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Komodo dragons highlight Indonesian adventure

By **Holmes Rolston III**

For the Coloradoan

A dragon!

I stood 10 feet from a huge Komodo dragon, a lizard the size of a crocodile. I crouched down to let a ranger take a photo of me behind the dragon, pulling off my gray broad-brimmed hat, quickly tucking it under my arm.

"No! No!" he shouted. "Don't wave your hat. He'll think it is some prey he can eat and lunge for it. Remember they can kill water buffalos!"

I backed away — slowly.

I was on Komodo Island in remote Indonesia, a World Heritage site and sanctuary for these dragons. This also is a UNESCO Man and Biosphere Reserve. The dragons are found only here, on Rinca Island, Flores and a couple of nearby small islands. They were unknown in the West until their discovery in 1910 by a Dutch army officer.

Today, they are on the IUCN Red List of threatened and endangered species. The largest living species of lizard, they grow up to 10 feet in length. I saw half a dozen that size. The dragons have the smallest geographical range of any large carnivore.

The sanctuary is visited enough that the dozen or so monsters I faced during my walk were more or less habituated. The 1,300 lizards on Komodo are seldom dangerous. But my guide had earlier shown me a list of a dozen and a half people bitten in recent years.

Why these huge lizards are here nobody knows. Other large lizards are known as fossils. Of course, there were the dinosaurs. There are no large carnivore mammals here, and some think top predators grow large. Or that reptiles grow large to fill niches elsewhere occupied by mammals, as with the turtles on the Galapagos.

I also saw a couple dozen Timor deer, a principal prey species, often closer to the dragons than I thought safe. I managed to spot four wild boar, another favorite prey species, but the boar kept their distance in the bushes.

I had to use airplane, motor car, boat and foot to get here. Earlier in the day, I had spent five hours at sea, weaving around the spits and headlands of dozens of the 15,000 islands that comprise Indonesia. That was quite a scenic ride, often with mountain cliffs dropping suddenly to a narrow strip of sandy beach and the sea. For the last hour, none of the islands seemed inhabited.

Surprisingly, I was the only passenger on a rather ramshackle 50-foot boat, with a crew of four. They gave me a seat in the middle of a covered foredeck, at a table with a view all around.

Midway through the trip, the cook produced a fine Melanesian meal of chicken and vegetables over rice that was tasty and well-prepared. I couldn't help but wonder what the kitchen down in the hold was like.

Rinca is another refuge island. This also is a marine reserve and underwater is one of the world's richest marine environments. We reached Rinca about 11 p.m. and cast anchor.

I slept on the deck, where they arranged a decent bed with two mattresses. I awakened to long-tailed macaques on the boat, hoping for food.

As I went ashore, I passed a few feet from a large dragon sunning itself on a stump. It was constantly sticking out and drawing in its 18-inch yellow-forked tongue, using it for smelling. They are able to smell carrion up to three miles away.

On a half-day hike on Rinca, I saw a couple dozen of the

TRAVELERS NOTEBOOK

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1,400 dragons on this island, including some young. They mate once a year, in August. In September, the females lay 15 to 20 eggs in a big hole they dig, here called a nest. I saw half a dozen of these.

The orange-footed scrub-fowl, or megapode, a big-footed, chicken-sized bird, also likes to use these den sites. It lays its eggs and hides them in the ground. It has strong orange legs and a pointed crest.

I wasn't familiar with birds that bury their eggs to hatch them. Megapode chicks break out of their shells with their claws, hatch with open eyes, full wing feathers and downy body feathers, able to run, pursue prey and sometimes even fly on the same day they hatch.

I saw several pairs scratching in the woods and once digging into one of these egg sites. In turn, I saw a yearling dragon, digging for megapode eggs.

These dragons are among the rare vertebrate species capable of parthenogenesis — virgin birth. Unfertilized females produce eggs that hatch as males. This has been confirmed in captive dragons



Holmes Rolston III kneels behind a Komodo dragon on an Indonesian island named after the large lizard.

COURTESY OF HOLMES ROLSTON III



in zoos in the U.S.

That such females could produce males would be impossible in the mammalian XY genetic system. But the Komodo dragons have a different sex-determination system known as the ZW system. This also is used by some fish and crustaceans such as the giant river prawn and by butterflies and moths.

On Rinca, after a half day of searching, we found two wild water buffalo. More accurately, these are feral buffalo, but they have been wild for several centuries. These are massive animals, and I wondered how even a 10-foot lizard could bring one down.

Their technique is to grab and wound the buffalo, infect-

ing it with toxic bacteria in their mouth and with some venom thought to be relatively weak. They have sharp claws and about 60 curved, serrated teeth. The buffalo dies a few days later and they eat it when debilitated and dying and after death as carrion.

At the far point of the Rinca hike, we reached a buffalo watering pond. The lizards make this their hunting ground. A half dozen buffalo skulls lay scattered about. The dragons can eat as little as once a month. They sometimes eat each other, including their young. The newborn young climb trees for safety.

Flores, a sizeable island with an airport, also has a population of dragons that are

not well protected and not easy to see. This is the island where in 2003 fossil bones were discovered of an anomalously small population of humans, *Homo floresiensis*, Flores Man, nicknamed the hobbits.

As I left, I thought how strange an island once with the tiniest people in the world also contains the world's largest lizards and bigger than these people who once co-existed with them. Dragons, we mostly think, are only in fiction. But here, truth is stranger than fiction.

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