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FLICKER

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Ironwood Forest Fire

As readers may be aware, a forest fire occurred in the Ironwood Forest area of Central George Town on 12 March 2021.

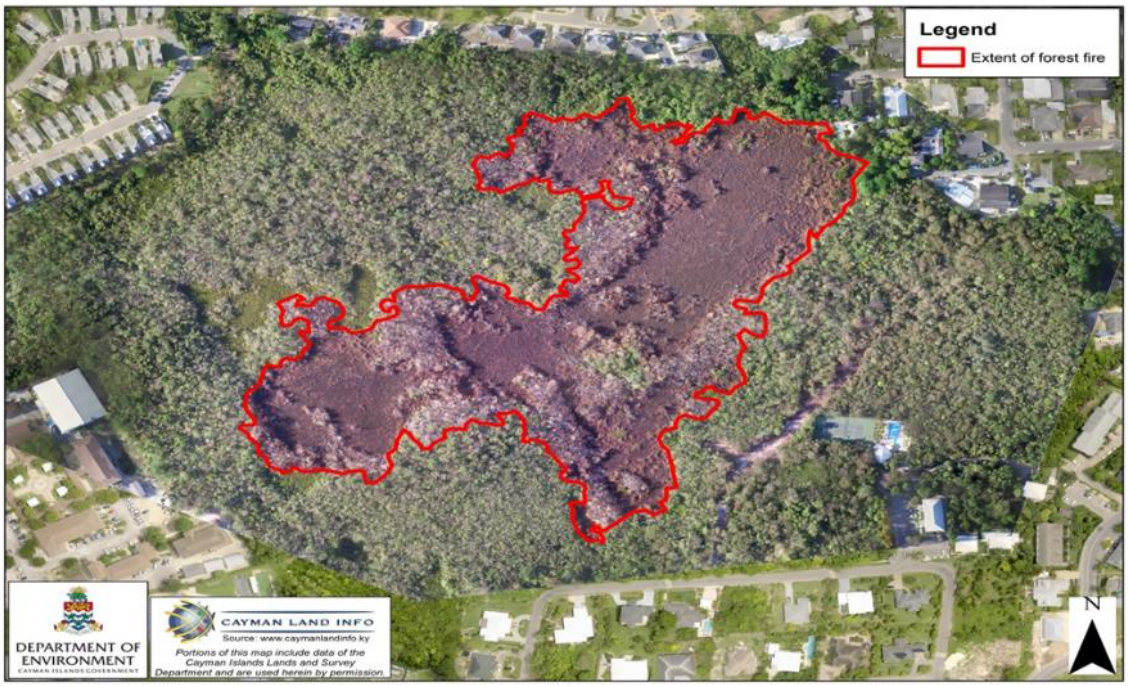
The Ironwood Forest is the largest piece of old growth ancient forest now remaining in the George Town area. It is a mosaic of freshwater wetlands, dry forest and dry shrubland, which due to the elevated humidity provided by the wetland supports a variety of epiphytes and orchids. These include many endangered and endemic species notably the Old George (*Wittmackia caymanensis*) and the Ghost Orchid (*Dendrophylax fawcetti*).

The fire began sometime after noon and was deemed 'under control' by fire services by 10 p.m. the same day. Small flare-ups occurred the next morning but by 9:30 a.m. the fire was deemed 'extinguished'.

The fire appears to have originated from a property bordering the forest area. It appears the fire was mostly fueled by the wetland fern and sedges, however, dry forest areas downwind of the wetlands were also severely impacted by the flames; see the map showing the extent of the fire damage below.

The areas that borders the wetlands are also where the Part 1 protected plant species, Old George, has its highest density. It appears that all Old George (which occur primarily at ground level) within the extent of the fire were completely burnt. Very few dry forest tree species within the extent of the fire survived.

However, rhizomes of the wetland sedges and ferns were protected from the fire by the water table and have already begun sprouting new shoots. These wetland species are expected to recover quickly.



Aerial imagery of fire footprint in the Ironwood forest, George Town (the Truman Bodden Sports Complex track is in the bottom left of image).

New shoots are seen forming of the main wetland plant species.

Dry forest trees and Old George plants that were bordering the fire extent were also non-lethally damaged by the flames. It is unknown how quickly the dry forest species will recolonise the cleared areas. After obtaining permission from landowners the DoE would like to carry out additional drone flights and site visits to the affected area to monitor the recolonisation of the dry forest habitat to ensure that no invasive species, such as Logwood (*Haematoxylum campechianum*) gain a foothold in these now cleared areas. This is particularly important seeing as Logwood is already present within the Ironwood Forest area and is an aggressive coloniser of low-lying damp habitats.

