



ANNUAL REPORT

CAYMAN TURTLE CONSERVATION AND EDUCATION CENTRE Ltd
for the year ended 31st December 2019



TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
FOREWORD FROM CEO	5
ABOUT US.....	13
• Nature and Scope of Activities.....	13
• Customers and Location of Activities	16
• Activity: Conservation, Education and Research	16
• Activity: Tourist Attraction.....	17
o Turtle Centre Exploration Tour (turtle exhibits)	18
o Turtle Adventure Tour (Entire Park).....	20
o Sales Channels for Tours	22
• Activity: Sea Turtle Captive Breeding and Turtle Meat Production	24
o Product lines.....	24
• Activity: Landlord	25
• Governance.....	25
o Laws governing major activities	25
o Ministry Policy and Directives	26
o Board of Directors	26
o Executive Management Team.....	27
o Table of Delegated Authorities	31
• Our People	31
o Personnel.....	31
o Pension	32
o Medical Insurance Coverage	32
o Headcount	32
o Demographics of Immigration Status	33
o Huge Strides in Conservation	33
Summary Results of Key OWNERSHIP AGREEMENT STRATEGIC GOALS & OBJECTIVES	33
AUDITED FINANCIAL STATEMENTS.....	45
• Breakdown of Revenue Sources	45
• Breakdown of Expenses.....	46
o Equity Injections	48
o Capital Withdrawals	49

o Dividends or Profit Distributions.....	49
o Loans	49
o Guarantees	49
RISK MANAGEMENT.....	50
• Key Risks and Risks Mitigation	50
ACTUAL LOSSES/DAMAGES, Write-offs, and related Payouts.....	56
FINANCIAL PERFORMANCE and ANALYSIS	56
SUMMARY of ACHIEVEMENT of Ownership Performance TARGETS	56
• Financial Performance	57
• Analysis of how the Equity Injection was Utilized	59
SCRUTINY by Parliament and the Public.....	60
CROSS-GOVERNMENT COMMITMENT	60
FORWARD-LOOKING	61
APPENDICES	61
APPENDIX 1. Economic Impact Assessment	61
APPENDIX 2. Historical Background	64
• History of Turtles in the Cayman Islands	64
• History of the Company in the Cayman Islands.....	64
• Rebranding in 2010	66
• 2010 Vision Statement.....	67
• 2017 Change of Name and Memorandum of Association	67
APPENDIX 3. Audited Financial Statements of the Company.....	68

Note:

“APPENDIX 3. Audited Financial Statements of the Company” is attached as a separate PDF bearing the signatures of the auditors.



FOREWORD FROM CEO



Tim Adam, CEO

This report summarises the performance of **Cayman Turtle Conservation and Education Centre Ltd.**, a Cayman Islands Government Company (hereinafter referred to as “the Company” or “CTCEC”), for the financial year ended 31st December 2019.

Cayman Turtle Conservation and Education Centre Ltd. is the official registered name of a Government Company that is 100% owned by the Governor in Cabinet of the Cayman Islands. For the year under review it traded under the brand-names:

- **Cayman Turtle Centre: Island Wildlife Encounter** (CTC), the brand used for our visitor attraction, conservation, research, and education activities;
- **Cayman Turtle Products** (CTP), the brand used for our subsidised turtle meat production, distribution and sale activities.



The Company’s current Articles of Association were adopted by Special Resolution dated 23rd August 2005, amended to reflect the change of company name (from *Cayman Turtle Farm (1983) Ltd.*) that had been approved by a Special Resolution dated 16th March 2017 of the Sole Member of the Company (Governor in Cabinet of the Cayman Islands).

The Company’s current Memorandum of Association was also adopted by a Special Resolution dated 16th March 2017 of the Sole Member of the Company (Governor in Cabinet of the Cayman Islands). The amended wording of the Memorandum focuses heavily on its first two statements of purpose:

*“(a) To carry on any or all of the businesses of ... breeding, hatching, raising and/or utilizing sea turtles, eggs, and derivatives of all descriptions as needed, **including but not limited to ... translocations and releases**, import and export, or other such actions as are*

necessary or desirable to fulfil national and international policy objectives in sea turtle conservation, education ... and research, to benefit the genera and in turn yield benefit to existing and future generations of mankind.

*Conservation and research policy objectives include ... the production and distribution of green sea turtle meat for human consumption with the **primary goals** of reducing the loss of free-ranging sea turtles to meet local and traditional demand as well as the use of secretion, excretion, fluids and tissues collected at harvest for educational and research purposes.*

*(b) To carry on the business of ... providing various products and services to visitors and residents, **conservation, education and research** ...”*

That focus is reflected in the Company’s name **Cayman Turtle Conservation and Education Centre Ltd.** which was also adopted by a Special Resolution dated 16th March 2017 of the Sole Member of the Company (Governor in Cabinet of the Cayman Islands).

This Company is presently comprised of several major functions:

- Conservation, education and research: The Company operates the first and oldest closed-cycle sea turtle breeding facility in the world. As a result, the Company is recognised as an international expert in captive breeding of turtles and as a globally known innovator in sea turtle conservation, research, and husbandry across the species’ full range of stages and ages. The Company has unparalleled experience and proven ability to breed sea turtles in captivity, incubate the captive-bred eggs indoors, and raise the captive-bred sea turtle offspring in captivity all the way up to full adulthood as a captive-bred breeding adult and thus complete the life cycle of these long-lived species. The Company also replenishes the wild population using its captive-bred sea turtles, in five programs:
 - Translocation Nest Sites
 - Hatchling Beach Releases
 - Jump-Start Hatching Releases
 - Head-Start Public Releases
 - Head-Start Private Releases



Translocation Nest Sites: Dr. Walter Mustin, Chief Research and Conservation Officer translocates Green sea turtle eggs from CTCEC’s Hatchery to a scientifically accurate man-made nest dug on world-famous Seven Mile Beach in Grand Cayman, Cayman Islands with a group of onlookers. He is assisted by one of the Centre’s full-time Veterinarians.

The educational **nest translocation program** has continued to gain in popularity and has attracted a loyal following both locally and overseas. This program translocates¹ a portion of the eggs of a captive bred nest, at one of two feasible date ranges in its incubation period, into a nest on one of our nation’s suitable nesting beaches in the wild. Paid Nest Watchers keep night-time vigil over the nests to ensure safety of the eggs

¹ In conservation and biology, *translocation* refers to “The transport and release of plant, animal or habitat from one location to another.”

throughout the final days of their hatching and climb up through and out of the sand on the beach. When hatchlings emerge from their nests, local followers are notified via a social media group and can attend the beach site to view first-hand the hatchlings' emergence out of the sand, down the beach and into the sea. Overseas followers can watch these events via a live commentary, with real-time updates through one of our social media channels.



Hatchling Beach Releases: Tiny, oreo sized hatchlings find their way from the white sandy beach of the seven-mile beach shoreline into the crystal clear waters of the Caribbean Sea in the Cayman Islands.

Hatchling beach releases take place within a couple of days of the baby turtle emerging from its egg in our hatchery. These releases are scheduled in the evening under the protective cover of darkness of the night, so the hatchlings are able to seek remoteness from concentrated populations of near-shore predators as they head for floating cover in the deep sea before the dawn comes.



Jump-Start Hatchling Releases: A tiny hatchling finds an edge of a sargassum patch to find refuge in. These patches become their home for the first year or two of their life.

