



who identified it as a new species of monitor lizard. No other specimens were documented after 1857 and the Gray's monitor was believed to have become extinct. The discovery in 1975 of a small population on the Philippine island of Luzon spurred new inquiries into the natural history of this enigmatic lizard. Though the butaan,

shipped to the eminent zoologist John E. Gray at the British Museum,

as it is called in its native Philippines, bears a distinct family resemblance to its imposing cousin, the Komodo dragon (and also ranks as one of the world's ten largest lizards), it leads an elusive, largely arboreal existence in dense forest habitat. Its secretive ways have made it a challenging species to study. Few zoos house them and last year when one of the Los Angeles Zoo's three females laid a clutch of fertile eggs, the L.A. Zoo became only the second zoo in the U.S. to successfully breed them.

The butaan is one of only three documented fruit-eating species of monitor lizard; all are native to the Philippines.

See pg. 2



Make It a Date

Boo at the L.A. Zoo

This year's Boo is bigger and better than before! Join us for a whole month of special spooky and safe family festivities, with haunted caves, a pumpkin patch, fun photo opportunities, and much more. Proudly sponsored by 99 Cents Only Stores, Boo at the L.A. Zoo is daily, with special entertainment and animal enrichment on weekends. And don't miss trick or treating on October 24, 25, and 31. All activities are free to GLAZA members and with paid Zoo admission.

October 1 (Thursday)—31 (Saturday) 10 a.m.—4 p.m.

Boo at the L.A. Zoo Upper-Level Members Preview

GLAZA members at the Family Deluxe level and above have the opportunity to experience the fun of Boo at the L.A. Zoo before the Zoo opens to the public. Guest passes will not be honored at this event. To RSVP for this morning event or upgrade your support in order to attend, phone 323/644-4770.



Be sure to keep an eye out for ScholarShare at Boo at the Zoo to learn about ways to make saving for your child's education a little less "scary" this Halloween season.





Celebrate the diverse cultures and animals of the Americas at this festive event proudly sponsored by the ScholarShare College Savings Plan. Activities include crafts, keeper close-ups, and live musical performances. Featured animals will enjoy special enrichment items. This event is free to GLAZA members and with paid Zoo admission.

September 26 (Saturday) and 27 (Sunday) 10 a.m.-4 p.m.







This year's Sunset Safari is your "Passport to the World!" Enjoy an enchanted evening of exotic wildlife and unique Zoo experiences including keeper talks, special animal feedings and walkabouts, wildlife education stations, photo opportunities, a petting zoo, Asian cooking demonstration, live band, carousel rides, and more. We've extended the event by one hour to allow for all this fun! Safari Society and Business Partners donors receive complimentary family tickets to this event and can purchase additional tickets at a reduced cost. The evening includes buffet dinner and drinks, with snacks along the route. Sunset Safari comes only once a year—don't miss the adventure! For details, please phone the Safari Society Access Line at 323/644-4717 or e-mail nsimerly@lazoo.org.

September 12 (Saturday) 6-9 p.m.



Conservation is a global mission that depends on local actions. Saving vanishing rainforest species relies on changing our daily habits: purchasing sustainably sourced products, choosing renewable resources, and reducing our ecological footprint. These are lifestyle choices that we must

make for ourselves and teach to our children in order to create a culture of conservation.

The theme of this year's Beastly Ball was "generations" because making a positive change in the world can be a process that takes lifetimes to achieve. In the early 1900s, fewer than 200 Indian

rhinos remained. But with strict protections from Indian and Nepalese wildlife agencies as well as nonprofit conservation agencies, the population has steadily increased to more than 2,000 individuals today. However, these animals are still under heavy threat from poaching and their current range is a fraction

animal activities at your Zoo

May 1-June 30

May and June were busy months. Births included a crested capuchin monkey, four Nigerian dwarf goats, two Peninsular pronghorn, a Sichuan takin, six Tadjik markhor, nine Yarrow's spiny lizards, two koalas, and two lesser Egyptian jerboas. Hatchings included three crested screamers, a superb starling, three batches of sunburst diving beetles, a California condor chick, and three Gray's monitors (also known as butaans).

