

## INDIA 2020

From February 8 until February 27, 2020, Lynn and I were in India on safari looking for this:



Indeed, this is an actual photograph from the trip taken by Durgesh Singh, our guide for the first eleven days of our trip. Durgesh is highly regarded guide for cultural and wildlife journeys. You are looking at a female Royal Bengal Tiger, *panthera tigris tigris*.

As well as taking game drives to see tigers, we made a number of cultural stops, including the Taj Mahal. I will return to these events later. In total we did 10 game drives in 3 different parks and saw 8 tigers. This is considered quite good, the more so because one sighting involved a mother and two 6-month-old cubs. Cubs of that age are  $\frac{3}{4}$  adult size and very playful. The general strategy was to listen for alarm calls from birds and monkeys and to follow these until the location of a tiger (or perhaps a leopard) was pretty certain. Then you sit and wait. Not all guides did this. Many thought that if you see nothing you should keep moving. We would eventually spot part of a sleeping tiger in the bush. Eventually, it would get up and go look for water or food. Then you get to see them walk or run through the

forest. The beautiful creature above was seen in the afternoon of the first day in Ranthambore Park in the state of Madhya Pradesh. Its capital is the infamous Bhopal (Union Carbide disaster, 1984). Picture 1 in the Picture Log includes the surrounding landscape, removed for the enlargement of the tiger in the picture above. Here, in Pictures 2 and 3, she is yawning as she awakens (in order to present the photos as large as possible I am showing them in a separate photo files, the Picture Logs).

Picture 2

Picture 3

After yawning, she stretches (Picture 4) before moving out (Picture 5). She walks along a rocky terrain which is enlarged in the Picture 7.

Picture 6

Picture 7

She walked slowly, knew we were there, and ignored us. We followed in our open Jeep. We follow her down the rocks towards running water and dried grasses.

Picture 8

Picture 9

There was a small stream between her and us. We had a driver, our guide Durgesh, a local park guide and Lynn and me. As soon as the tiger gets to the bottom of her walkway, she finds some thick bushes and disappears. This captures the experience of seeing our first tiger in the wild. At some points of this walk she was no more than 20 feet away.

The physical dimensions of the Bengal Tiger are impressive. Standing 3 feet to 3 feet 6 inches at the shoulder, females weigh up to 310 pounds and males weigh up to 490 pounds. Adult females are 7.9 to 8.7 feet long and adult males are 8.9 to 10.0 feet long. An African adult male lion weighs 420 pounds.

Game drives are on one lane dirt roads through the forests. They can involve difficult climbs up and down cliffs and sometimes lots of dust. Usually there are two a day. The first drive begins before dawn. This is done early because tigers are

most active in early morning and in late afternoon. They hunt at night. Humans have to be out of the parks at night. There are no fences, just buffer zones between conserved parks and farmland or cities. Farmers sometimes lose animals to tigers, such as goats, sheep and even the sacred cows. The government has a program of immediate reimbursement for lost property so that farmers don't set out poison to kill the tigers. It is a difficult balance to preserve the tigers and to protect the rights of farmers. We would get up around 6 am and drive perhaps 20 minutes to the park and when inside it would still be quite dark. One time just a few feet into the park we encountered a large elderly male tiger getting up from his nap. See if you can spot him in Pictures 10-12. In Picture 13a he turns an ear towards us and then looks around in Picture 13b and Picture 13c. We were able to follow him for some time after he started walking off. Unfortunately, we were unable to photograph his walk since following him in a Jeep on a very bumpy road made it nearly impossible.

#### Pictures 10 to 13 a, b, c

A morning drive lasts up to 6 hours. The late afternoon drives start around 3 pm. It gets dark shortly after 6 pm. We did 4 drives in Ranthambore park, 4 more in Satpura National Park, and 2 in Pench National Park. We were pretty much in the center of India, perhaps slightly north of center.

After the lucky early morning drive, we did not see any tigers the rest of the morning or during the afternoon drive. Many of the other visitors didn't see any tigers all day. However, after leaving the park a little after 6 pm a tiger was spotted leaving the park as well. It was probably headed for a nearby farm where the pickings were easy (typically, in the wild, a tiger might get a kill once in twenty tries). About 15 Jeeps were leaving the park simultaneously, including ours. They began a wild and woolly jockeying for position as they followed the tiger's unrushed march through the bush to the road.