Based on the biological needs of hatchling sea turtles, CTC has recently introduced the **Jump-Start Hatchling Releases**. The day-or-two-old hatchlings are released approximately a mile offshore in the daytime under supervision of one of our veterinarians, from a Dive Boat positioned downwind of floating sargassum mats away from concentrations of predators. These mats are patches of floating macroalgae that sea turtles spend the first one to five days of their lives after a fast-paced swim from shore. These first few days can be treacherous and often fatal for such small creatures. By “jumping over” the greatest risk of predation posed by near-shore birds and fish to place these vulnerable cookie-sized newly hatched turtles directly into their instinctive orientation to and a short distance away from safe habitat, this innovative CTC program greatly increases each Jump-Start Hatchlings chance of survival to adulthood.



The other popular program for our releases that is well known is the **Head-Start** releases of the juvenile sea turtles aged one year or more, into the sea from beaches around our islands. CTC also offers this to guests as a privately sponsored turtle release opportunity to share with their family, friends or colleagues, to mark a special occasion or as a corporate team building event.

Our Company's decades of **Head-Started Turtle** releases have been proven, by DNA analysis in an independent collaborative study conducted by the Cayman Islands Department of Environment, the University of Barcelona and the University of Exeter under the auspices of the UK's Darwin Plus Initiative, to be a major contributor to the sea turtle population in the wild around Cayman: at least 90% of Cayman's current Green turtle nesting population has proven to have originated from the Company's captive breeding facility.



Head-Started Releases: A Head-Started turtle raised fully at CTCEC is released. These turtles are from clutches laid on our breeding beach located in the Centre and hatched in our hatchery. They are then raised under the care of our two full-time veterinarians for at least one full year prior to their release. For health and safety each turtle undergoes testing and quarantine protocols prior to their release.

In addition to CTC's conservation efforts our scientists and veterinarians work tirelessly on **research projects** that are often collaborative with institutions in various parts of the world, with non-invasive field study elements that are only able to be done right here in the Cayman Islands at CTC because of the convenient, constant and safe accessibility to turtles of the full age range from egg to post-breeding adult. The unique opportunities and setting at CTC provide a research haven for many scientists to tap into for exploration into many fields beyond turtle species: these include marine mammal studies, coral studies, and new types of truly biodegradable plastics. To date our scientists and veterinarians have participated in projects that have produced over 100 peer-reviewed published or presented research papers.

CTC **educates** over two thousand students per year on sea turtles and other wildlife and conservation themes, in addition to its wildlife and conservation education impacts of guide talks, on-site educational talks to student groups ranging in age from pre-school to university level, off-site educational talks in the islands' schools, interpretive signage and literature, and an educational video that is displayed during tourist visits.

- Tourist attraction: The Company's conservation and education missions have the opportunity for very broad reach and impact because the Company's site is the most-visited single land-based attraction in the Cayman Islands. With over a quarter million visitors each year, it remains consistently popular with tourists arriving both by air and by cruise. This aspect of the Company's business, comprising shore excursions, tours, admissions, food & beverage

and retail merchandise sales, provides some 87.8% of the Company's revenues, and is therefore the primary source of funding the Company's conservation, research and education activities. It is also a very important component of the socioeconomic fabric of the Cayman Islands: business activities and employment related to this tourist attraction are estimated to have a combined economic impact translated into full-time equivalents (FTE's) that ranges up to the equivalent of 2.8% of the Caymanian labour force.

- Sea turtle meat production: The Company's turtle husbandry operations and unique expertise provides a reliable source of high-quality turtle meat products, sold at affordable prices, to satisfy the continuing strong local culinary traditions especially among indigenous Caymanians. This availability of farmed meat has been proven, by the carefully analysed results of a year-long independent study conducted by the Cayman Islands Department of Environment and the University of Exeter under the auspices of the UK's Darwin Plus Initiative, to be a major contributing factor to keeping sea turtles in the wild around the Cayman Islands because of its ongoing daily positive impact² in greatly reducing incentives to poach turtles from the wild.
- Landlord: The Company is the landlord to a dolphinarium which is another major tourist attraction on the island.

As an employer the Company has been particularly exemplary in its success in hiring and developing local people. Of an authorized headcount of 109 Full-Time Equivalents (FTE's) filled by 109 Crew Members (including a few Part-Time), as at the financial year-end 31st December 2019 there were only five (i.e. less than 5%) employees on Work Permits.

Highlighting the high ratings of the guest experience that the Company provides, CTC was awarded the *TripAdvisor Certificate of Excellence 2016* (this had also been awarded in 2015). On the popular *TripAdvisor.com* website, "Cayman Turtle Centre: Island Wildlife Encounter" remains #2 (second only to the "Kittiwake Shipwreck & Artificial Reef") of the "Top Things to Do" in West Bay³, Grand Cayman. CTC has been awarded the distinction of *Best of Cayman Islands* and *Experts' Choice* by TripExpert. On Cruise Critic, the Company's park features as one of the top three most reviewed "*Popular Grand Cayman Shore Excursions*"⁴. CTC's tour packages receive high ratings on cruise line shore excursion webpages, and the "*Stingray Encounter and Turtle Swim*" shore excursion⁵ combination package that the Company sells to Carnival Cruise Line is featured as one of the five top shore excursions in Grand Cayman listed as "*Featured*" on Carnival Cruise Lines' shore excursion offerings⁶. The Company has received accolades for its involvement

² <https://www.darwininitiative.org.uk/documents/DPLUS019/23876/DPLUS019%20FR%20-%20edited.pdf>

Accessed 26th June 2020.

³ https://www.tripadvisor.com/Attractions-g1006573-Activities-West_Bay_Grand_Cayman_Cayman_Islands.html

Accessed 26th June 2020.

⁴ <https://www.cruisecritic.com/memberreviews/shore-excursions/port/1/>

Accessed 26th June 2020.

⁵ <https://www.carnival.com/shore-excursions/grand-cayman/stingray-encounter-and-turtle-swim-417078>

Accessed 26th June 2020.

⁶ <https://www.carnival.com/shore-excursions/grand-cayman>

Accessed 26th June 2020.

and support from various local civic organisations such as the Cayman Islands Chamber of Commerce, the Cayman Islands Tourism Association, and Meals on Wheels to name a few.

The Company was recognized for outstanding conservation and education work with Sea turtles in 2019. CTCEC was nominated and shortlisted as a finalist in the 4th bi-annual Governor's Conservation Awards. The awards recognize people and businesses within the local community that have demonstrated an active role in the fields of historic preservation and environmental conservation across all three Cayman Islands within the last 10 years. Carnival Cruise Lines also honoured CTC by presenting the Company with Carnival's 2019 *Award for shore excursion logistical support*. The Company was nominated for the prestigious *Caribbean's Leading Adventure Tourist Attraction* by World Travel Awards for the 7th year in a row.

Several CTCEC staff were nominated for the annual Cayman Islands Tourism Association (CITA) *Stingray Awards*. CTCEC's CEO, Timothy Adam, took home the coveted Stingray Award for Allied Manager of the Year, while Customer Service Manager Rebecca Bush was honoured with the award for Allied Employee of the Year, and Shonna McGill was nominated for the very competitive Rising Star Award.