Arrivals included a female Aruba Island rattlesnake, two green vine snakes, and some exciting additions to Rainforest of the Americas—a largespot river stingray and a bigtooth river stingray. Others included a new female **siamang**, a **snow leopard**, a new breeding pair of Speke's gazelles, a Malay chevrotain, five lesser Egyptian jerboas, a female ocelot, two male Peninsular pronghorn, a rock hyrax, and a **serval**. Among the new avian arrivals were a pair of Bruce's green pigeons, a pair of spur-winged lapwings, a white-headed buffalo weaver, a Cape thick-knee, and a male barn owl. Three California condors came to the Zoo for medical treatment.

Two California condors transferred to the San Diego Zoo Safari Park; other departing birds included a Ross's turaco, two violaceous turacos, and a tawny frogmouth. Other outgoing animals included two Mexican beaded lizards, a female colobus monkey, two hedgehogs, a Malay chevrotain, a tammar wallaby, a Japanese serow, a red-rumped agouti, a rock hyrax, a siamang, a Sichuan takin, and four gerenuk.



Crested screamer chicks with parent.

ScholarShare joins us in announcing these newborns and animal activities at the Los Angeles Zoo. ScholarShare, California's 529 College Savings Plan, is a proud sponsor of the L.A. Zoo and supports a shared commitment to education.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles and the Los Angeles Zoo do not discriminate on the basis of disability and, upon reasonable advance notice, will provide reasonable accommodation to ensure equal access to its programs, services, and activities. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request with reasonable advance notice prior to the event or activity you wish to attend. For further information, please contact: 323/644-4200 (voice/TTY).



Butaans are unusual among monitors in that they consume quantities of fruit along with invertebrates. Hence their physiology differs significantly from that of their relatives. They have a well developed cecum, a pouch-like structure in the large intestine where special bacteria help break down the cellulose in plant matter—a feature generally associated with hooved animals. Instead of big back-curving serrated teeth for tearing flesh, their teeth are short and peg-like for eating the invertebrates and hard-shelled fruits found in their tropical habitat.

"Diet was a huge issue," says Curator of Reptiles and Amphibians Ian Recchio. "Few people who had butaans could get them to eat many types of fruit, if any. They would occasionally eat grapes, which are kind of like sugar-filled balloons—they don't provide much nutrition. But one of the things we have going for us in Southern California is lots of exotic ficus trees producing wild fruits. We found that the butaan would eat common figs (Ficus carica), which people have cultivated for ages to suit our taste for sugar. We used those sweet figs as a kind of bridge to more natural ficus fruits produced by weeping fig (F. bengamina), little-leaf fig (F. rubiginosa), and rubber fig (F. elastica) that we'd collect on Zoo grounds. Those are much closer to the native fruits that they eat in the Philippines, most of which are unobtainable."

The Zoo's current group of butaans, which was a U.S. Fish and Wildlife Service confiscation, arrived on January 11, 2011—less than a year before the LAIR debuted. The four lizards were young, healthy, and (unlike the previous group) included one male. On August 16, 2014, a clutch of eggs was laid. The first stage was a success. The next challenge was hatching the eggs.

"There's a tiny bit of data on butaan egg incubation," explains Recchio. "Dallas Zoo had an egg complete incubation to hatch, though unfortunately the animal died. But obviously they got the temperature and humidity right. We used that data and other published knowledge out of the Philippines."

And of course, the Zoo's reptile staff had experience with the world's best-known monitor, the Komodo dragon. As with the Komodo eggs, the butaan eggs were carefully removed from the nest in their exhibit and placed in a high tech incubator. After 300

- Newly hatched baby butaans do not feed immediately.
- 2. Animal Keeper Jeromy Chenault assists with a veterinary exam on a female adult butaan.

days of closely observed incubation, keepers saw the first egg begin to hatch (or pip) on May 11. It took each lizard about a day to work its way out of the egg and the last emerged on May 23.