#### Pictures 14 to 16

In spite of many near misses caused by the enthusiasm generated by not having seen a single tiger in the park (except for us) there were no collisions.

Tigers are not the only animals worthy of observation. Some species were seen as we drove to a site known to be good for seeing tigers and others were chance encounters that turned into long periods of waiting and observing. Wild boars (*sus scrofa cristatus*) were frequently encountered. They are smart, fecund and tasty (so the tigers say; what does the fox say?). Picture 17 shows a male

making an overture to a female. In Picture 18 the male is making piglets, the female's face is blurred to protect her identity and a youngster (lower right) is observing technique for future reference. Picture 19 shows the satisfaction of all participants.

In Picture 20 we see a very large Gaur (also called the Indian Bison). This species is perhaps the largest bovine (*bos gaurus*) on the planet. In spite of their size they blend into the landscape so well that they can be nearly invisible a short distance away. Their legs are white, looking like the small trunks of trees. On one occasion we observed four Gaurs, about 100 feet away in some undergrowth. I looked away and then back at them again. I could only see one. Doing the same again, looking away and then back at them, all four were again visible. On a long drive looking for tigers we happened upon a female Gaur in a small grassy clearing. She was grazing and only took cursory cognizance of our presence. For some reason the local guide decided that we should sit and watch. After at least ten minutes, pronking (stotting) like a gazelle, a juvenal gamboled out of the forest into the clearing and up to its mother. Rudely jamming his/her snout against mother's udder earned a drink of milk (Picture 21). We watched this for 15 minutes. The guide said he had observed this behavior only once before, having been a guide for many years.

The guides educated eyes spotted the animal in Picture 22 while we were lurching along a bumpy, rocky road. Is it another Gaur? The fur is longer, the legs are black, no horns are visible. It is moving left to right foraging. It is a sloth bear (*melursus ursinus*)! You may be able to make out its white snout mingled with the dried grass at the lower right. It is looking for termite mounds which we have seen although not in great abundance. The descriptive word *sloth* refers not to its disinclination to be active but instead to the shape of its claws (like those of a tree sloth) designed (in the case of the bear) for tearing open the cement like hard exteriors of termite mounds.

One of our drives turned into a lesson about karma. We were motoring along a high ridge on a pretty smooth dirt road. We went under a branch that was about twenty feet above us. As we passed under, I announced that there was a nightjar (*caprimulgus asiaticus*) on the branch. No one said a word and we continued along the road. I repeated myself and this time Durgesh said he saw a leaf wrapped around the branch. (I have not mentioned that much of the forest is made up of teak trees (*tectona grandis*) and they have very large leaves.) The local guide agreed with Durgesh. I insisted that it was not a leaf. Everyone knew that nightjars are nocturnal and they would never be out in direct sunlight. The driver put the Jeep

into reverse and as easily as he drove forwards, he drove backwards stopping under the precise branch in question. Sure enough there was a nightjar on the branch. Apologies were requested and registered. I smugly accepted the much cherished “nice spot” that accompanied an especially good spotting on a safari drive, whether in India or Africa or Brazil. I did not know that the karma meter was running during this event. Failing to see a tiger, we went back towards the park exit, but something else caught the eye of the local guide. He saw a family of wild dogs up on a cliff face made up of large and small rocks and trees. They were far enough away that you needed binoculars to see them well. Everyone saw them, the local guide, Durgesh, the driver, Lynn!, but not I (and I had the best binoculars). Much as I tried to follow directions from everyone, I just could not see the dogs. That’s karma. The next morning, we went by the same place and all of us could see the dogs just fine. The Indian wild dog (dhole, *cuon alpinus*) looks more like a Dingo than like an African wild dog. It is quite vulpine in appearance and behavior. Pictures 23 and 24 show the vixen with pups (there were four pups). She leaves the pups in a cave and looks for her mate. The wait is long.

Picture 25

Picture 26

We saw quite a lot of other animals in Ranthambore. Very abundant are the Chital deer (*axis axis*). They are also called Axis deer and Spotted deer. This name leads to endless attempts at humor such as “I spotted a Spotted deer.” “I spotted it first.” “I spotted a Croc.” Is that the Spotted Croc?” “No, just a Croc, no spots.” In Africa it was the Spotted Hyena who prompted these inanities.