We overlaid the Old George abundance maps with the polygon of the extent of the fire, and calculations show that an approximate 26% of the Old George population was lost to this one event. Old George has long been considered unique to the island of Grand Cayman, though recent morphological evidence suggests the same species can be found in Isla de Providencia (Colombia).

On the ground image of the Ironwood Forest showing the wetland area completely burnt.

Old George was assessed in the global IUCN Red List in 2013, and is currently listed as Critically Endangered.

The plants reproduce asexually by producing basal offshoots. Ex-situ specimens translocated as separated offshoots to the QEII Botanic Park on Grand Cayman grow and reproduce asexually, but despite producing viable seeds they fail to establish new individuals sexually, suggesting the microclimate in the Ironwood Forest is important to seedling establishment. Old George is Critically Endangered because it has already lost much of its original habitat to extensive land use change as George Town has urbanised. Its final holdout in the Ironwood Forest remains at risk now more than ever.

Translocated Old George in the QEII Botanic Park.

While our data for the Ghost Orchid is not standardised to the same level as the Old George data, we confirmed that this Part 1 species also suffered losses during the fire.

TRU Officer Vaughn Bodden with one of the burned Old George specimens.

The cause of fire was reported as accidental but likely human-caused. Safe fire practices such as making a fire pit, clearing debris around the fire pit, and not burning debris on hot and dry days are all safe fire use practices that can help prevent accidents like this from occurring and can help minimize risk to property, wildlife, and human life alike. Thank you to all the worried citizens who reached out with their concerns.

Habitat	Total area (hectares)	Area impacted by fire (hectares)	Percentage of habitat impacted by fire (%)
Dry forest / shrubland	17.6	2.07	11.76
Wetland	4.3	3.57	83.02

Habitat-specific areas impacted by the fire in the Ironwood Forest. Habitat maps were overlaid with the burn footprint to calculate the percentage of each habitat area affected.

The Global Big Day is back for 2021! Only this year there is a special incentive to get involved in the Caribbean.

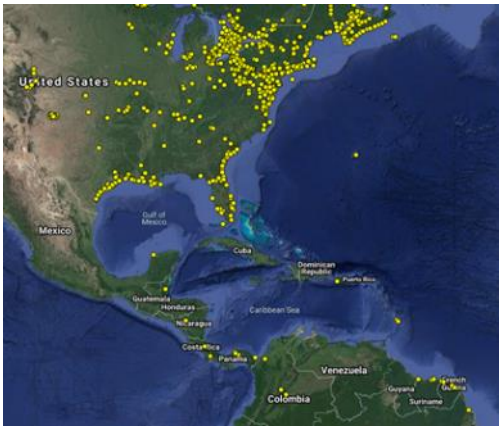
As readers may be aware, the Global Big Day is a Citizen Science initiative led by the Cornell Lab of Ornithology. Last year, Global Big Day brought more birders together virtually than ever before. More than 50,000 people from 175 countries submitted a staggering 120,000 checklists with eBird!

On Saturday May 8th 2021, anyone can take part in the initiative which aims to identify as many bird species as possible within a 24 hour period. Whether you go birding for five minutes or two hours doesn't matter, in fact, you can support the initiative simply by donating to the cause.

This year, BirdsCaribbean has set up a special fundraiser for the event and all the money raised from participating BirdsCaribbean GBD teams will benefit the exciting new Caribbean Motus Collaboration.

The Motus Wildlife Tracking System (Motus) is an international collaborative research network that uses coordinated automated radio telemetry to facilitate research and education on the ecology and conservation of migratory animals. Named after the Latin word for movement, Motus uses automated radio telemetry arrays to study the movements and behavior of flying animals (birds, bats, and insects) that are nano-tagged and tracked by Motus receivers.

See a short video on the basics behind the remote tracking system here.



The Caribbean Motus Collaboration aims to bridge the gap in the existing network of receivers (yellow dots).

An already existing network of Motus towers reveal a big gap in the Caribbean (see previous page). While we know that the Cayman Islands provide an important stop-over point for migratory birds, we still have a lot to learn about our importance locally in the global migration network.

Each Motus station is able to detect thousands of already tagged birds flying by at a radius of up to 9 miles (15 km), every second of the year. Thousands of nano-tags have been deployed on 236+ species (mostly birds) and species of particular interest can be tagged at a relatively low cost per tag.

