What’s New at the Zoo
Pam Mizuno

Now that we’re in the middle of hurricane season and Lane has passed the islands, we are so very grateful the animals and zoo got through the torrential downpour of rain without serious damage. We are hopeful that the rest of our 2018 hurricane season will be uneventful!

We had so many “New In The Zoo” animals to report on last newsletter that I totally forgot to report that our Sacred Ibis once again blessed us with a newly hatched chick in April. This is the third year in a row our Ibis have successfully hatched and raised offspring. The hatchling in the photo is only a few days old and it illustrates how large they are in comparison to their parents. At 4 months of age this young one is as large as the adult birds and difficult to tell apart from its parents. The Ibis in the top left of the photo has a speckled grey neck indicating it is still a juvenile that was hatched last year. Mature adult birds have a solid black head and neck like the parent bird standing next to its young.

In the last newsletter you learned about Spunky Monkey’s new male companion. He didn’t have a name at the time, but we’re happy to report his name is now “CHUNKY”! Yes! Spunky Monkey now shares her exhibit with Chunky Monkey!! He has a great appetite and is eating and growing. We’re certain he will live up to his name in the next few years.
In June, our alligator, Stitch, moved into her new home and she couldn’t be happier! She has grass, plants, pond, waterfall and tilapia! What more could any alligator ask for!! Plan your next visit to the zoo to watch her and our other alligator, Lilo (yes! Lilo & Stitch) have their daily meal at 1:30 p.m. During the winter months, when the weather is cooler, they sometimes lose their appetite and don’t require daily feeding as nature slows their metabolism down into winter survival mode. At that point they may only eat 1 to 3 times a week. So if you want to watch the Gators chow down, hurry in to the zoo to see them before the days get shorter and the weather turns cold!

Our alligator, Stitch, enjoying some sunshine in the cool wet grass after the torrential rains had passed.

Baby Emu Bling is now 5 months old and boy is she getting tall! It must be adolescence with all that leg and neck she’s developing. It has been fun to watch her go from egg, to newly hatched chick, to tall young teen! We can now definitively use HER and SHE because her recent DNA blood screening has confirmed that Bling is a girl.

Even though summer break has ended and school is back in session, there is lots to see and do in the zoo!  

Come out and visit us soon!!
This year’s Tiger Fun Day, supported by Friends of the Zoo, was a great success. June 30th turned out to be a beautiful sunny day for our fundraising event. The day was filled with music, laughter, games, good food and cold refreshments. Over 2500 people of all ages came out to help us celebrate.

It all began at the Information booth at the zoo entrance, where people picked up zoo passports, which were a new feature of Tiger Fun Day this year. Kids would then go to various stations and collect stickers that corresponded to the animals in their passport. When it was full they returned to the Information booth to receive their honorary zoo keeper seal and a prize.
As the visitors made their way into the heart of the zoo, they came to the music, food and games section. Everyone had to try their hand at the Wheel of Fortune, Treasure Hunt and the Fishing game.

From left to right: Treasure Hunt Game, Wheel of Fortune and Fishing Game. Everyone had to try their hand at the games and there were some nice prizes.

Below: After the games it was on to the food: pizza, hot dogs, and refreshing Bradda Pops, were some of the choices.

This little guy was having so much fun.

It wouldn’t be complete without Terry Tiger and Andy Alligator. The kids always have fun meeting them as you can see on the left. On the right, some kids are disguising themselves, can you tell what they are?

Continued on Page 5
The day wouldn’t be complete without a visit to the petting zoo, which is always a hit for kids and grown ups alike. Everyone enjoys having a chance to see and touch the animals up close. The petting zoo is open every Saturday from 1:30pm – 2:30 pm, and Tiger Fun Day was no different. It’s always a happy experience.