Picture 27

In Picture 27 a male Chital deer does his best to define “low hanging leaves.” Picture 28 shows the White-throated Kingfisher (*halcyon smyrnensis*). Given its striking colorful appearance, this seems like an odd choice for its name. In Picture 29 is a young Indian Crocodile. This is a freshwater species (*crocodylus palustris*) that can grow as large as the saltwater variety. It is also called the Marsh Crocodile, the Broad-snouted Crocodile and the Mugger Crocodile.

The Blue Bull is the largest of the Asian Antelopes.

Picture 30

The one pictured here is a male. It is known as the Nilgai (*boselaphus tragocamelus*). The horns are small and permanent, in contrast with the antlers of the Chital deer (horns are permanent, made of the protein keratin, perhaps with a bony core, and unbranched; antlers are annually shed and regrown, made of bone and branched). An adult Crocodile is featured in Picture 31. If its tail were straightened out it would be about 8 feet long.

The end of our visit to Ranthambore Park, February 16, was also the end of our first week in India. Let's go back to the beginning, our arrival in New Delhi, February 10 at 2:05 am local time. The first surprise is how many hours different New Delhi is from Atlanta. The answer is 10.5 hours. India is wide enough to encompass 2 time zones of typical width 1000 miles. Both the north and south regions of India are quite narrow, making one time zone for both reasonable. The government decided to have just one time zone for all of India and they chose to compromise on which time zone it would be by choosing GMT+5:30. We were allowed to use this first day to acclimate to the shift in time from Atlanta to Delhi. Our first two days were spent at The Oberoi, Delhi, a five-star hotel with every possible amenity. In Picture 32 we see that Ron is not going to get fat(ter) in this hotel. Maybe presentation is everything, Picture 33.

After breakfast on February 11 we go on a tour of Old Delhi. We drive along the Rajpath to visit the largest mosque in Asia, Jama Masjid. To get to the heart of Old Delhi we transfer to a pedicab, a rickshaw with a one man-power engine, that can negotiate the narrow alleyways and avoid hitting the many persons on foot. In order to set the scene, remember that India is 79.8 % Hindu (14.2 % Islam, 2.3 % Christian plus small numbers of adherents of Sikhism, Buddhism, Zoroastrianism, Sanamahism, Judaism and Jainism.) The Hindus consider the cow sacred. There are cows everywhere. They walk in the middle of the roads and highways. They are everywhere! And yet, there is no cow flop anywhere to be seen, much less to be stepped in. This valuable commodity is quickly collected by an invisible army of cow flop merchants who also are everywhere. The alleys, streets and roads are clean. Women mix the flops with hay and sell them as fuel for fires, as paving for floors, and to make soaps (*soaps*, not *soups*).

#### Picture 34

We see tourists at the entrance to Jama Masjid. Looking down from the mosque you see the street for silver markets and the typical jumble of modes of transportation.

### Picture 35

In Picture 36, Ron is accompanied by the local guide and by Durgesh.

In the afternoon, sightseeing in New Delhi continued. We drive past India Gate which was built in honor of the Indian soldiers who died during World War I. Besides the buses there are several motorized (electric) pedicabs.

### Picture 37

Our next stop is Rashtrapati Bhawan, built in early 20<sup>th</sup> century as the imperial residence for the Viceroy. Since independence in 1947 it has been the official residence of the President of India. The Parliament House is a unique circular building with huge colonnades.

### Pictures 38, 39

Our next stop is Humayun's Tomb, the first of the grand dynastic tombs of the Mughal culture. This structure was built around 1570 and exemplifies the technique of stone inlaid with stone. See Picture 40. In Picture 41 you can see a 6-pointed star symbol which is an ancient symbol for Hinduism and for Islam. It antedates the star of David in Judaism. It is often seen with another very old and popular Jainism symbol, the swastika, which means "well-being." We saw cabs bearing the swastika symbol.

The last stop on our tour of Delhi is the 70-meter-tall Qutub Minar from the 12<sup>th</sup> century. This was the Sultanate period and the tower commemorates the conquest of Delhi by Qutb al-Din Aibak, the slave and chief general of Sultan Muhammad of Ghori. The tower is shown through one of the arches that displays fine stone carving.