The Company remains an active member of the Cayman Islands Chamber of Commerce and of CITA, with its Chief Tours and Customer Experience Officer Raymond Hydes having served on CITA's board during 2019. The



Company is also a very active Platinum Associate Member of the Florida-Caribbean Cruise Association (FCCA). The Executive Team and Managers hold memberships in several professional associations as well as serve on several Boards and/or Committees including the Cayman Islands Marketing Professionals Association (CIMPA), Public Transport Board, CI Sport Shooting Association (CISSA), Cayman Maritime Heritage Foundation, CI Earth Day Committee, National Cultural And Heritage Plan Committee, Aquatic Animal Life Support Operators Association, The Duke of Edinburgh's International Award, CPA (Newfoundland & Labrador, and Canada), Cayman Islands Institute of Professional Accountants (CIIPA), Cayman Airways Ltd, Cayman Islands Veterinary Medical Association, International Sea Turtle Association, American Fisheries Society, National Security Services, Cayman Islands Society of HR Professionals (CISHRP), Jasmine, MS Foundation Cayman (MSFC), FDOE Teaching License, Cayman Maritime Heritage Foundation,

Cayman Catboat Club, Institute of Engineering and Technology, Aircraft Owners and Pilots Association.

Company staff members are also encouraged to participate in charitable, cultural and other civic-minded initiatives, and the Company itself supports some such causes directly. During the period under review several of its staff members have been personally involved as volunteers in Meals on Wheels fundraising and weekly meal deliveries; in the work of the Rotary Club of Grand Cayman, the Rotary Central Science Fair, and the Catboat Club; and in other similar voluntary service organizations such as Jasmine, Cayman Aids Foundation, NCVO, etc. The Company's veterinarians on an *ad-hoc* voluntary basis have assisted the Department of Environment and the Guy Harvey Ocean Foundation with marine life rescues, including stingray and sea turtle rehabilitation (off-site) as well as on-call for when either organization needs veterinary assistance. The Company's Curator – Terrestrial and Education has assisted the Department of Environment with:

- Consulting / advising on various animal care (mostly terrestrial animals)
- Bird Rescue Consulting
- Bird Rehabilitation
- Advice on Cayman Parrots (captive assessment, various matters related to confiscated or rescued parrots, feeding, growth stages, age identification, etc.)
- Parrot releases with public participation alongside CTCEC's Veterinarian Team
- White-Crowned Pigeon releases alongside CTC Veterinarian Team
- Cayman Parrot Amnesty Program assistance

The Company is a participant in the annual Earth Day Clean-Up event hosted by the Cayman Islands Chamber of Commerce. CTCEC supported this event through volunteering and by sponsoring their Tote Bags. The Company also sponsors other annual events hosted at CTC such as the annual Easter Dig and Halloween events organized by DMS Broadcasting. Other sponsorships included Gamers Bay and an international motor race participant in the Mongol Rally. CTCEC continues to support the community through "in kind" donations to organizations such as the National Drug Council, Department of Children and Family Services, Department of Tourism, Schools, Churches, Mission Groups and Make-a-Wish Foundation to name a few, with free admission prize vouchers, rather than cash.



Some of the CTCEC Team participates in the Chamber of Commerce's Annual Earth Day Clean up, just one of many beach clean ups for the year. CTCEC was a proud sponsor of the COC's Earth Day initiative.

A notable and history-making financial achievement during this 12-month fiscal period ended was finally paying off the long-term debt on the Company's balance sheet, which was the final payment on the Guaranteed Senior Notes (the "bond") that had been issued to raise debt on 1st March 2004 to fund the major development to create a world-class tourist attraction at the Company's main site. The "bond" was finally extinguished upon its maturity 15 years later on 1st March 2019.

ABOUT US

- Nature and Scope of Activities



Happy Guests at the entrance of CTCEC.

The major portion of the Company's revenues is derived from the tourist attraction components of the business, as the site remains the most-visited land-based tourist attraction on the island. Over 55% of the Company's admissions ("Tours") revenues are derived from cruise passengers, who comprise over 60% of the guests visiting the facility. For several of the cruise lines that come to Cayman, anecdotally more than one-third of all Grand Cayman shore excursions they sell to their passengers feature the Cayman Turtle Centre as a prime stop on the excursion.

Despite its popularity however, the revenues of the expanded facility have not ever come up to the expectations of what was originally projected⁷ in the planning stages of the project, to some extent due to factors such as lack of a cruise terminal in the West Bay area, and further exacerbated by the ongoing lack of cruise berthing anywhere in the island. In addition, the Company's turtle meat production is sold at a considerable loss, because maintaining the subsidised pricing structure is part of the conservation imperative to minimise the risk of poaching occurring and thereby keep wild turtles in the wild. As a result, the Company remains dependent on subsidies in the form of Equity Injections from the Government of the Cayman Islands to assist in meeting its debt obligations and running costs. These Equity Injections form part of the Government's approved Budgets and are included in the Company's Ownership Agreement with the Government.

The green sea turtle captive breeding activities continue, involving the husbandry of turtles both for conservation and display purposes, and for turtle meat production purposes, without requiring collection of any eggs, hatchlings or turtles of this species from the wild. The Government-mandated turtle meat production and sale to the resident population is a deliberate, price-subsidised yet often misunderstood program which conservation authorities acknowledge probably is the program that has the highest direct numerical impact on maintaining the Cayman Islands' marine turtle population in the wild. **The Company remains the only such enterprise anywhere in the world to have achieved the second generation and beyond of sea turtles bred, laid, hatched and raised entirely in captivity.** The research activities also continue, with over 100 scientific papers having been published or presented over the years from 1971 shortly after the inception of our predecessor Mariculture Ltd. During the 12-month fiscal period one paper was accepted for publication, and another one was submitted for peer review and publication, a poster was presented at a conference; a number of research projects have been on-going during 2019.

⁷ One very significant assumption of the projections was that cruise berthing was going to be built in George Town, and a cruise pier in West Bay, neither of which have so far materialized.



CAYMAN TURTLE CENTRE
ISLAND WILDLIFE ENCOUNTER

Captive breeding and reintroduction of the Endangered Grand Cayman (Rose-throated) Amazon Parrot (*Amazona leucocephala caymanensis*)

Geddes Hislop, Arlen Bodden, William Chisholm
Cayman Turtle Conservation and Education Centre, Grand Cayman, Cayman Islands, BWI



Background

Parrots native to the Cayman Islands are part of the Rose-Throated Amazon, also known as the Cuban Amazon (*Amazona leucocephala* sp.), complex endemic to the Western Caribbean. The nominate subspecies is found in Cuba, while two subspecies each are found in The Bahamas and The Cayman Islands. The Grand Cayman Amazon (*Amazona leucocephala caymanensis*) and the Cayman Brac Amazon (*Amazona leucocephala hesternia*) are both endemic sub-species restricted to their relative islands. Both are considered National Birds of The Cayman Islands.

The wild population of the endemic Grand Cayman Parrot (*Amazona leucocephala caymanensis*) was reeling from the impact of Category 5 Hurricane Ivan that struck the island in September 2004, devastating the parrots, their habitat and the entire island. The sub-species was then categorised as Endangered. In 2008, the Cayman Turtle Conservation & Education Centre (CTCEC) on Grand Cayman Island paired unreleasable rescued, injured or confiscated Grand Cayman parrots to initiate an inaugural captive breeding programme for the subspecies.



Identifying Concerns

Having no documented precedent for captive breeding of the Grand Cayman (*A. l. caymanensis*) sub-species or its congener the Cuban Amazon (*A. l. leucocephala*) for conservation purposes, the CTCEC team identified three key concerns that needed to be addressed for the success of the fledgling breeding programme:

- 1) Determining sexual dimorphic characteristics in order to achieve pair bonding.
- 2) Designing parrot nesting boxes to compatible with nesting cavity preferences for breeding wild parrots.
- 3) Weaning captive-bred chicks from parental care and then preparing for release by transitioning from a diet of commercial feed to being able to actively seek and select natural wild feed.



