islands. I am considered "Least Concern" by the International Union for Conservation of Nature (IUCN). What am I?



3. I may be found in southeastern Peru, northern Bolivia, Paraguay, southern Brazil, Uruguay and northern Argentina. What am I?



Answers on page 34



North County Aviculturists 25<sup>th</sup> Annual

# San Diego County Bird Mart

Saturday, October 10, 2015

9 a.m. to 3 p.m.

Vista Palomar Riders Club Grounds  
973 Little Gopher Canyon Road, Vista, Ca. 92084

Exotic Birds, Parrots, Finches, Softbills, Doves,  
Pheasants, Poultry and related animals!

Cages, Toys, and Accessories!

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Exciting Raffle! Educational Displays!

Free Bird Care Hand-outs!

There will be food vendors this year!

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Free Admission!

**Now accepting vendor applications!**

**Come and Join the Fun!**

For More Information or Reservations,  
Please call Jill Thorburn 760-535-2998  
or E-Mail [Teamthorburn@hotmail.com](mailto:Teamthorburn@hotmail.com)

North County Aviculturists (NCA) is North San Diego County's only Club devoted to people who love Exotic Birds of all types. Our Purpose is to Promote Interest and Education to all interested in Aviculture!

# Test Your Avicultural Knowledge - answers

All photos by Steve Duncan

1. Orange-winged amazon -  
*Amazona amazonica*



2. Great-billed Parrot -  
*Tanygnathus megalorhynchos*



3. Southern Screamer - *Chauna torquata*





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new ideas

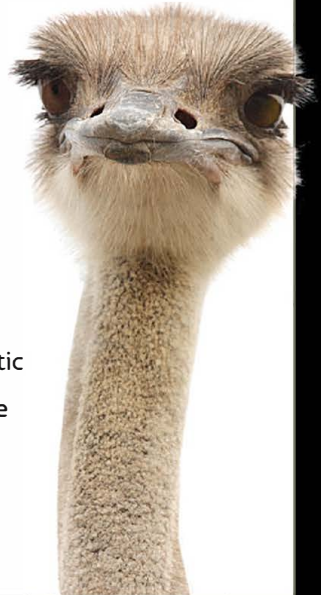


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www.ccasbirds.com

Long Beach Bird Breeders  
6444 Spring St # 132  
Long Beach, CA 90815  
longbeachbirdbreeders@gmail.com

Contra Costa Avian Society  
P.O. Box 23115 Pleasant Hill, CA 94523  
www.contracostaaviansociety.org

Fort Worth Bird Club  
P.O. Box 1712 Keller, TX 76244  
fwbc@fortworthbirdclub.com

Acadiana Bird Club  
480 Almonaster Dr Youngsville, LA 70592  
acadianabirdinc@hotmail.com

Finch Society of San Diego County  
4256 10 Ave San Diego, CA 92103  
www.finchsocietyofsandiego.com

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## ASA Affiliations

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LoryLeague.org  
National Animal Interest Alliance  
National Finch and Softbill Society  
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## 2015 EVENTS

**October 10, 2015 NORTH COUNTY AVICULTURISTS 25TH Annual San Diego County Bird Mart 9 -3pm** 973 Little Gopher Canyon Rd. Vista, CA  
Jill Thorburn 760-535-2998 Teamthorburn@hotmail.com  
**November 29, 2015 EVERYBODY'S BIRDMART. , 9:30 AM - 4:00 PM.**  
Pomona, CA

## 2016 EVENTS

**April 27-30, 2016 AVICULTURAL SOCIETY OF AMERICA CONFERENCE,**  
Port Angeles, WA. [www.asabirds.org/conference/](http://www.asabirds.org/conference/)

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