### Picture 42

A bird followed us. Very inquisitive and unafraid it was very close by. It is an Indian Myna, also called the Common Myna (*acridotheres tristis*). We would see many of these birds on our safari drives.

### Picture 43

Also common was the Indian Palm Squirrel (*funambulus palmarum*). It has three stripes down its back. We would run into these again at a safari lodge. They have a very loud whistle when alarmed.

#### Picture 44

Some of the stone carvings were splendid. These were made in sandstone and the centuries have been kind to them.

#### Picture 45

Tonight, will be our last night in Delhi. Tomorrow, February 12, we will drive to Agra, to see the Taj Mahal among other sights. From The Oberoi, Delhi we will move to The Oberoi Amarvilas. This is owned by the same company that owns The Oberoi, Delhi, is also a 5-star hotel and has a completely different architecture when compared to The Oberoi, Delhi.

The morning of February 12 was spent driving to Agra through verdant farmland. Agra is globally renowned for the Taj Mahal, the most well-known of India's cultural sites. It is the top earner from tourism. Agra was the royal city of the Mughal era and has many other cultural sites. We visited the Agra Fort and then the Taj Mahal for sunset. The next morning, we again visited the Taj to see the morning sunrise. Both times we had very clear air, no rain and no fog.

The Agra Fort is an example of Mughal architecture in red sandstone (Pictures 46-47). It was the seat of the Mughal Empire for several generations. Akbar erected the walls and gates and the first buildings on the eastern banks of the Yamuna River. Shah Jehan added the impressive quarters and the Mosque. Shah Jehan was the 5th Mughal Emperor from 1628 to 1658. His most impressive construction is the Taj Mahal. It houses the tomb of his favorite wife, Mumtaz Mahal. Shah Jehan's tomb is also there although in a less distinguished spot than that of his wife. The Taj Mahal took about 20 years to build using 20,000 workers around the clock. The Shah was not knowledgeable about practical matters and bankrupted the Empire with this project.

#### Picture 48

Picture 48 shows a typical tourist pose, partially eclipsing the Taj. The monument is protected on its west, north and south by the Agra Fort buildings having arches framing the Taj as in Picture 49. The east is protected by the

Yamuna River and the high cliffs reaching up to the plateau upon which the Taj sits. The sheer size of the Taj is perhaps grasped by Picture 50 in which we see persons in the foreground and in the distance where they look like ants on the wall. The Agra Fort was constructed by the great Akbar beginning in 1573, using the labor of 4000 men over 8 years. Picture 51 captures this perspective as well.

The morning of the 13<sup>th</sup> we went back to the Taj. In Picture 52 you can see that persons are dressed for the cold. This picture and Picture 53 are of the Agra Fort. You can always spot an Englishman in short pants (Picture 54) at any temperature. Pictures 55-57 are various perspectives and poses. In case you can't read the sign in Picture 58, it says: **Please do not pluck the flowers and do not move in lawns.** In Picture 59 one of the carved arches of the Taj is seen. In Picture 59b, two Rhesus Macaques (*macaca mulatta*) maintain a sign of prohibitions. The Taj has many empty rooms. One is seen in Picture 60. Random tourists are seen in Picture 61. The very fine artwork of the entry arch for the Agra Fort is seen in Picture 62. Sacred cows visit a strip mall and a very clean street.

#### Picture 63

Lynn decides to buy a bird cage that is a replica of the Taj.

#### Picture 64

We had an excellent view of the Taj looking west from our hotel room at The Oberoi Amarvilas. The gardens of the hotel are visible in the foreground and then there is the forest between the hotel and the Taj. On the north and south ends of the Taj the Agra Fort buildings can be seen as well.

#### Picture 65

In addition to our safari drives in Ranthambore we also were in Satpura and Pench. From Agra to Satpura we traveled by train. From Pench we flew to Mumbai on the western coast. Mumbai is the financial center of India, its largest city, and is characterized by many tall modern buildings, big highways and no cows! Mumbai is still 80% Hindu, but the city manages to keep all the cows out of the city so that international businessmen can maintain a sense of living in the 21<sup>st</sup> century. The richest man in India, Mukesh Ambani, has as his house a 27-story skyscraper right downtown. Our driver explained, as we drove by, that he set aside 7 stories for his fancy car collection. Ambani was worth \$58 billion in 2019, according to Forbes. It is rumored that his "house" cost \$1 billion to build. Ambani is 62 and it is said

not to be concerned with charity. Recently, however, he donated \$66 million for coronavirus efforts. Mumbai (Bombay) was once dominated by fishing. Today the remains of the fishing villages and people are plain to see as a very poor shanty town at the waterfront in stark contrast to the modern city that rises above it in the background. Indeed, the outbreak of a coronavirus epidemic in these Mumbai slums is happening.