CTCEC's Free Flight Aviary exhibit provides ideal setting for the parrot breeding programme



Wild parrot nests inspired the captive breeding nest box



Isolation enclosure for implementing pre-release quarantine and final feed transition

Overcoming the Challenges

CTCEC's conservation team utilised local cultural knowledge, trial and error, along with careful observation to successfully address the stated three key issues among others:

Observations of parrot behaviour and social interactions offered insight into sexual dimorphic characteristics. DNA (blood feather) sexing confirmed the assumptions, allowing criteria for identification of sexes to be established.

Through investigating the composition of wild parrot nests, along with consulting former parrot hunters, nest depth was determined to be the critical dimension in designing nest boxes for captive breeding. Optimal nest box depth was established at 1.5 – 2 ft. (45.72 – 61 cm).

Introducing the captive-bred chicks to a natural diet of native fruits, seeds and flowers from an early age was surmised to be an important precursor for successfully transitioning to wild feed at release. CTCEC was in the advantageous position of having many wild parrot feed trees readily accessible onsite or within close range of the park. A protocol of 1/3 of daily feedings to both parents and chicks being composed of wild diet eased the later conversion of release candidate parrot chicks via gradual, methodical transition to 100% wild fodder.

Discussion

A successful captive breeding and release husbandry protocol has been devised for the Grand Cayman parrot. The programme boasts fourteen captive bred Grand Cayman parrots (*Amazona leucocephala caymanensis*) being successfully captive-bred and released into the wild between 2009 – 2018, while raising public awareness and endearment to the plight of the Endangered national icon.

The publicity of CTCEC's Release programme gave much needed attention and support to the protection of the Cayman Islands parrots, boosting public support for revised and more comprehensive legislation to protect both the parrots and their habitat. In 2017, following parrot population surveys conducted by the Cayman Islands Government's Department of Environment in 2014 and 2015, Grand Cayman parrot numbers appeared to have stabilised at an estimated population size of $6,395 \pm 1,202$ and their status was reclassified to Vulnerable. The Cayman Brac parrot (*A. l. hesternia*), having the most limited range of any Amazon parrot, is still considered Endangered with an estimated population of 772 ± 97 (Haakonsson, Harvey, and Rivera-Milan, 2017).

Vulnerability to devastation from hurricanes and poaching for illegal pet trade, along with loss of habitat due to burgeoning development, continues to threaten the stability of the Cayman Islands' endemic National Birds.

Building on the success of its endeavor working with the Grand Cayman parrot, CTCEC has since extended its parrot breeding/ release programme to include the more vulnerable Cayman Brac Amazon. In 2019 the programme achieved the first recorded captive breeding of the subspecies.

References and Acknowledgements

Work on this project was given special support and attention by park veterinarians Drs. Ana Malabia, Vandana Baboolal and consultant Dr. Mirela Mainet. Literature references included: Department of Environment, Cayman Islands Government; Haakonsson, Harvey, and Rivera-Milan, "Conservation status of Grand Cayman (*Amazona leucocephala caymanensis*) and Cayman Brac (*Amazona leucocephala hesternia*) Parrots", J. Caribb. Ornithol. (2017); Patricia Bradley & Yves-Jacques Hey-Millet – *Birds of the Cayman Islands* (2013); Raphael et al – *Birds of the West Indies* (2004)

www.turtle.ky

facebook.com/caymanturtlecentre | instagram.com/caymanturtlecentre | twitter.com/caymanturtle

Grand Cayman, Cayman Islands



- **Customers and Location of Activities**

The tourist attraction services of the Company are mainly provided to tourists, as well as residents and “visiting friends and relatives” (“VFR”), and schools. All services are provided in Grand Cayman. The Company organizes and offers public Head Started turtle releases in both Cayman Brac and Little Cayman.

The Company’s operations are based in North West Point, West Bay, on some 23 acres of land. The address of the main centre of operations is: 786 North West Point Road, West Bay.

During 2019 the sales outlet for Cayman Turtle Products (“CTP”) was co-located with the Company’s seaside pumping station across the street from the main site on North West Point Road, West Bay. CTP has arrangements in place to make it turtle meat products available to customers in Cayman Brac through a distributor and a restaurant on that island.

In addition, CTC operates a retail souvenir and gift shop in combination with its shore excursion dispatch functions, in a rented kiosk at the Royal Watler Cruise Terminal in George Town.

Cayman Turtle Conservation and Education Centre Ltd. is therefore a multi-function Government Company comprising four main types of activities.

Under the Cayman Turtle Centre (“the Centre” / CTC) brand it operates:

- a conservation, education, and research facility for sea turtles.
- a land-based tourism attraction, with over a quarter of a million visitors per year, which also has food & beverage and merchandise sales operations.

Under the Cayman Turtle Products brand, it operates:

- a commercial green sea turtle captive breeding, turtle meat harvesting and subsidised turtle meat sales facility.

The Company also functions as:

- a landlord: to a dolphinarium, Dolphin Discovery (Cayman) Ltd.

- **Activity: Conservation, Education and Research**



Our sea turtles at the Centre range in size from 6 ounces to over 500 pounds, apportioned among specifically designated tanks. Visitors can observe turtles in various stages of growth and development. In its collection the Company also exhibits indigenous and regional birds, fish, sharks, a crocodile, butterflies; the National Bird (the Cayman Parrot – of which we have both subspecies, the Grand Cayman Parrot and the Cayman Brac Parrot); the National Tree (Silver Thatch); the National Flower (Wild Banana Orchid); and several other types of flora and fauna.

In addition to the Company's many decades of successfully breeding sea turtles in captivity some of which are released into the wild, it also operates captive breeding of species of birds including the Grand Cayman Parrot, the Cayman Brac Parrot, and the White-Crowned Pigeon (locally known as the "Bald Pate").

Guided tours, informational signage and park maps, and an informational video educate visitors on the life cycle of sea turtles and various related conservation topics. In addition, CTC hosts over two thousand students per year on various programs within our set curriculum, educating them about sea turtles and other conservation topics, while giving them the opportunity to interact in person with turtles and other wildlife.

The Company's major strategic thrust during the past year and continuing into the 2020-2021 Ownership Agreement is developing, expanding and enhancing its activities in the fields of conservation, research, and education.



CTCEC's Caribbean Aviary allows guests to get up-close and personal with birds. Individuals who wish to experience hand-feeding the birds have the opportunity to do so.

The conservation of sea turtles has however been the overarching objective from the initial creation of the Company's predecessors in 1968, and **turtle conservation remains the central focus and primary purpose at the heart of the Company's mission. The Company's other functions are vital means of supporting the aims and outcomes of that central objective and are best understood in that context.**

• **Activity: Tourist Attraction**

Another key national role that the Company plays is providing a world-class tourist attraction. Cayman Turtle Centre: Island Wildlife Encounter remains the country's most-visited land-based attraction site. By far the greatest portion of the Company's revenues comes from its "tourist attraction" lines of business:

- Admissions: 57.7%
- Food & Beverage: 11.8%
- Retail (Gift Shop): 18.3%

for a combined total of 87.8% of our revenue.