Healthy babies were cause for celebration; but hatching reptiles is only half the battle. Like all babies, these had to transition to solid food. During the ten months they developed inside the eggs, the lizards were nourished by their yolks, a rich diet that sustains them for some time after hatching. In the wild, this would be until they are able to catch their first meal (frequently land snails). In the Zoo, their caretakers had to coax them to eat.

Animal Keeper Marlowe Robertson-Billet began by offering the oldest baby a variety of food options. Anyone who has ever tackled feeding a fussy child will empathize with the process if not the menu, which was based on available information about the butaan diet from the field and from other zoos.

"The Komodos were all about food," she explains. "Within a week, they were taking small mice. These guys were completely different. I started trying to feed the first one about a week after he hatched, but he didn't actually eat anything until 17 days later. I would hold him, take the food up in tongs, and tap it to his mouth until he took it. We did that every day with different food items. I tried mealworms and cockroaches and snails and krill and shrimp and crickets. He would take each one, chew it, hold onto it and run around with it for like ten minutes, and then spit it out."

Eventually, Robertson-Billet decided to try a new strategy and chose an off-menu item popular with other reptiles: wax worm. The soft, squishy caterpillar was a success. "By the time he decided he was going to spit it out, he'd already swallowed it, so that was the bridge to eating." From there it was easy to coax him to eat catfish bits and pieces of hard-boiled egg. His littermates soon followed suit. The next step will be introducing fruit to the babies.

"You really have to think outside the box and brainstorm," Robertson-Billet says of the herpetology team's achievement. "It's really rewarding and it will help with the second clutch. It will also help other institutions to repeat this success—so it's not uncharted territory for the next people."

 Curator Ian Recchio (front) with monitor lizard experts Daniel Bennett (right) and Michael Cota (back) at the Interdisciplinary World Conference on Monitor Lizards in July. of what it once was. The future of the Indian rhinoceros and all rhinos is in the hands of today's young people, who must carry on the effort to save them.

Here at the Zoo, conservation efforts also play out over generations. The first Gray's monitors came to the Zoo in 1998 as a U.S. Fish and

Wildlife Service confiscation. Since then, the old reptile house where those original animals were housed has been replaced by the state-ofthe-art LAIR, and a new generation of animal caretakers has achieved a milestone for this species—two clutches of butaan (as they are called in their native Philippines) eggs

were successfully hatched at the Zoo, and once again the global spotlight is on the Zoo. As with the giant horned lizards, our success will help conservationists around the world in their efforts to protect this rare lizard for future generations.

Elsewhere in the Zoo, sometimes on exhibit for our guests to see, and sometimes behind the scenes (as with the Avian Conservation Center and the Callitrichid Conservation Center), efforts to unlock the secrets of caring for rare and endangered species continues—and when it comes to conservation, secrets are something best shared.



Tucked away in a quiet corner of the Zoo, the Avian Conservation Center (ACC) is the secret core of the bird collection. Built in 2011 to replace an aging holding complex, the 22 outdoor enclosures meet the varying needs of our birds. A small kitchen with windows all around allows keepers to closely monitor birds while preparing diets. As the name implies, ACC's primary mission is conservation, providing an optimal breeding environment for such critically endangered species as Bali mynah and blue-throated macaw.

The first chick to hatch in the ACC was a tawny frogmouth, a nocturnal species from Australia that appreciates the ACC's privacy. Initially looking like a fuzzy cotton ball, the baby fledged successfully and went on to another zoo to be paired for breeding. Some species such as superb starlings and violaceous turacos nest more readily in the shelter of the ACC than in large, mixed-species exhibits. Sometimes a new pair of birds needs a chaperoned courtship before sharing the same space, so they live side by side until keepers see positive signs of bonding. We're currently watching a pair of blue-breasted kingfishers via closed-circuit cameras, which allow the birds to interact with minimal human disturbance. The female was recently seen trying to feed the male through the wire mesha distinctly good sign.