By now you may have noticed many signs written in English. English is the second most commonly spoken language in India (125 Million speakers). Hindi is also widely used (551 million speakers) but otherwise there are some 20 additional major languages and some 720 regional dialects. The official languages of India are Hindi **and** English. The only times we had trouble communicating was when we were on safari drives with local guides. Our trip guide, Durgesh, translated for us.

I will offer several more pictures that remind me of events, if a bit out of sequence. Picture 66 is, of course, the Taj, close-up. You can see the fine stonework presentation of a passage from the Koran around the rectangular entrance.

Picture 67 shows three Sambar Deer (*rusa unicolor*) hip-deep in a large pond covered with red algae that the deer enjoy eating. They also are relatively safe from predation by tigers while in the water. Tigers like water but they are not very mobile in deep water. The Sambar deer are large and plentiful. This picture was taken in Ranthambore Park. In Picture 68 you can spot an owl, a Spotted Owlet (*athene brama*). Usually nocturnal, they are sometimes spotted during daytime, as was this one. This one is spotted night and day.

Picture 69 is a view of the Yamuna River from the west side of the Taj. Notice the razor-ribbon barbed-wire fence on the edge of the cliff down to the river. In Picture 70 we see random tourists in front of a part of the Agra Fort that protects the Taj.

Picture 71 is a nice look at Chital Deer. A juvenal crocodile is featured in Picture 72. It is about to enter the red algae eaten by Sambar Deer in an earlier Picture. In Picture 73 we have another look at our first tiger just before it disappears. More Sambar Deer are seen in Picture 74. A young crocodile protects his side of the creek in Picture 75.

Gray Langur monkeys (*semnopithecus*) want to enter the park too.

## Picture 76

Once we were in the park we were followed and accompanied by the birds in Pictures 77-78. They were intrepid and liked being around vehicles the size of Jeeps. These birds serve the role of the African Oxpecker. They eat insects and parasites on the skin of deer, antelope and cattle. Although I cannot positively identify these birds, they are not Oxpeckers of India, a species under threat, and already being replaced by those in the picture. I thought they were a kind of Myna but can't prove it. \* India has other examples of replacement birds. For example, farmers for years have added chemicals to the diet of cattle to protect them from disease and for other reasons. Diclofenac is used as a painkiller for cattle. It is now illegal but there is a black market dealing in it. When cattle that have been treated with diclofenac die and the vultures eat the carcasses the vultures themselves die from this chemical. Vultures are nearly extinct in India. However, a species of Kite (along with feral dogs) has taken over the task of carrion eating and dead carcasses are not piling up. Whatever these birds in the Pictures are called, their affinity for us and our Jeep is not based on friendliness but on the possibility that we are covered in parasites. \* Because we live in the computer age, I am able to make a copy of Picture 78 and email it to Pradeep Kumar, about whom you will learn more below. He emailed back the name: Rufous Treepie (*dendrocitta vagabunda*). What a great name! I had my answer 6.5 hours after asking. A Treepie is in the crow family, *corvidae*.

Sometimes it was fun just driving through the forest on a sandy road that twisted and turned and changed elevation and was negotiated at high speed. This was sort of like being on a roller coaster and I was pretty sure these one lane roads were also one way. As we came around and over a complex curve, we were surprised to see overhead a large number of Flying Foxes, a type of fruit eating bat (megabat). They were suspended upside down like a bat would be (Pictures 79-80). This species, *pteropus medius*, is distantly related to your small echo-locating bat (microbat). They have, instead, keen eyesight and a strong sense of smell. They were a treat to see and the only time we saw them.