A great big **MAHALO** goes to the FOZ team and the volunteers who came from all over the island to make this year’s Tiger Fun Day a big success.
Message from the President

Pat Engelhard

Your Pana’ewa Rainforest Zoo and Gardens is 40 years old this year. Hilo’s original zoo was located near Onekahakaha Beach Park for several years. But County officials knew this wasn’t a good place to house animals like tigers and bears because of previous tsunamis in the area, so when the opportunity to build in a more appropriate place became available our zoo was moved to its present location. The Pana’ewa Rainforest Zoo was also designed to be used for research by UH Hilo students and was completed in 1978. It is the only zoo in the United States located in a natural rainforest.

The importance of rainforests is immense. Rainforests are located in tropical climates near the equator and cover 6% of the Earth’s land surface. They have existed for hundreds of millions of years. They contain more than half of the plant and animal species on the Earth and produce more than 40% of the world’s oxygen. Plants “photosynthesize” by absorbing carbon dioxide from the air and releasing oxygen and water vapor back into the atmosphere. This moisture generates the thick cloud cover that makes the rainforest humid and warm. Rainforests are also a vital source of medicines; 25% of modern medicines come from rainforest plants, although the medicinal properties of only 1% of plants have been assessed. Foods we use today that originated in rainforests include coffee, cocoa, many fruits and nuts, spices, and yes, even rice.

The world’s tropical rainforests are (surprise) mostly in the tropics; the 3,000 mile wide band between the Tropic of Cancer (23.5° N latitude) and the Tropic of Capricorn (23.5° S latitude). There are smaller pockets in Dominica, Puerto Rico and other islands in the Caribbean as well as on Pacific islands and, of course, Hawaii. Rainforests are disappearing at the rate of 1 football field per second or an area the size of Panama each year.

A large number of animals live in the rainforest: fish, reptiles, amphibians, birds, mammals and invertebrates (like insects and worms). Our Pana’ewa Rainforest Zoo and Gardens is home to many species of rainforest animals from around the world. Why not refresh your interest in the rainforest by returning to our gem of a Zoo. See the article on “Jewels of the Rainforest” in this issue for some of the unique rainforest amphibians.
Stop by and see some of the “Jewels of the Rainforest, you won’t be disappointed. There are some very interesting amphibians, such as the ‘Tomato Frog’, ‘Bumblebee Dart Frog’, ‘Green & Black Dart Frog’, ‘Dyeing Frog’ and ‘Blue Arrow Dart Frog’.

**Tomato frogs** are bright red, warning potential predators of their toxicity. If provoked they will puff up and secrete a thick, mildly toxic, glue-like substance from their skin as a form of self-defense. These nocturnal, mainly terrestrial frogs will wait and ambush their prey, which consists of a wide variety of terrestrial and aquatic insects, in both larval and adult form. They are found in northeastern Madagascar where they occupy forested lowlands, shallow pools, ditches and swamps.

The **Bumblebee Dart Frog** gets its name from its coloration of bright yellow and black stripes and/or spots. They are one of the largest of the poison dart frogs and have a loud pleasant “birdlike” trill call, which the males use to attract mates. They also use visual cues as they show off their brightly colored bodies for females. These poisonous frogs are found in Northern South America, mainly in Venezuela.

The **Red-eyed Tree Frog** ranges from Mexico, through Central America to Colombia. The species has red eyes with vertically narrowed pupils. It has a vibrant green body with yellow and blue, vertically striped sides. Its webbed feet and toes are orange or red. These little fellows have sticky pads on their toes like geckos do. They spend most of their lives in trees. During the day, they remain motionless, cover their blue sides with their back legs, tuck their bright feet under their bellies, and shut their red eyes. Thus, they appear almost completely green, and well hidden among the foliage. When a red-eyed tree frog detects an approaching predator, it abruptly opens its eyes and stares at the predator. The sudden appearance of the red eyes may startle the predator, giving the frog a chance to flee.

*Continued on Page 8*
Green and Black Poison Dart Frog: This brightly colored frog is native to Central America and northwestern parts of South America. This species was introduced into Hawaii in 1932 to help control the non-native insect populations, mainly mosquitos. They obtain their poison from their natural habitats so they should not be poisonous in Hawaii. They are mostly found in Manoa valley on Oahu.