Hand-reared chicks need a gradual transition from being hand fed in a heated brooder to mastering skills for independence. Our greater roadrunner chicks graduated from a small enclosure to a space for flying and learning to forage and find the best roosting sites with a doting keeper nearby to meet their changing needs. In nature, young birds disperse from their parents' territory as they reach maturity, often with firm encouragement from the adults. So we reserve a room when we expect Zoo parents to ask their offspring to leave home.

The ACC is not just about reproduction. Birds recovering from health issues and those who need assisted living in retirement, like our 27-year-old barn owl, can be best cared for there. It was also home to our keel-billed toucans and blue-billed curassows while the Rainforest exhibits were under construction and to the black-headed weavers, Congo peafowl, and violaceous and white-cheeked turacos while their exhibits were renovated. In short, the ACC is essential to managing our bird collection. The behind-the-scenes work there ensures that birds will always be available to delight and inspire our guests, along with helping ensure that many species survive for generations to come.

- 1. As few as 115 blue-throated macaws remain in the wild.
- 2. The red-and-yellow barbet is native to eastern Africa.

L.A. ZOO PHOTO DAY

- 3. Blue-breasted kingfishers form strong pair
- 4. The Bali mynah is found on one small island in Indonesia

The Los Angeles Zoo's avian program is made possible in part by support from Edison International.

To register, phone 323/644-4703, e-mail volunteers@lazoo.org,

Photo Day 2015 takes place on Sunday, November 8, from 7:30 a.m. to 4 p.m. This is a fantastic opportunity for photographers of all skill levels to try out new photo equipment such as cameras and lenses with the Zoo as your backdrop. Presented jointly with Paul's Photo, experts will be on hand to assist with telephoto stations, loaner equipment, and lead workshops to learn tricks of the trade used by professional photographers to capture the perfect shot. Photographers who are GLAZA members, students with valid school ID, or Paul's Photo Club members receive a \$10 discount (no discount for at-the-door registration).

or go to www.lazoo.org/photoday.

Registration fees are:

September 1-November 5: \$175 for photographers and \$70 for guests

November 6-8:

At-the-door registration \$200 for photographers and \$80 for guests (no discount for at-the-door registration)

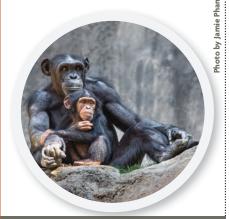




Leave a Zoo **LEGACY**

The Los Angeles Zoo relies on financial support from donors to maintain the wellbeing of the animals in its care and to continue important conservation work. Help ensure a thriving Zoo and planet robust with wildlife by remembering GLAZA in your estate plans. Naming GLAZA in your will benefits the Zoo in a lasting way and may offer personal benefit by reducing estate taxes for heirs while providing Zoo recognition during your lifetime. If you already have a will, you can add a charitable gift with a quick phone call to your

Donors who include GLAZA in their estate plans are recognized as members of the Selig Legacy Society and receive acknowledgment on the Zoo's entry plaza donor wall and in GLAZA's annual report. Selig Society partners also enjoy an annual, behind-the-scenes tour and luncheon with Zoo Director John Lewis and GLAZA President Connie Morgan. Consult your attorney or tax advisor to learn how tax benefits apply to your specific situation. Donations to GLAZA are tax-deductible to the fullest extent allowed by law. For details, contact Senior Director of Advancement Carrie Scott at 323/644-4782 or cscott@lazoo.org.



Number 2

Greater Los Angeles Zoo Association Annual Memberships: Individual \$55, Individual Plus \$75, Family \$126, Family Deluxe \$165, Contributing Associate \$250, Wildlife Associate \$500, Conservation Associate \$1,000. Each membership category includes unlimited admission to the Los Angeles Zoo for one year, one-year subscriptions to Zoo View and Zooscape, 10-percent discount at Zoo restaurants and shops, and invitations to special events. Students and seniors receive \$10 off an annual membership.

