Zering 2015

Songs of Spring Hidden in the

Hidden in the soundtrack of spring are important clues about environmental health.

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FrogWatch & Listen

From the tiniest spring peeper to the largest and loudest American bullfrog, frogs and toads sing a springtime chorus to attract mates. By listening in, biologists and citizen scientists gain valuable insight into the health of our aquatic ecosystems.

BY CRISTINA SANTIESTEVAN

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The animals in the Zoo's Small Mammal House may be tiny, but their stories and personalities are immense. Take a stroll through the exhibit and meet some of the Zoo's smallest residents.

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For new Zoo arrivals, quarantine is a must. Quarantine allows time for new animals to acclimate to life at the Zoo, while veterinarians assess their health and nutritionists refine their diets.

SMALL MAMMALS, USUAL DISCUSSION OF THE DISCUSSI

Their bodies may be little, but there's nothing tiny about these animals' stories or personalities.

ike the animals that live there, the Small Mammal House can be a little inconspicuous. Curator Steve Sarro says the building is easily overlooked because it is set back a bit off Olmsted Walk, behind a bronze statue of a giant anteater. Even people who notice the building often walk past, says biologist Kenton Kerns, who routinely hears people say, "Oh, Small Mammals. That's just the rats. Let's not go in there."

"And that's so sad!" Kerns exclaims. "I wish I could tell them, 'It's *happenin*' at the Small Mammal House.""

And it is. Births, arrivals, new animals, and new exhibits—it's all happening at the Small Mammal House.

Curator Sarro elaborates: "At the Small Mammal House, we focus on the many, many frequently overlooked species. When people go to the Zoo, they think they want to see elephants, flamingos, bears, and lions. We show them that there are a ton of other animals that are just as cool that they haven't thought about."

Golden Oppotunities

The first animal you see—probably—when you walk in the front door of the Small Mammal House is an excellent symbol for the whole building. It's a golden lion tamarin. This fascinating animal definitely is *not* is boring. Nor is it a rat.

The golden lion tamarin is, in fact, a primate, one Sarro calls "our most storied animal." A very small, orange monkey, it is native to Brazil and is extremely endangered—only about 3,200 remain in the wild. The fact that any remain in the wild at all is thanks, in part, to the work of the Small Mammal House and Smithsonian's National Zoo scientists. Research and breeding done at the Zoo—including a



program of free-range golden lion tamarins roaming the Zoo grounds—led directly to the successful reintroduction of these little monkeys back into the wilds of Brazil. These efforts led to the golden lion tamarin being reclassified from "critically endangered" to "endangered" in 2003.

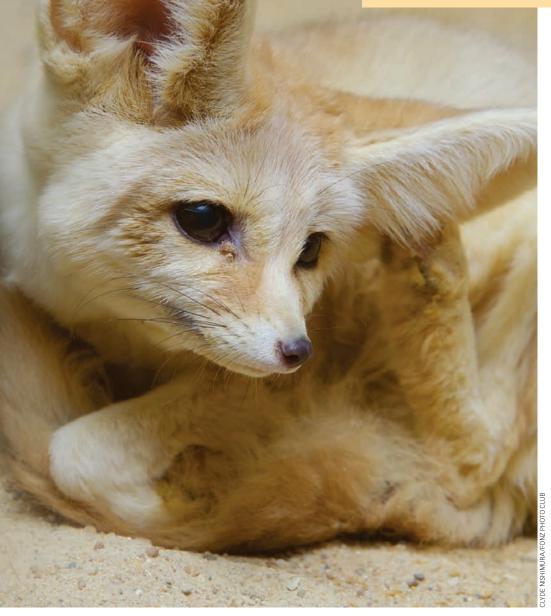
Golden lion tamarins no longer roam the Zoo grounds at large, but visitors can still find more than a few in the Small Mammal ABOVE The life-size giant anteater statue outside the Small Mammal house was installed in 1937. FACING PAGE: Golden lion tamarins are among the most popular residents in the Small Mammal House.

SMALL MAMMALS, big deal

House, hanging from trees and delighting visitors with their antics.