Dyeing Frog: They were named by the Spaniards who thought the native Indians used their skin to dye parrot feathers used in their rituals. Their boldly colored bodies warn predators of their dangerously toxic skin. This species is distributed throughout the eastern part of the Guiana Shield and Venezuela, including parts of Guyana, Suriname, Brazil and nearly all of French Guiana. Feathers are plucked from the back of young parrots and the frogs are rubbed on the parrots' exposed skin. When the feathers regrow, the toxin causes them to appear yellow or red rather than green. These altered feathers are highly prized by the indigenous tribes.

The Blue Arrow Dart Frog is a poison dart frog found in the forests surrounded by the Sipaliwini savanna, which is located in southern Suriname and adjacent to northern Brazil. These frogs are very territorial and aggressive both towards their own species and others. To ward off intruders, they use a series of calls, chases, and wrestling. Like many other rainforest frogs they have toxins in their skin, but in reality only the toxin from the Golden Poison Frog is used by the indigenous peoples on the tips of their arrows or darts. In captivity, the frogs lose toxicity as a result of altered diets.
How to help the Zoo

There are several ways that you help enhance and create new habitat to make this a first class rainforest zoo. We already have a world class tiger exhibit, admired by many visitors and professional zoo staff alike. With the new alligator exhibit completed, we now have to think about the next exhibit that needs modernization. There are several ways of donating monies to the zoo.

Membership: You can donate by becoming a FOZ member, $25/year. This includes the quarterly FOZ Newsletter and 10% discount on all items sold in the zoo gift shop. Click Here to become a member.

Animal Adoption: We have added 3 new animals to the adoption list. Why not adopt a couple of them and help the zoo animals at the same time.

Stop by the gift shop and pick up a $25/year package or email adoption@hilozoo.org for more information.

General Donations: Anytime is a good time to donate to the zoo. If you are at the zoo you can contribute as you leave by dropping a donation into the donation box, or go by the gift shop to drop off a donation. You can also mail a donation to; Friends of the Zoo, P.O. Box 738, Keaau, Hi., 96749.

All donations as described above are tax deductible. Friends of the Pana’ewa Zoo is a nonprofit 501(c) (3) organization.

Animal Benches: The purchaser is allowed to request wording in memory of a loved one or in commemoration of an event. FOZ will have a small plaque printed with limited wording in recognition of the person or event. If you would like to purchase a bench please email admin@hilozoo.org. Be sure to include your name and phone number.
~ Calendar 2018 ~

Christmas at the Zoo
Saturday, December 1, 2018
9:00 am – 11:00

Benefit Book Fair
Saturday, June 2\textsuperscript{nd}, 2018
10:00 am – 3:00 pm

FOZ Board Meetings
September 17, 2018
October 15, 2018
November 19, 2018
January 21, 2019

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FOZ Board of Directors

Pat Engelhard – President
Betsy Del Sarto – Vice President
Betsy Duerr – Secretary
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Beth Dean
Candace Bautista

Zoo Director
Pam Mizuno

Please send feedback or comments regarding the newsletter to:

newsletter@hilozoo.org

Your FOZ Donations at work this year!

1. FOZ funded the Alligator enclosure which was recently opened for Stitch.

2. FOZ funds were also spent on fencing for the donkey/emu enclosure.

3. FOZ was involved in several animal acquisitions either in the purchase or in some other way for:
   - Colobus Chunky Monkey
   - Capuchin Monkey Leia
   - Sloth Akala

Thank you for your generosity.

Christmas at the Zoo
2018!

Don’t forget this year, “Christmas at the Zoo” on Saturday, December 1\textsuperscript{st} 2018. Watch all the animals get their Christmas treats. It starts at 9:00 am and goes until 11:00 am. It’s a perfect time to see all the animals.