The Los Angeles Zoo and Botanical Gardens is located in Griffith Park at the junction of the Ventura (134) and the Golden State (I-5) freeways. We are open from 10 a.m. to 5 p.m. daily, except December 25 For information, phone 323/644-4200, or visit us on the Internet at www.lazoo.org. Sandy Masuo, Editor

Pickle Group, Graphic Design Tad Motoyama, Zoo Photographe Jamie Pham, GLAZA Photo Editor Printed on 30-percent recycled stock



*calendar of events

MEMBERS ONLY

GLAZA members at the Wildlife Associate (\$500) and Conservation Associate (\$1,000) levels, watch your mailbox for an invitation with details. To upgrade your support and enjoy this exclusive event, phone 323/644-4244. October 3 (Saturday) 5:30-8 p.m.

Check our website soon for details and to purchase tickets. December 5 (Saturday) 8-9:45 a.m.

GLAZA members at all levels are invited to celebrate the season with this special morning event. Stay tuned for more details. December 5 (Saturday) 8:30-10 a.m.

Docent-led tours are available to GLAZA members only and are free for everyone eligible on your membership. No confirmations will be mailed. Please make reservations at least two weeks in advance by phoning 323/644-4244.

September 12 (Saturday) September 13 (Sunday) September 19 (Saturday) September 20 (Sunday) October 3 (Saturday) October 4 (Sunday) October 10 (Saturday) October 11 (Sunday) November 7 (Saturday) November 15 (Sunday) November 21 (Saturday) November 22 (Sunday) (Meet at the waterfall near

SAFARI SOCIETY ONLY

Morning at the Zoc

Join us just after the sun rises as the animals wake for the day! This earlyentry event held exclusively for **Business Partners and Safari Society** donors features a continental breakfast, animal walkabouts, special feedings, and keeper talks. Watch the mail for your invitation to this private event. For inquiries, please phone the Safari Society Access Line at 323/644-4717 or e-mail nsimerly@lazoo.org. November 14 (Saturday) 8:30-10 a.m.

By including GLAZA in their estate plans, Selig Legacy Society members permanently enhance the welfare of the Zoo's animal residents and ensure the vitality of the Zoo for generations to come. This annual behind-the-scenes presentation and special luncheon is just for them. To learn how to include GLAZA in your will or estate plan, contact Senior Director of Advancement Carrie Scott at 323/644-4782 or cscott@lazoo.org.

SELIG LEGACY SOCIETY

October 14 (Wednesday) 9:30 a.m.

L.A. ZOO LIGHTS REINDEER ROMP

This year's holiday celebration will Reindeer will be visiting and bringing seasonal cheer to the Zoo! be bigger and brighter than everincluding a luminous LAIR! Enjoy See them daily in Eucalyptus Grove extraordinary light installations, and on weekends, enjoy special festive sounds, and holiday treats holiday activities, including crafts. throughout the Zoo at L.A.'s merriest Stay tuned for more details. event. Check our website soon for November 27 (Friday) through January 3 (Sunday) 10 a.m.-4 p.m. details and to purchase tickets. November 27 through January 3, 2015, except December 24 and 25

SPECIAL TOURS

These docent-led tours are free to GLAZA members but space is limited. For reservations, phone 323/644-4703 or e-mail docents@ lazoo.org. Specify "Bird Walk" or "Garden Tour" in the subject line and include the following in your e-mail: your name, membership number, number of members in your party, ages of attending children, and your phone number.

Please gather at the group entrance to the Zoo.

Many migratory birds overwinter in Southern California. This docent-led bird walk is a great opportunity to meet your avian neighbors and spot an exotic visitor or two! November 21 (Saturday)

Plants all have stories to share and many are survivors of longvanished worlds. On this garden tour we'll see plants that were part of ancient landscapes shared with animals from dinosaurs to saber-toothed tigers. November 14 (Saturday)

the entrance to the International

Marketplace at 10:30 a.m.)

8-10 a.m.