While in Ranthambore, we stayed at The Oberoi Vanyavilas, another five-star hotel. Pictures 81-82 show our rooms and the welcoming ritual involving a turban and flower tiara. In Picture 83, you will see Lynn's pet elephant (Picture 84). I know that Picture 85 is out of place (back in Agra) but it is such a nice view from our hotel room there.

On February 16, we drove to Jaipur and took a plane from Jaipur to Bhopal and then drove on to Satpura National Park. We spent three nights at the Reni Pani Lodge outside of the Park and near Satpura, Madhya Pradesh. The Park is located in the south of Madhya Pradesh. It is the core area of the Pachmarhi Biosphere Reserve. The elevation ranges from 320m to 1352m inside the Park with tall sandstone mountains, narrow gorges, ravines, waterfalls, streams and dense forests. The teak tree and the sal tree predominate, along with ferns, mango trees and birds. Along with the mammals we have already seen in Ranthambore, tiger, sambar, gaur, nilgai, cheetal (chital), and dhole we also saw the Indian Giant Squirrel. Numerous bird species are also present in Satpura Park. We did four game drives over a two-day period. The accommodations were more rustic than The Oberoi hotels, and more rustic than Lynn liked. I rather liked it there. On February 19 we departed for Pench National Park.

Our lodge at Pench was up in a tree. An entire suite of rooms was erected on posts and branches of a very large tree. A wooden stairway took you up about 20 feet to the front door. To get back and forth to the dining lodge in the dark you needed to shout out (actually honk a clown horn) for an escort, lest a tiger should dine on you. Pench is now under the umbrella of "Project Tiger" having been named the 19<sup>th</sup> Project Tiger Reserve back in 1992. The Pench River runs through the Park but by the end of April it has dried up and the only source of water is the Pench Reservoir. During the first night, there was a loud crashing sound above our heads on the roof. I went out the front door, about 20 feet above ground to see what was happening. A large Langur ran past me and down the tree. He had been resting on a branch when it broke and hit our roof.

I cannot remember whether this event occurred in Satpura or in Pench. I think it was in Satpura. Anyway, we were on the lookout for a tiger already fleetingly spotted by another group. Several Jeeps were patrolling for a sighting. There was a lot of anxious jockeying for position. A caste system for drivers and local guides seemed to exist and more senior guides shouted (in Hindi or some local dialect) at our driver to go back up the hill and wait until they allowed him to move. Our driver wasn't having any of it and picked out a spot to sit and watch, very much in keeping with the strategy of local guides we had had earlier, and with the approach of Durgesh who is still with us. The local guide says he sees the tiger in the dense undergrowth and that eventually it will come out our way on its way to water. I had my binoculars out and was surveying every bush and tree. Eventually the guide motioned to me to look straight-ahead into the brush. I stared through the binoculars for several minutes until I realized that the tiger was staring right back at me and filled the field of view completely. He was 30 feet in front of

me. He walked towards us and out into the open and then ran over a hill and out of sight. We were able to follow him for a few hundred yards. The rest of the Jeeps, well down the other side of the hill, missed out entirely.

Our last day in Pench Park was also one of the best. Word was out that a tiger with two cubs had been seen in a remote part of the park the day before. We spent one drive looking everywhere for them, except where they had been seen. No one thought they would stay put. On our last day of tiger drives we got it right and from the bird cries and monkey noise picked a good spot to wait for the tigers to come by on their way to water. And so, they did. Since this written document began with a wonderful tiger picture, it will also end with pictures of the mom and her cubs. You will find them at the end, a few pages below. When the cubs were first visible to us, several other Jeeps also appeared. Unlike Africa where unlimited numbers of Jeeps can converge, the number of Jeeps in the parks of India is controlled. The cubs began to wrestle and roll about. Mom would get them to move on. Were the cubs oblivious to our presence or were they so aware that they put on a show? For me, their eyes were the answer.

On February 21 we flew from Nagpur to Mumbai. We spent two nights there at the Taj Mahal Tower hotel (I know we are not in Agra, neither is this hotel). These accommodations were more Lynn's style. The next day we took a boat ride to see the famous Elephant Caves. Mumbai is made up of islands. Some connections are by causeways and some are by boat. The Elephant Caves date from sometime in the interval of the 6<sup>th</sup> to 8<sup>th</sup> centuries. Imagine a mountain of solid rock and an army of stone carvers. They carved right into the rock making large rooms replete with wall carvings of various Gods. This feat reminds one of the similarly carved monolithic Coptic churches in Ethiopia, although the Elephant Caves are much older. It is said that the Hindus have 33 million Gods. They pick and choose which ones they like to worship. The caves are dedicated to Ganesh. This explains the Cave's moniker.