During the 12-month financial period ending 31st December 2019, total visitors numbered 314,047 which is a 3.6% increase over 2018 (303,122). Of these⁸:

- 60.3% were cruise visitors on a package purchased on-board a cruise line or as part of an itinerary on an island tour with an independent tour operator,
- 29.6% were "stay-over" visitors,

⁸ These percentages assume the known percentages of cruise, stay-over, and residents also applied respectively to "Website" and "Upgrade" admissions (allocated between cruise and stay-over) and to "Complimentary" admissions (allocated between cruise, and residents). "Complimentary" admissions totaled 17,092 in the 2019 financial year. The great majority of "Complimentary" admissions are infants 4 years old and under, who up to 2019 have been given free admission at CTC when accompanied by paying guests.

- 8.9% were residents.

This shows an increase of 0.8% from 28.8% to 29.6% in the proportion of “stay-over” visitors compared to the proportions of admissions in the previous year.

The number of stay-over visitors to CTC increased by 6.4% over the previous year, 2018. The number of stay-over arrivals via air to the island for the year 2019 was 502,739 as compared to 463,001 in 2018, which shows an increase of 8.6%.

The number of cruise visitors to CTC did not change (less than 0.1%) comparing 2018 vs 2019. This number reflects some effects of increasing competition from newer shore excursions and was largely impacted by the increase in cruise calls during the year. The number of cruise visitor arrivals to the island for the 12-month period ended 31st December 2019 was down by (4.7%) compared to the 12-month period ended 31st December 2018. Therefore, our growth in cruise visitors during this year was an excellent achievement.

As a tourist attraction, throughout 2019 Cayman Turtle Centre offered two different types of admissions:

- Turtle Centre Exploration Tour
- Turtle Adventure Tour

Each of these is described below.

o **Turtle Centre Exploration Tour (turtle exhibits)**

The “Turtle Centre Exploration Tour (turtle exhibits only)” admission gives visitors access to the following features and exhibits:

- **The Green’s Breeding Pond** - The Breeding Pond is home to our green sea turtles which have matured and are at the age to start reproducing, which is usually at about 16 years of age or occasionally younger. Green Sea turtles are the second largest of all the sea turtle species and here guests will find a few weighing in at more than 500 pounds.
- **Turtle Touch Tanks** - Here guests will find yearling turtles swimming and playing. This zone **includes the Turtle Touch Wading Pool** where guests are allowed into the shallow pool where the young turtles are swimming. The interactive exhibit pools in this zone are supervised by a Lifeguard and/or a Security Guard, and under supervised instructions guests can touch a juvenile turtle and take a photo or video while touching them.
- **Smiley’s (crocodile) Saltwater Cove** – “Smiley” is a 10-foot hybrid (saltwater + freshwater) crocodile of the same species that in the mid to late 1500’s gave our country the



CTC’s Touch tank experience is a guest favourite . The guests and the turtles are both big fans of the experience. Turtles have the opportunity to swim out of the touch tanks often swim back in for the “back scratching” feel of the gentle touch of the guests.

transliterated name “Caimanes”.⁹ “Smiley” has been trained to jump and put on a show during enrichment exercises and health observations at her feeding times.

- **Education Centre & Hatchery** – Guests visiting the Education Centre can learn more about the turtles, in a short continuous-loop video playing in a mini theatre, in various static displays, and in various literature in a library in the public access area. Guests can also view our turtle Hatchery where during breeding season (May – October) guests can witness new hatchlings making their way up through the sand of our incubation display boxes specially designed and purpose-built to enable our scientific team to monitor selected clutches of eggs as they incubate, hatch, and make their way up through the sand column to the surface as they would do at the normal depth of a green sea turtle nest in the wild.¹⁰
- **Schooner’s Bar and Grill** - an open-air bar and grill where diners can relax on a covered screened deck overlooking Turtle Lagoon. The menu boasts a selected range of Caribbean and international items to tease and please every palate. Guests can enjoy a tropical drink or select from the brands of the island’s very own brewery - Caybrew.
- **Toddler’s Playground** - a partially shaded safe dry play area for young children one to five years old with swings, slides and playhouses. It is conveniently located between Schooner’s Bar & Grill and our fresh-water Breakers Lagoon.
- **Local artisans’ booth** - where we host local craftspeople from the community, offering local handcrafted items made mainly from silver thatch and jewellery made primarily from various local shells and seeds.
- **Splash Gift Shop** – our retail store which has an attractive range of gifts and souvenirs, and functions as the exit for both types of admissions. The product selection protocols emphasize eco-friendly and locally-sourced products as much as possible, featuring a range of made-in-Cayman products including pepper jelly and other condiments, locally roasted coffees, soaps and lotions, jewellery using local materials such as black coral and the semiprecious stone Caymanite, artwork, Christmas ornaments and other types of giftware.
- **Turtle Nest Café** – our food and beverage outlet on the courtyard at the front of the park, serving ice cream, specialty coffees, other hot and cold beverages, hot patties, sandwiches and other snacks.



Splash Gift Shop is often touted as the best on the Island. It has one of the largest selections of beautiful plushies, resort wear, costume and semi-precious jewelry along with souvenirs of all kinds and giftware. It is easy to see why it warrants this title.

⁹ Transliterated from the Taino language word meaning “crocodile”, and pluralized by early Spanish explorers and cartographers.

¹⁰ Our scientific team also uses these boxes to monitor the progress of the “control group” of siblings of the eggs assigned to our nest translocation program which places half of a selected clutch in a created nest on a wild beach to hatch and emerge into the sea, in our program of education and tourism outreach to selected tourist accommodation properties with suitable beaches.

o **Turtle Adventure Tour (Entire Park)**

The “*Turtle Adventure Tour (Entire Park)*” admission gives guests access to all of the “*Exploration Tour*” features **in addition** to a unique opportunity to interact with island wildlife in aquatic and other features and exhibits:

- **Turtle Lagoon** - Snorkel in the lagoon with juvenile green sea turtles up to two years old and enjoy this wonderful experience of observing them “up close and personal”. It is supervised by a team of trained Lifeguards. There are also hundreds of colourful reef fish and little islands where our breeding peacocks and their offspring live. One of the islands houses our model lighthouse.
- **Predator Reef** - Watch sharks, Great Barracuda, tarpons and other predators through the underwater or dry view panels, or from the bridge. On weekdays (Monday to Friday) at the 11:00 AM feeding time guests can view our marine animal programs team as they give an educational narration about sharks, barracuda and other wildlife while hand-feeding our sharks and doing their health observations.
- **Caribbean Free-Flight Aviary** - Caribbean birds fly freely in this large aviary, and guests can hand-feed them under supervision. The several different species include colourful nectar feeders, seed eaters, and pellet feeders especially the impressive Scarlet Ibis native to Trinidad and the White Ibis native to the Cayman Islands and other Caribbean islands; they also include both subspecies of our islands’ **National Bird the Cayman Parrot**. There are 10:00 AM to 3:00 PM daily bird hand-feeding opportunities for guests. Our keepers are on-site during the feedings, to assist guests with the various types of feeding and to answer guests’ questions about the various species in the sanctuary. This facility also incorporates our White Crowned Pigeon captive breeding and release program that has helped to replenish Cayman’s population of this species (locally called “Bald Pate”) that had been somewhat depleted over the years as it had been a target for sport shooting. There is also a breeding pair of the indigenous parrots, the offspring of which are released annually after habituation to transition to wild food sources.
- Our **Shoreline Nursery** habitat complete with young mangroves, conch, juvenile fish, tube worms and other shallow-water flora and fauna.
- **Butterfly Garden**, a free-flight habitat, hosts indigenous and migratory butterflies in the various stages of their life cycle.



