Cayman Islands, August 27-September 3, 2022

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The three islands forming the archipelago are Grand Cayman (GC), where most people live and almost all tourists arrive, and, ~100 km away and 5 km apart, the Sister Islands: Little Cayman (LC) and Cayman Brac (CB). There are no ferries; you can catch a ride on a private boat, but most people travel to LC and CB by air. That's a pity because ferries would be great for deepwater cetaceans. The planes flying between islands don't have time to gain much altitude so in theory you should be able to see whales and possibly dolphins, but I didn't see any, just lots of sargasso rafts.

The islands have good roads, cheap car rentals, but no cheap accommodation or food. They have dry tropical climate (only the western side of GC gets a bit more rain). December to April is the dry season. Hurricanes pass over once every few years, mostly in August-October. Tourist season is October-March.

In late August-early September 2022 I spent 5 days on GC, 2 days on CB and one hour between flights on LC (enough to see the endemic species of anole and subspecies of grackle plus a huge booby/frigatebird colony, but not much else).

Sticking out in the middle of the Caribbean, the Caymans seem isolated, but during the Pleistocene they were connected or almost connected to Cuba, so there were non-volant terrestrial mammals there. Two-three species of hutias and one-two of *Nesophontes* are known from subfossil deposits, along with a few bats, Cuban crocodile and numerous birds that did not survive the arrival of humans in the 16th century (the islands have never had an indigenous population). Caribbean monk seal and a few more bat and bird species became extinct in the 20th century.

Nine species of **bats** still inhabit the islands. Some might eventually prove to be endemic taxa, particularly the undescribed but very distinctive (small and dark) form of **big brown bat** from GC. Most known cave roosts have recently been abandoned due to disturbance. Please don't use flash photography in caves!

Bats of Cayman Islands				
Taxon	Island(s)	Roosts	Status	
Waterhouse's leaf-nosed bat, Macrotus waterhousii minor	GC,LC,CB	houses, caves	rare	
Jamaican fruit bat, Artibeus jamaicensis parvipes	GC,LC,CB	caves, houses	common except after major hurricanes	
Cuban fig-eating bat, Phyllops falcatus falcatus	GC,CB	fig trees	very rare; possibly extinct on GC	
Cuban fruit-eating bat, Brachyphylla nana nana	GC	caves, houses	no known roosts; very rare	
Buffy flower bat, Erophylla sezekorni planifrons*	GC,CB	caves	rare	
Big brown bat, Eptesicus cf. fuscus ssp.	GC	caves, houses	rare; all known cave roosts abandoned	
Big brown bat, Eptesicus cf. fuscus duterteus	CB	caves	rare	
Eastern red bat, Lasiurus borealis**	GC	trees	known from 3 specimens; possibly vagrant	
Brasilian freetail, Tadarida brasiliensis muscula	GC	caves	very rare, main colony gone	
Pug-nosed mastiff bat, Molossus milleri milleri	GC,CB	houses, caves	relatively common	

*The range of this subspecies is usually given as "N Bahamas and Cayman Is", which doesn't make sense geographically because other sspp. occur in S Bahamas and Cuba

** I wonder if it's actually Pfeiffer's red bat, L. pfeifferi

Recently extinct bat species include *Chilonatalus micropus*, *Natalus* cf. *major*, *Pteronotus parnellii*, *Monophyllus redmani*, and *Phyllonycteris poeyi*.

Marine mammals are poorly known: almost 30 species have been recorded, including some deepwater species (the islands are surrounded by dropoffs on all sides), but none appears to be common and most are very rare. Local dive operators who run daily boat trips have told me that they see dolphins only a few times per year. Introduced mammals include **feral cats** and **dogs**, the usual trio of **murids**, plus **Central American agoutis**.

Under current taxonomy there are 17 endemic bird subspecies (<u>list</u>), but only one near-endemic species (vitelline warbler); the GC race of Cuban bullfinch is now often considered a full species (<u>bird finding info</u>). Most native reptiles are endemics and they differ a lot between islands, but both native amphibians are shared with Cuba (<u>list</u>).

<u>Grand Cayman</u> is an elevated atoll with the lagoon overgrown by mangroves in the E part and open to the north in the W part. The western side is almost completely developed, but in the east much of the interior is still in good condition. Despite good numbers of moths, mosquitoes and other flying insects, bats are surprisingly sparse on GC: when you walk forest trails you see bats flying by only 2-3 times per night, and a handheld detector records bat passes every 20-30 minutes at best. The only species you are likely to see/record in flight are **Jamaican fruit bat** (mostly in forests and larger gardens) and **pug-nosed mastiff bat** (in towns and open areas).

<u>Mastic Trail</u> (S trailhead 19.31365, -81.19062, N trailhead 19.34096, -81.19302) crosses 3.7 km of primary and secondary forest, mangroves, and limestone shrublands. Another good forest trail is in <u>Colliers Wilderness Reserve</u> (19.32781, -81.10334); the trail is very short but the access road is also worth walking and would be a good place to try mistnetting. Both trails have **Central American agouties** and **black rats**, but they are uncommon. <u>Queen Elizabeth II</u> <u>Botanic Park</u> (19.31574, -81.16896, open 09:00-16:30, gate open 08:45-17:30) is one of the places where **eastern red**, **Cuban fig-eating** and **buffy flower bats** have been recorded in the past. **Central American agouties** are not hunted there and a bit easier to see. You can also see all endemic bird taxa and most reptiles there. The nature trail is a 2-km loop. <u>Lower Valley Forest</u> (access from <u>Nature's Circle</u>, a loop road starting at 19.26616, -81.27941) is where **Cuban fig-eating bat** was last recorded in the 2000s.