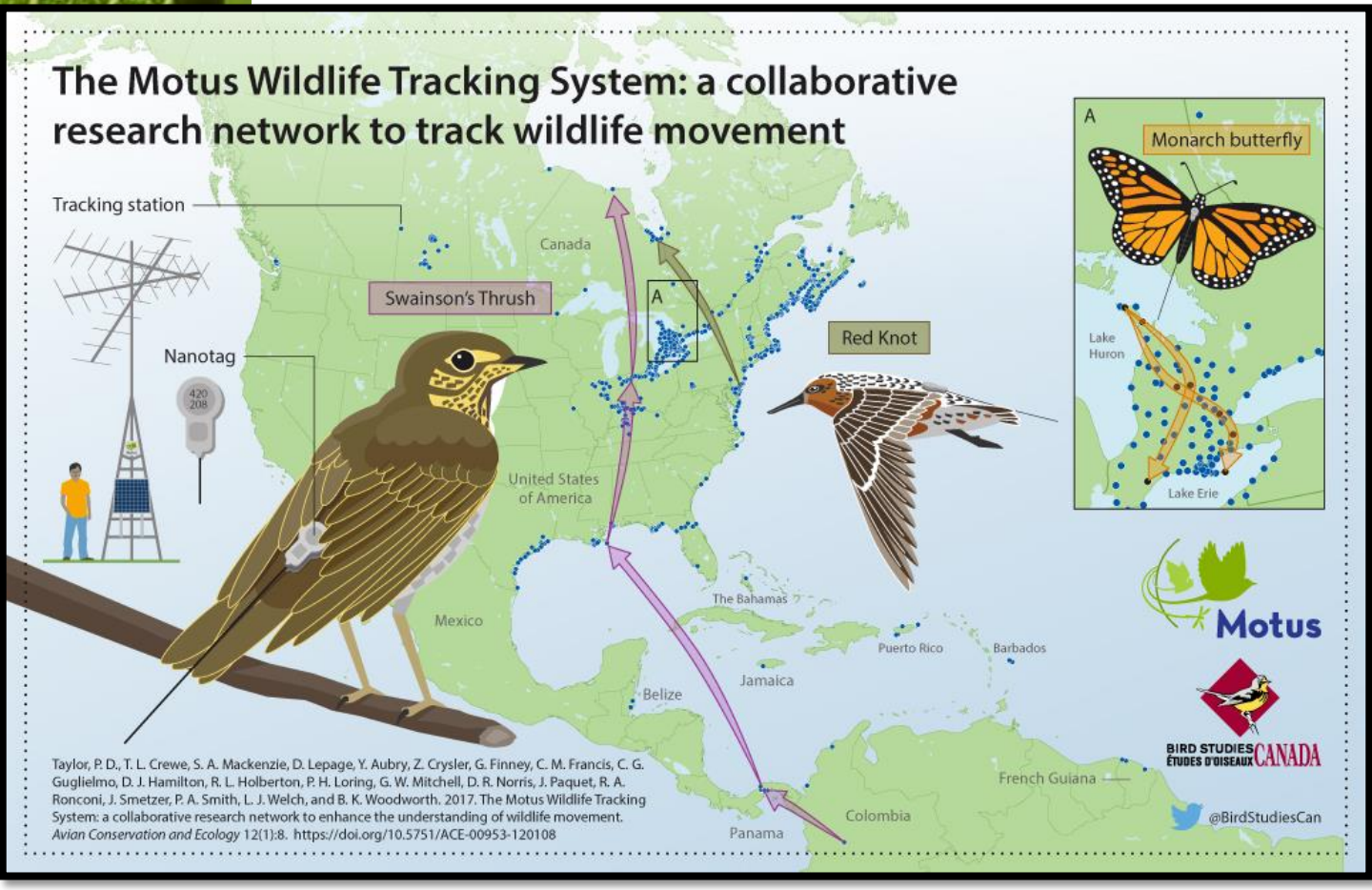
In the hope of putting Cayman on the Motus map, Cayman has entered a BirdsCaribbean GBD Team which will go birding on the Global Big Day while also raising funds for Cayman's own Motus tower.

You can **join** the "Cayman Birding" team, **donate** to the cause or simply help **spread the word** to family and friends who have a keen interest in our birdlife by finding us on this page:

https://charity.gofundme.com/o/en/campaign/birdscaribbeans-global-big-day-fundraiser-2021

Whatever your level of involvement, the Global Big Day is a fun and competitive 24 hours where we hope to beat our local record of 94 species seen on GBD in 2019 (82 species were seen in 2020)

–see the checklist here!



The Caribbean Motus Collaboration will add to the existing network of Motus towers and a station in Cayman will fill an important gap for migratory routes.

Cayman Parrot Sanctuary Shows Success

Since its inception in 2018, the Cayman Parrot Sanctuary in East End, has achieved remarkable success in the ongoing conservation efforts of our national bird: the Cayman Parrot (*Amazona leucocephala caymanensis*).