A close relative, the golden-headed lion tamarin also lives in the Small Mammal House, just a few enclosures down. There may be even more of those soon—a new golden-headed lion tamarin is coming in

"This building is incredibly family-friendly," says Sarro. "The animals are right at a child's-eye level."



Fennec foxes' huge ears help keep them cool in their desert climate by radiating body heat.

to pair with one already there. This could mean baby golden-headed lion tamarins in the House soon!

And tamarins aren't the only amazing animal hiding in the Small Mammal House.

An Icon Restored

Continue to your right from the golden lion tamarins and you'll find another kind of living symbol. Back when each area of the Zoo was represented by an icon, a fennec fox stood for the Small Mammal House. But fennec foxes haven't resided here for seven years—until now. A female fennec fox named Daisy just moved in, and a male will join her later this year. Sarro is particularly excited about the fennec foxes. "They have huge ears, and they're perfectly adapted to their environment. They're very personable, charismatic animals," Sarro says. "And they just couldn't be any cuter."

If there is anything cuter than an adult fennec fox, it's a baby fennec fox—and the Zoo is hoping to welcome some of those before long.

Another reason the staff is excited about the fennec fox—beyond its cuteness and conservation—is that it is the only canine in the Small Mammal House.

Far from housing only rodents, the 40 exhibits in the Small Mammal House hold primates, small carnivores, a few birds, a cat, a marsupial, and even some animals whose closest relatives are elephants.

The marsupial is the brush-tailed bettong—the only marsupial currently living at the National Zoo. A cursory glance might dismiss it as a small, brown rat-like creature, but a closer look reveals a striking animal—one that's critically endangered in its native range in Australia.

"They look like miniature wallabies," says Kerns. "Which is crazy, because wallabies look like miniature kangaroos as it is."

The cat is a sand cat called Thor for his lovely blond coat. Sand cats are native to Africa and the Arabian Peninsula. A female will be joining Thor soon, with hopes for sand cat kittens in the near future.

Hidden Gems and a National Treasure

Like the bettong and many of the other animals at the Small Mammal House, the sand cat is typically nocturnal.

"Night is when these small animals can avoid predators," Kerns says. "In our building, a lot of them will calm down and realize there's no predator, and then they're up and active a lot more during the day than they are in the wild."

But sometimes that does mean you have to look a little to find the animal or you'll miss it.

A lot of people, for example, miss the animal in the next enclosure: the shorteared elephant shrew. Related more closely to elephants than to shrews, it weighs in at a tiny one to 1.5 ounces fully grown. The Zoo has a history of breeding these animals, which are around a quarter of an ounce when they're born. "They're the size of a cotton ball with legs, a nose, and a tail," says Kerns. But they're not babies long; within 45 days they are sexually mature adults.

Just a few enclosures down is a living legend. Curled up at the back of an exhibit (kids may have to stand on their tiptoes) is a black-footed ferret. Once thought extinct in the United States, ferrets were rediscovered in the 1970s. The Zoo was crucial to the success of their breeding and reintroduction into the wild, and now North America's only native species of ferret once again lives where the buffalo roam.

Black-footed ferrets are still endangered in the wild, but they're also rare in zoos. Only a handful of zoos have them on exhibit. In fact, that goes for many small mammals. While small mammal houses were once common in zoos, fewer and fewer are left. This makes the National





Zoo's Small Mammal House all the more exceptional and important.

"A lot of people don't realize how conservation issues affect the small things," says Kerns. "They're affecting the little guys just as much as the big guys. The main messages are 'save pandas, save elephants.' And we completely agree with that. Those CLOCKWISE FROM TOP LEFT: Short-eared elephant shews, black-footed ferrets, and Thor the sand cat are among the many unusual animals to be seen in the Zoo's Small Mammal House.

SMALL MAMMALS, big deal

are flagship species. If you save panda habitats, you're saving habitats for all the small mammals there too."

Rodents of Unusual Appearance

Around the corner from the black-footed ferret are some of the most remarkable animals in the Small Mammal House: the naked mole-rats.

"There are two extremes," Kerns says. "There are people who see them, read 'rat,' on the sign and want nothing to do with them. They fly past as if a mouse is chasing them. And then there are people who go 'GASP! The naked mole-rats! I have been looking forward to this all day!"