We have an interesting second day of sight seeing in Mumbai with a local guide who was quite well informed. On February 23 we fly to the southern tip of India, Cochin. We then drove 50 miles to Kumarakom and stayed overnight at the Kumarakom Lake Resort. This is in the state of Kerala in the tropical Malabar Coast. We had a private swimming pool with an outdoor shower. For that matter, the entire bathroom was al fresco. In the morning of February 24, we were greeted by local bird expert Pradeep Kumar who took us to a bird sanctuary. Lynn did the first walk with us but for the second walk she stayed with the driver in the car while Pradeep and I did the walk. It reached 100 degrees Fahrenheit. Pradeep kept

a list of what I saw. The rules were fairly simple. I had to tell him where the bird was, what colors it displayed and what it was doing. If he concurred, I was credited with a **spot** (a spotted bird). In 1.5 hours, I spotted 36 birds:

- 01 Indian pond heron
- 02 Gray headed swamp hen
- 03 Pheasant tailed jacana
- 04 Black drongo
- 05 Whiskered tern
- 06 Little cormorant
- 07 Common coot
- 08 Black headed ibis
- 09 Bronze winged jacana
- 10 Brahmini kite
- 11 White breasted waterhen
- 12 Cattle egret
- 13 Little egret
- 14 Intermediate egret
- 15 Painted stork
- 16 Common myna
- 17 Baya weaver
- 18 House crow
- 19 Indian jungle crow
- 20 Oriental magpie robin
- 21 White throated kingfisher
- 22 Red vented bulbul
- 23 Ashy prinia
- 24 Little grebe
- 25 Cotton pigmy goose
- 26 Black winged stilt
- 27 Common swallow
- 28 Black hooded oriole
- 29 Plain prinia
- 30 Great egret
- 31 Purple rumped sunbird
- 32 Oriental darter
- 33 Pale billed flowerpecker
- 34 Blue tailed bee eater
- 35 Red wattled lapwing
- 36 Common pigeon

In the afternoon we boarded a houseboat with a crew of three for a leisurely overnight excursion downstream. We went through a network of tranquil canals and lagoons in the Alleppey backwaters. Many summer homes were on the banks and houseboats were plentiful. We left the houseboat and drove 40 miles to Cochin. We had two more nights in India before flying home. The Brunton Boatyard hotel of Cochin served as our headquarters for these last days. Cochin is the commercial capital of Kerala and holds the title of “Queen of the Arabian Sea.”

In the evening we attended a Kathakali dance performance. This is a dying art form with elaborate costumes and makeup which are applied in front of the audience before the performance. Men play all genders. A rhythm is set by a drummer who has a barrel drum hanging by a strap over his shoulder and who plays the drum with both sticks and hands. I thought the drummer stole the show from the other two actor/dancers. The characters and the story told by the dance are from the great Indian epic, the Mahabharata. The Gods: Brahma, Vishnu, Shiva, Ganesh, Devi, Rama... are featured. The first three, the *creator*, the *preserver* and the *destroyer* respectively have been adopted by particle physicists to personify the quantum creation, number and annihilation operators.

We spent our last day sightseeing in Cochin. We visited St. Francis Church built by the Portuguese in 1510 by friars brought to India by Vasco da Gama. We also were tutored in the methods and mechanisms of Chinese net fishing. We then went to Jew Town (that is what they call it) to see the 1568 Synagogue. In Jew Town you can go to Jew Street which is full of antique shops selling “genuine and pseudo *objets d’art*.”

‘No offense.’

‘None taken.’

The last night at the hotel was abbreviated. Our flight left Cochin for Doha at 3 am! Getting to the airport 3 hours earlier meant leaving the hotel around midnight. What an experience! In the fall of 2019, there were riots in New Delhi protesting seemingly Draconian new laws restricting the rights of Muslims. Since March, just after we got back, there has been a travel ban in and into and out of India caused by covid-19. We just made it, having planned the trip for over a year.



Tiger cub



Tiger cub



Mom