- **Breakers Lagoon** is the largest fresh-water swimming pool in Cayman with two waterfalls and an underwater view of the predator tank. It is supervised by a team of trained Lifeguards.
- **Turtle Twister Waterslide** at the Breakers Lagoon accommodates guests of a wide range of ages, and features two loops for over 100 feet of sliding thrills with a pumping capacity of some 600 gallons of rushing water per minute.
- **Budgie's Snack Shop** at the Breakers Lagoon offers a range of "fast food" and cold beverages.



- **Blue Hole Nature Trail** - Stroll along this trail and view the beautiful nature that Cayman has to offer, including the **National Flower the Wild Banana Orchid**. The Wild Fig trees growing out of the Blue Hole cavern host the rare endemic Ghost Orchid, rescued by the National Trust from other locations and planted there for safety. The trail also hosts both native and migratory butterflies, and various birds frequently visit. This zone incorporates an original forest where several of Cayman's indigenous species of trees and bushes have been growing for hundreds of years. The Blue Hole itself is the name given to a cave that contains a natural pool in which scientists have discovered a rare endemic subspecies of the tiny aquatic Blind Cave Isopod¹¹ (a white crustacean related to shrimps). Cayman Turtle Centre's Blue Hole site has been found to be presently the only known habitat for this particular subspecies remaining anywhere on the planet.
- **Cayman Street** - Walk down this gravel street to view old Cayman architecture, featuring traditional gardens and a variety of local garden trees, shrubs, and herbs such as "Fever Grass" (Lemon Grass) and "Cayman Mint". The various species of flora on display include the **National Tree the Silver Thatch**, which also grows in the landscaping of various other parts of the park. This tree was vital to the island's economy up to a generation or two ago, used in the local production and export of Cayman thatch rope that earned the reputation of being "the strongest natural fibre" that was in demand by mariners in Cayman and in other countries as it was much more resistant to usage in seawater than its counterparts back in the day before nylon and other synthetic fibres were invented to manufacture rot-resistant ropes. Silver Thatch is still important in the creation of various crafts by local artisans. The **Cayman Mahogany**, a hardwood that was used in past years in the islands' shipbuilding industry, is also featured in various areas of the park.

¹¹ Bass, D. "The Status of Four Aquatic Crustaceans from Grand Cayman, West Indies." *Living World*, Journal of The Trinidad and Tobago Field Naturalists' Club (2012): 77-78.

o Sales Channels for Tours

The admissions are sold as “tours” or “shore excursions” through various sales channels:

- The majority of visitors comprise “turtle exploration” admissions sold as a key feature of island activities offered to cruise visitors by Independent Tour Operators (ITOs) whose customers are primarily cruise tourists. Both of the dolphinariums on the island also offer their “dolphin swim” guests a visit to CTC included in their price (which applies to all except for one or two cruise lines). CTC provides these admissions to ITOs and dolphinariums at wholesale prices.
- The Company sells tours directly to customers at full price at its Ticket Counter in the Reception building at the park entrance. The “*Turtle Adventure Tour (Entire Park)*” admission is available for online purchase through the Company’s website www.turtle.ky at discount prices. There are also admission discounts available by association with various “partners” such as *Explore* magazine, *Cayman Coupons*, *Your Cayman*, *Island Map*, *American Express*, car rental companies (Andy’s and Budget), concierge coupons, and certain taxis.
- During this year the Company had two vans providing free shuttle bus service for stay-over visitors, with pick-up and drop-off at various resorts in the Seven Mile Beach area. The colourful branding of these vehicles also serves as mobile advertisement for the park.
- The Company sells wholesale to some cruise lines the equivalent of “*Turtle Adventure Tour (Entire Park)*” admissions including a guided tour of the turtle exhibits. Those cruise lines in turn market them to their cruise passengers as shore excursions. These wholesale excursions include ground transportation from and to the cruise terminal. In some cases these tours include a buffet lunch at the Company’s on-site Schooner’s Bar & Grill. In addition, the Company provides to the cruise lines “combo” shore excursion packages which also include visits to other attractions. There are various combinations such as Pedro St. James National Historic Site, Hell tourist attraction, and Stingray Sandbar in the North Sound. The Company also is a channel for wholesaling to cruise lines the shore excursion to the Queen Elizabeth II Botanic Park.



CTCEC had three representatives at the 2019 FCCA Annual Conference in partnership with the CIDOT Delegation. Both the Cayman Islands Department of Tourism and The Cayman Turtle Conservation and Education Centre are Platinum Associate Members of the Florida Caribbean Cruise Association.



- **Activity: Sea Turtle Captive Breeding and Turtle Meat Production**

- **Product lines**

The Company is still the only facility in the world that has achieved the second generation and beyond, of sea turtles bred, laid, hatched and raised in captivity in a closed cycle that takes no eggs or animals from the wild (wild egg and animal collection for the breeder stock was concluded over 40 years ago in the late 1970's). Several decades ago, the farm assisted the US and Mexican authorities in captive breeding the very endangered Kemp's ridley sea turtles which replenished the wild population especially in the Gulf of Mexico. However, the Company's primary breeding focus has been and remains on the green sea turtle, having been the first aquaculture establishment anywhere to have succeeded in breeding sea turtles in captivity.

After the Company's predecessor had established the captive breeding facility and its operations commencing in 1969, exports of sea turtle products of the families *Cheloniidae* and *Dermochelyidae* were added to Appendix I of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) in 1977, which therefore banned commercial trade in such products between member nations. In light of that, the Company's predecessor ceased production of turtle oil, turtle shell jewellery and turtle leather products which together had been a very significant source of revenue.

Currently, product lines have been limited to meat products, which are produced and sold at subsidised prices to avoid poaching of turtles from the wild to satisfy the strong ongoing local demand for turtle meat. These products are strictly for consumption and use within the Cayman Islands, thereby remaining in strict compliance with the CITES convention. Meat products are typically each sold in 5-pound "lots" and in tamper proof bags that are sealed with a tamper proof seal and label. Law enforcement action and legal penalties up to and including imprisonment and seizure of assets exist and have been imposed for persons in possession of illegal products of protected species. This new technology secure sealing arrangement therefore further assists in preventing illegal take and illegal sale of wild turtle, because the illegal products would be easily recognisable upon search, by not being contained in the securely sealed bags.

The following are the types of meat products available:

- **Steak:** Only lean meat. Note: Because this is typically only used occasionally by fine-dining restaurants and priced as a premium product so as to keep demand low, most of the lean meat is sold as part of either the *Stew* or *Menavelins* lots which are the most popular ingredients for turtle dishes that feature in strong and enduring local culinary traditions especially among indigenous Caymanians, and residents originating from coastal Nicaragua, Honduras, and its Bay Islands.
- **Stew:** a mixture of cuts of lean meat, fin, neck-bone, various organs, boiled calipee, and a small quantity of fat.
- **Menavelins:** a mixture of skin, various other organs (different from "Stew" contents), a small quantity of fat, and some small cuts of lean meat.
- **Bone:** mostly bone, with a very small quantity of meat attached. This is typically only used to make Turtle Soup. (There is very little demand remaining for this product, as in the processing

there is typically almost no meat left on the bone because as much as possible of the meat is taken to make the other products.)