Naked mole-rats are intriguing, even if not your cup of tea. The only truly eusocial mammal, they live in colonies with queens, like bees. They live underground full-time. They can live to be more than 30 years old. Only the queen breeds, and when she does, she gets longer rather than wider so she doesn't get wedged in her own burrows.

Compare the naked mole-rat—wrinkled, blind, pink—with the nearby giant jumping rat: large, brown, and athletic. Native to Madagascar, and nocturnal, jumping rats are endangered. They're also an excellent example of the Small Mammal House's mission, says Kerns. "The Small Mammal House is one of the few places at the Zoo where you can see how species changed as they spread across the world and adapted to all these different environments."

Celebrity Sighting

Just across from the naked mole-rats are some instantly recognizable critters: meerkats. "They're a staple," Kerns says. "They play, they're very curious, they stand on their hind legs, and they're almost always moving. Everyone loves to see them. It's always a good day when you see a meerkat."

The other superstar of the Small Mammal House is the sloth, who lives in the big corner exhibit with a bunch of other species, including golden lion tamarins. He doesn't move much, but even when just hanging around sleeping he fascinates visitors.

Another animal that fascinates zoogoers looks like a squirrel with a

fancy dye job. In fact, that's practically what it is. Native to Southeast Asia, the Prevost's squirrel is almost identical to the wild ones scampering around Rock Creek Park. The biggest differences between the species are their coloration and the fact that North American squirrels hibernate.

Missy Hawkins a geneticist with SCBI is studying the genetics of Prevost's squirrels, and three other species to learn about how the topography and geography of Indonesia has changed and evolved.

Family-Friendly

The Small Mammal House is unique on another level as well.

"This building is incredibly familyfriendly," says Sarro. "One of the amazing things about the Small Mammal House is that so many exhibits are low to the ground. Kids can see animals without Mom and Dad having to pick them up. The animals are right at a child's eye level."

The Small Mammal House isn't just good for young humans: It's also a good spot for animal babies.

"That's the awesome thing about the Small Mammal House for a visitor," says Kerns. "You can't come back and have the same experience twice.



ABOVE: Naked mole-rats owe their unusual appearance to their subterranean habitat. RIGHT: Screaming hairy armadillos get their name from the loud piercing sound they make to scare off predators.



Clark, the Zoo's male prehensile-tailed porcupine, was recently introduced to a young female, in hopes that prehensiletailed porcupettes— baby porcupines will follow sometime this year. Similarly, a new red-ruffed lemur has just arrived with a breeding recommendation. Baby red-ruffed lemurs would be a major conservation success; the species is critically endangered in the wild.

New Kids on the Block

Not all the new residents at the Small Mammal House are babies. Clementine and Trixie, two of the Zoo's newest residents, are striped skunks. Sarro explains that they help teach people that really cool animals live right in their own backyard. The skunks will also participate in the Meet a Mammal program, a daily opportunity for visitors to see a small mammal up close.

CLOCKWISE FROM RIGHT: **Prevost's squirrels**, redruffed lemurs, slender-tailed meerkats, and Linnaeus' two-toed sloths can all be seen in the Small Mammal House.

Three other new arrivals to the National Zoo are bound to attract attention for their names: the screaming hairy armadillo, greater mouse-deer, and tamandua (coming this spring). The screaming hairy armadillo, as its name suggests, is hairier than most armadillos and hollers when disturbed. The mouse-deer is an ungulate a hooved animal—that stands only 12 to



14 inches tall. And the tamandua is an arboreal anteater with a prehensile tail. These animals, all fascinating in their own right, only increase the diversity and attraction of the Small Mammal House.

"Every zoo you go to, you're going to see a lion," says Sarro. "But you're not going to see a tamandua at every zoo."

Keep an eye on the Small Mammal House—new species and new babies will continue to arrive.

"That's the awesome thing about the Small Mammal House for a visitor," says Kerns. "You can't come back and have the same experience twice. There's so much going on. What you see changes with the time of day and the time of year. That's what makes the Small Mammal House so unique and so fun."

Sarro agrees: "Nobody goes away disappointed." **SZ**

-BRITTANY STEFF is an editor for the Zoo's website and a veteran contributor to Smithsonian Zoogoer.