SEPTEMBER-OCTOBER 2015

Member Newsletter of the Los Angeles Zoo and Botanical Gardens

Zooscape (ISSN 1060-3859) is published bimonthly by the Greater Los Angeles Zoo Association, 5333 Zoo Drive, Los Angeles, CA 90027. Periodical Postage paid at Los Angeles, CA.

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ED-ZOO-CATIONAL Ldventure

FOR MORE DETAILS, GO TO WWW.LAZOO.ORG/EDUCATION/CHILDRENSCLASSES/. TO REGISTER, GO TO WWW.LAZOO.ORG AND CLICK ON "BUY TICKETS."

Registration Policy: Registration for Ed-zoo-cational Adventures begins two months prior t Please check www.lazoo.org for class availability. For more information, phone 323/644-4211

SLEEPOVERS

Bring your group or troop to the Zoo for an indoor all-night, interactive experience. Tour the Zoo after dark, enjoy a pizza/ salad feast, participate in hands-on animal activities, and fall asleep to beastly bedtime stories. In the morning, enjoy a continental breakfast while meeting some of the Zoo's animal ambassadors. Scout groups have the opportunity to earn a badge during this overnight experience. This event is designed for children, ages seven through twelve. Cost is \$55 per person. Schedule for the 2014–2015 school year can be found at www. lazoo.org/education. Contact Coral Barreiro at 323/644-4709 for assistance.

ZOOCAMP

Embark on an arctic adventure during Winter ZooCamp at the L.A. Zoo. Campers will have a cool time engaging in fun activities and going ape over the Zoo's amazing animals. Each camp is led by specially trained, experienced adult staff. Registration fee is \$65/day for nonmembers and \$60/day for GLAZA members. Winter ZooCamp registration opens November 2. Extended care (mornings 8-9 a.m. and afternoons 3-5 p.m.) is available for an additional fee.



ANNUAL MEETING SCHEDULED

Members are invited to attend the Annual Meeting of the Greater Los Angeles Zoo Association in the Grand Room of the Andrew Norman Center on Thursday, November 12, at 11:30 a.m. The main item of business is election of trustees. Nominees for re-election for three-year terms are: Brian Diamond, Nick Franklin, Phyllis Kupferstein, Betty White Ludden, Elizabeth Price, Bob Ruth, Slash, and Dana Walden. **Proxy**

Know all persons by these present:

That, I, the undersigned, have made, constituted, and appointed Phyllis Kupferstein of Los Angeles, California, my proxy to represent me at the Annual Meeting of the Greater Los Angeles Zoo Association to be held on Thursday, November 12, at 11:30 a.m., and at any or all adjournments thereof, hereby granting unto said Phyllis Kupferstein all the powers that I would possess if personally present at said meeting or at any adjournments thereof. Should I be present, this proxy

behaviors into an ethogram, and

Mail to: Phyllis Kupferstein, Secretary, c/o GLAZA, 5333 Zoo Drive, Los Angeles, CA 90027-1498 November 12 (Thursday) 11:30 a.m.

Andrew Norman Center (Grand Room)

Address City/State/Zip Signature Date

COURSES AND LECTURES

Observing Animals: Behavioral Studies in Zoos (UCLA Extension) This course, taught by L.A. Zoo Director of Research Dr. Cathleen Cox, provides an introduction to methods and techniques of studying animal behavior. Topics include recognizing individual

methods of collecting quantitative data. In addition to lectures and demonstrations, participants conduct a study project on selected species at the Zoo. No prerequisites. Enrollment limited. Classes take place on Thursday evenings with the exception animals, producing accurate descriptions of behavior, of November 27. Training for recognizing and organizing projects takes place on Saturday,

October 17. For more information, contact Dr. Cox at 323/644-4204. For registration, contact UCLA Extension at 310/825-9971 or 818/784-7006, or visit www.uclaextension.edu. September 24 (Thursday) through December 10 (Thursday) 7:30-10 p.m. Classroom C, Children's **Discovery Center**