- *Scrap Bone*: all bone, using smaller bones such as from the fins, used by local restaurants and individuals only to make the stock of Turtle Soup.
- *Un-boiled and Boiled Calipee*: This is used as a key constituent of turtle stew meals. Produced from the plastron (the cream-coloured exterior “belly”) it is boiled to become a very tender gelatinous consistency with a mild meaty flavour. However, some customers purchase it raw, to boil it themselves.
- *Corned Turtle*: Some traditional local consumers have occasionally requested that we produce this type of turtle meat product, which is treated by salting and preserving the lean meat (turtle steak) about which some older Caymanians reminisce fondly. This is only produced to order, with advance notice required due to the length of the treatment.

During the fiscal year ended 31st December 2019 total turtle meat products sold was 82,678 lbs, which is an increase of 3.1% over the amount sold in 2018. Income from turtle meat products comprised 9.3% of the Company’s revenues.

- **Activity: Landlord**

During the fiscal period ended 31st December 2019, this segment of the Company’s business comprised a property lease to a dolphinarium: Dolphin Discovery (Cayman) Ltd.

This rental income totalled 2.8% of the Company’s revenues.

- **Governance**

- o **Laws governing major activities**

As it is a Government Company, Cayman Turtle Conservation and Education Centre Ltd. operates under several laws that pertain to the public sector as well as the legislation that pertains to the private sector. Legislation that governs our major activities includes:

- Public Authorities Law
- Public Management and Finance Law (PMFL)
 - o Financial Regulations
- Public Service Management Law (PSML)
- Labour Law
 - o Labour (National Basic Minimum Wage) Order
- Health Insurance Law
- Public Service Pensions Law
 - o *Note*: The Company’s employees are not Civil Servants, however they are Public Servants coming under the category of “Other Public Service” as defined in the Law to mean “Service with a statutory authority or Government company that has opted to join the Plan with the approval of the Board”. The Company has chosen the Public Service Pension Board to be the provider of pensions to its employees.



Cayman Islands Government Administration Building, known locally as “GAB”.

- Immigration Law
 - Immigration Regulations
- Procurement Law
- Veterinary Law, 1997, revised
 - Veterinary Regulations, 1998, revised
- Local Companies (Control) Law
- The Companies Law
- Public Accountants Law - International Public Sector Accounting Standards
- Liquor Licensing Law
- Music and Dancing (Control) Law
- Workmen's Compensation Law
- National Archive and Public Records Law
- Freedom of Information Law
- Data Protection Law
- Complaints (Maladministration) Law
- Animals Law
- National Conservation Law (NCL)
- Water Authority Law
- Endangered Species (Trade and Transport) Law (ESTTL)
 - *International treaty*: Convention in International Trade in Endangered Species of Flora and Fauna (CITES)
 - **Ministry Policy and Directives**

The Ministry of District Administration, Tourism & Transport (DATT) had in a previous fiscal period issued the following policy documents:

- Policies and Procedures for the Procurement of Goods and Services (July 2014)
- DATT - Procurement Requirements – Checklist (July 2014)

Those documents, which also incorporate the rules established by the Public Management and Finance Law and the Financial Regulations, and the Procurement Law, guide the Company's procurement processes.

○ **Board of Directors**

The Company is governed by a Board of Directors appointed by the sole shareholder, the Governor in Cabinet of the Cayman Islands. The Board meets monthly. The Board of Directors for this financial year, comprised in accordance with the Articles of Association, were:

- Ex-officio Directors:
 - Chief Officer of Tourism or his or her nominee: ***Mr. Stran Boddan, or alternatively Mr. Perry Powell, Mr. Jonathan Jackson, or Ms Neyka Webster for this period***
 - Chief Officer for Agriculture or his or her nominee: ***Mr. Wilbur Welcome for this period***
 - Financial Secretary or his or her nominee: ***Mr. Michael Nixon for this period***
 - Chief Executive Officer of the Company (in a non-voting capacity) who also serves as official Secretary of the Company: ***Mr. Timothy Adam***
- One Director who is a member of the Cayman Islands Chamber of Commerce: ***Mr. Wil Pineau for this period.***

- Other Directors (in alphabetical order):
 - **Mr. Dale Bodden** (bank officer).
 - **Mr. Joseph “Joe” Parsons** (private citizen, retired – former Chief Scientific Officer of the Company) served as **Deputy Chairman** for this period.
 - **Mr. Naceto Welds** (businessman) served for this period. Note: After his appointment, Mr. Welds became a Public Servant through his employment with one of the Statutory Authorities.
 - **Mr. Brian Wight** (businessman) served as **Chairman** for this period.
- In addition, **Ms Katherine Jackson** (Office Manager of CTC) functioned as Recording Secretary for the proceedings of the Board.
 - **Executive Management Team**

During the period, the Company’s senior executives comprised:

- **Mr. Timothy Adam**, Chief Executive Officer (CEO) (Board/Company Secretary)
- **Mrs. Peggy Hamilton**, Chief Operating Officer (COO)
- **Mr. Raymond Hydes**, Chief Tours and Customer Experience Officer (CTCEO)
- **Mrs. Renee Howell**, Chief Marketing and Merchandising Officer (CMMO)
- **Mr. Christopher Jackson**, Chief Infrastructure Officer (CIO)
- **Dr. Walter Mustin**, Chief Research and Conservation Officer (CRCO)

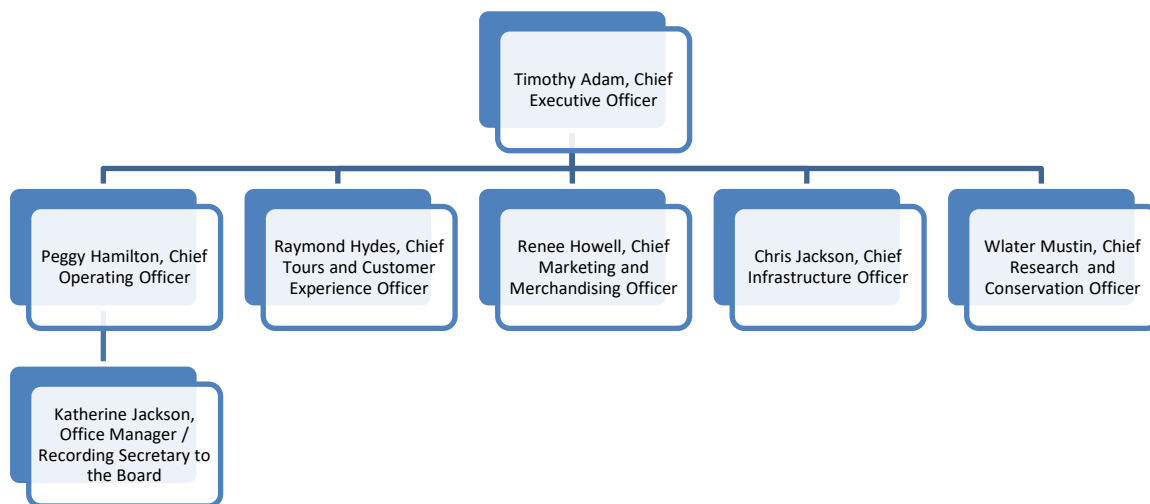


Figure 1 Executive Level Organization Chart up to 31st December 2019

Ms Katherine Jackson is the **Office Manager** (also **Recording Secretary** to the Board of Directors and support to the Executive Management Team). She also has the official responsibilities of **FOI Manager** and **Complaints Manager** and is our primary liaison for various official contacts as well as corporate travel arrangements.