Good places to look for drinking/foraging bats are <u>Meagre Bay Pond</u> (19.29209, -81.23239), <u>Governor Michael Gore</u> <u>Bird Sanctuary</u> (19.27704, -81.30887, particularly good for **pug-nosed mastiff bats** and **black rats**), and <u>Malportas Pond</u> (19.34740, -81.20821, in <u>Central Mangrove Wetland</u>).

<u>Salina Cave</u> (contact <u>CINT</u> for access) in <u>Salina Reserve</u> reportedly has **Jamaican fruit bats**, **Waterhouse's leaf-nosed bats**, and **Brasilian freetails**. <u>Cayman Crystal Caves</u> (entrance gate at 19.34519, -81.17749) are accessible by tours; they still have **Jamaican fruit bats**, and formerly had **Waterhouse's leaf-nosed bats**, **big brown bats**, **pug-nosed mastiff bats**, and **Brazilian freetails**. <u>Pirate's Cave</u> (19.27895, -81.24905) formerly had **Jamaican fruit bats** and **Waterhouse's leaf-nosed bats**, but nowadays only very few of the former roost there occasionally.

<u>Cayman Parrot Sanctuary</u> (19.31899, -81.08737) has a few bat houses, one of which had **big brown bats** when I checked it out. Another bat house, at <u>Governors Residence</u> (19.34099, -81.38118, view from <u>Governors Beach</u> parking area at 19.34112, -81.38113), had a few droppings on the pole, but no bats emerged at dusk.

<u>Cayman Brac</u>, developed in the W part but much less so in the E, is higher than the other islands: in the E part the central plateau is separated from the N shore by cliffs up to 40 m high. The only freshwater ponds on the island are <u>Westerly</u> <u>Ponds</u> just S of the airport runway.

Brac Parrot Preserve (trailhead 19.72045, -79.78862) has some of the best forest on the island; at dusk there were **Jamaican fruit bats** and **pug-nosed mastiff bats** flying around, plus some smaller bats I couldn't ID. Other good places to explore the forest are Lighthouse Trail (19.75198, -79.74098, 1.7 km each way, but only the first 1 km is forested) and Salt Pond Walk (S trailhead 19.69125, -79.86153; N trailhead 19.69863, -79.86799). The small cave at the S end of the latter trail, called <u>Rebecca's Cave</u>, might have bats sometimes but I didn't see any.

Dozens of caves are scattered around the island, but many are hidden by dense vegetation; some are still unexplored or even undiscovered. Not surprisingly, there's a lot more flying bats around than on GC, but all easily accessible caves have lost most or all bats because of disturbance. <u>Great Cave</u> (19.73647, -79.73588) still had small numbers of **Jamaican fruit bats**, **buffy flower bats**, and **big brown bats** (the latter hiding in cracks and easy to miss). <u>Bats' Cave</u> (19.69657, - 79.83772) sometimes has **Jamaican fruit bats** (but not during my visit); **Waterhouse's leaf-nosed bats** occasionally use the entrance as night roost judging by insect remains. <u>Peter's Cave</u> (19.75317, -79.74138, parking at 19.75249, - 79.74110) had one **Waterhouse's leaf-nosed bat** at night; watch for nesting white-tailed tropicbirds and brown boobies near the entrance. <u>Skull Cave</u> (19.72074, -79.82052) had bat droppings but no bats. I checked out a few more small caves but didn't find any bats there: <u>Green Cave</u> (19.71920, -079.76778), <u>Pebble Cave</u> (19.71872, -79.77024), <u>Hutia Cave</u> (19.71857, -79.79691), <u>Bedding Plane Caves I</u> (19.73548, -79.73765) and <u>II</u> (19.73509, -79.73798).

Little Cayman is the least developed island (only ~200 people live there permanently); it has no known caves except 5 m-long Weary Hill Cave (19.69999, -79.98301). Preston Bay Iguana Nesting Sanctuary (19.65920, -80.10425) has the best forest. Owen Island, a tiny islet accessible by 200-m swim or paddle (from 19.66689, -80.06703) has no introduced mammals and is said to be good for various endemics; I'd love to check it for *Nesophontes*.

Species list

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1.	Waterhouse's leaf-nosed bat, Macrotus waterhousii minor	Peter's Cave (CB)
2.	Jamaican fruit bat, Artibeus jamaicensis parvipes	multiple locations (GC, CB)
3.	Buffy flower bat, Erophylla sezekorni planifrons	Great Cave (CB)
4.	Big brown bat, Eptesicus cf. fuscus ssp.	Cayman Parrot Sanctuary (GC)
	E. cf. f. duterteus	Great Cave (CB)
5.	Pug-nosed mastiff bat, Molossus milleri milleri	multiple locations (GC), Brac Parrot Preserve (CB)
6.	Black rat, Rattus rattus	multiple locations (GC)
7.	Central American agouti, Dasyprocta punctatus	multiple locations (GC)