The Sanctuary was established as a partnership between the DoE and Sanctuary owner Mr. Ron Hargrave. Mr. Hargrave and his staff, most notably Regina Nowak, have worked tirelessly on receiving and rehabilitating Cayman Parrots. Each parrot receives the highest standard of care, tailored to their individual needs through careful coordination and access to expert advice and veterinary treatment.

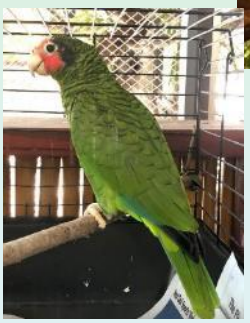
A total of 28 birds have been through the Sanctuary and so far 17 have been successfully released back into the wild!

This includes parrots that were illegally poached, birds that had collided with cars and suffered broken wings, birds that had been abandoned or found in emaciated conditions and birds with concussions that had fallen from the nest.

The Sanctuary currently houses 11 parrots with at least three pending release in the near future. The pre-release conditions include dietary transition to wild food, flight training to strengthen wing muscles, and socialisation with other parrots.

We urge the public to remember that the Cayman Parrot is protected by law, and should you encounter a parrot in need please contact the DoE on 949-8469 or the editor (details on page 2).

Left: Three young confiscated birds in the 30ft. aviary where they can practice their flying skills.
Right: Ron Hargrave and Jane Haakonsson updating the inventory of the Sanctuary.



Released birds*:*

Romeo & Juliet, Spice, Pepper, Bonk, Chastity, Otto, Sparky, Nicole, Kooch, Pretty, Siberia, Santi & Paris, Vibe, Frederika and Shorty.

Green Iguana Project Update

As the 2021 breeding season is approaching for the invasive Green Iguanas, it is time to give the readers an update on the culling programme.

There are 140 cullers currently registered to take part in the programme in 2021 with approximately 60 of those regularly active. As is to be expected, as the iguana population is driven down, iguanas become increasingly difficult to find and there is considerable evidence that many of the individuals remaining are now keenly aware of the hunting pressure making them skittish and wary of human activity. In an effort to keep the cullers active, make removal efforts more lucrative and to focus attention on the larger breeding adults, another restructuring of the reward scheme was introduced following the October 2020 adjustments; large adults over 5lbs now fetch CI$10 per individual, smaller adults are CI$7 and the hatchlings earn CI$5.

As a result, individuals received at the culling station have increased a little with numbers ranging between 1,000 - 1,400 iguanas being delivered every week. As of May 1st 19,390 iguanas have been removed from Grand Cayman in 2021 which brings the total of iguanas removed since the start of the program in October 2018 to 1,281,948. Hatchlings from the 2021 reproduction efforts are expected soon.

A TRU team is headed to Cayman Brac in May to continue the community-based searches while DoE Officer Martin van der Touw keeps up the pressure on the Brac population of Green Iguanas by responding to and removing every sighting on an ongoing basis. DoE Intern, Tanja Laaser on Little Cayman is currently investigating camera trap footage of a particularly shy Green Iguana female living around the airstrip. It is our hope that we will successfully remove this female before the nesting season starts.

A trail camera image showing a young female Green Iguana which has been spotted several times in the West End of Little Cayman.

KNOW YOUR NATIVES

RED BIRCH

All three Cayman Islands are home to the common and fast growing Red Birch tree (*Bursera simaruba*). It is commonly referred to as "Birch" but is unrelated to the trees of northern temperate regions.

Red Birch is a deciduous woodland species with straight thin stems and a tendency to branch near the ground. The bark is characteristic, red and peeling in sheets resembling paper and the leaves are pinnately compound (leaves are paired symmetrically along the stem). Flowering twice a year, the flowers of the birch are small and yellow-white and its berries are an important food source for native birds, especially for the Cayman Parrot and the White-crowned Pigeon.

Reaching a height of over 15 meters (49 ft.), the Red Birch is found in woodlands but can tolerate shallow soil and thrive on dolostone karst and smoother Ironshore limestone. Being tolerant to disturbance as well as fire-resistant, the birch is great for use in landscaping purposes.

The birch tree is also of significant cultural importance as it has been used for medicinal purposes as well as for living fence posts. The ability of this tree to grow roots from fresh cuts makes it an inexpensive and low-maintenance fencing alternative.

The Red Birch is often referred to as the "Tourist Tree" because of it's reddish peeling appearance!

Red Birch berries are very attractive to birds, especially to Cayman Parrots, and its peeling bark makes it easy to recognise.