The Chief Executive Officer is

- responsible as the Company's "chief executive officer" as defined in the Public Authorities Law, reporting to the Chairman of the Board of Directors,
- the Company's primary liaison with the Board of Directors, also with the Ministry of District Administration, Tourism and Transport to which the Company reports, and jointly with the Chief Marketing and Merchandising Officer functions as the primary spokesperson to the news media.
- the **Company Secretary as appointed by the Board of Directors.**



During the period, the **Chief Operating Officer** had responsibility for

- financial and management accounting;
- payroll, payables and receivables;
- business controls and revenue assurance;
- insurance and risk management;
- IT infrastructure, telecommunication, park Wi-Fi facilities, and the CCTV security camera network;
- procurement oversight;
- selection, procurement and support of software applications for financial, accounting and administrative functions, Point of Sale and inventory control functions
- Human Resources functions, including:
 - staff records;
 - payroll and timekeeping record checks;
 - management of recruitment, retention, training, and termination processes;
 - on-boarding and orientation of new staff members;
 - immigration processes for staff on Work Permits and other immigration-related controls;
 - medical insurance and pension enrolments, terminations, and liaison with scheme providers;
 - progressive discipline oversight and advice to supervisors;
 - maintenance of HR processes and Standard Operating Procedures, especially related to human resources;
 - management of random drug testing and related protocols;
 - maintenance of the "Crew Member Handbook" and related policies;
 - maintenance of the pay and salary structures.
- financial reporting to the executives, Board of Directors and Government;
- Administration functions, including the Office Manager and administrative staff;
- liaison with auditors, and with law enforcement investigations when pertinent.

During the period, the **Chief Tours and Customer Experience Officer** had responsibility for

- the main revenue centres: Admissions & Sales (also including Stayover Sales), retail and wholesale Tours, wholesale “Shore Excursions”, Lifeguards, Customer Service and overall Customer Experience.
- liaison with cruise lines, tour operators and transportation providers;
- liaison with secondary liability insurers to meet cruise line requirements;
- tour scripts and tour quality control;
- CTC’s Courtesy Shuttle service.
- Proactively build, maintain, and manage the lifecycles of a competitive, profitable product line for each of the CTC’s revenue streams in close liaison with the Chief Marketing & Merchandising Officer (see below).



During the period, the **Chief Marketing and Merchandising Officer** had responsibility for Marketing, Retail (Splash Gift Shop, Courtyard Little Kiosk, Port Kiosk), F&B Outlets (Schooners, Budgies and Turtle Nest Café) and oversight of:

- market communications through advertising, promotions, tourism industry alliances website and social media
- corporate communications including PR, media, signage donor relations, corporate philanthropy
- branding and brand management; customer relations and customer loyalty programs
- market research, surveys; development and execution of strategic marketing and corporate image programs
- product management, costing and pricing, development and launch, performance measurement and enhancement, product lifecycle management, placement and sales channel development
- Develop and manage strategic and tactical plans and budgets for the company’s secondary revenue streams especially retail merchandise, food & beverage, and special events
- Implement and execute the strategies within agreed timeframe, with key financial and operating deliverables identified, measured and reported
- Proactively build, maintain, and manage the lifecycles of a competitive, profitable product line for each of the CTC’s revenue streams in close liaison with the Chief Tours and Customer Experience Officer; ensure that all marketing and merchandising projects are delivered on time and within budget
- Manage the Brands (“Cayman Turtle Centre: Island Wildlife Encounter” and “Cayman Turtle Products”), Promotions and Public Relations of the company to maintain and enhance the reputation of the company and its brands among all stakeholders



- Executive level leadership, management and monthly performance reporting of the Company's retail merchandise, food & beverage, animal releases, and special events lines of business
- Manage risk processes to deal with commercial and other business-related risks which might affect the brands and financial goals of the company
- Identify and progress further product development and diversification opportunities for the business in keeping with the brands and the company's overall Vision and Mission
- Develop measurable/appropriate research, questionnaires and survey methods; analyze the behaviors of customers and other stakeholders
- Establish credibility throughout the organization, with the Board, management and employees



During the period, the **Chief Infrastructure Officer** had responsibility for

- buildings and grounds, maintenance and landscaping, and janitorial functions;
- site security, disaster preparedness plans and drills, safety, incident reporting, lifeguards and lagoon cleaning;
- upkeep of exhibit enclosures and infrastructure;
- oversight of capital projects;
- vehicle fleet and heavy equipment;
- mechanical, electrical, and plumbing equipment and infrastructure, also including the Aquatic Life Support System (ALSS) and other lagoon filtration and sanitization systems,
- utilities costs and usage monitoring.

During the period, the **Chief Research and Conservation Officer** had responsibility for

- all animal care and welfare, veterinary and other animal programs and displays including marine, aviary and terrestrial;
- in-house and external collaborative research, scientific testing, and record-keeping;
- internships for research, conservation and animal programs;
- regular liaison with the Department of the Environment, Department of Agriculture and its Animal Welfare Unit, University of Georgia and its Infectious Disease Laboratory, Phoenix Health Services (in Grand Cayman), and St. Matthew's University School of Veterinary Medicine; as well as with overseas government conservation specialists and research partner institutions;
- water quality testing and other regulatory relations with the Water Authority;
- Cayman Turtle Products: the turtle farming operation, turtle herd management, animal welfare and husbandry.



o ***Table of Delegated Authorities***

In keeping with generally accepted good corporate governance, the Governor in Cabinet of the Cayman Islands functioning as the sole Shareholder of the Company has vested its authority in the Board of Directors of the Company. The Board of Directors in turn has exercised its authority to delegate certain matters to the management of the Company. Some of those delegated authorities are vested in certain management positions, and some are vested in the Company's business case review board and its Tenders Assessment Committee comprised of the appropriate senior management.

There is a document entitled "*Table of Delegated Authorities*" and comprised of tables and narrative that summarises the delegated authorities. This is a "living document" as these powers can be amended or augmented by subsequent Resolution of the Board of Directors, so the document contains an Issue and Amendment Record listing the version number and date of that version. The current edition is Version I, issued 27th May 2015¹².

This document is of course subject to relevant legislation such as the Public Management & Finance Law (PMFL) and its Financial Regulations, the Procurement Law, and the Public Authorities Law, which may require additional approvals and/or controls. For example, some transactions may require public tendering and other processes involving the Public Procurement Committee, and/or approval of Cabinet. In addition, with the Standards In Public Life Law expected to come into effect in early 2020, this document will need a review to ensure it is consistent with the recently passed legislation.

• **Our People**

o **Personnel**

Being wholly (100%) owned by the Governor in Cabinet, the Cayman Turtle Conservation and Education Centre Ltd is classified as a Government Company and for HR matters, we fall under relevant sections of legislation pertinent to public entities, such as:

- the Public Authorities Law;
- the Public Service Management Law (PSML) and its relevant Personnel Regulations;
- the Public Management and Finance Law (PMFL) and its relevant Financial Regulations;
- Public Service Pensions Law
- However, although all our employees are Public Servants, they are not Civil Servants, and therefore we also come under
- the Labour Law, and other related legislation which include
- the Immigration Law,
- the Health Insurance Law, and
- the National Pensions Law.



¹² The previous Version H had been issued 21st May 2014.

Consistent with the Company's marine-related themes in its cultural portrayals and tourist attraction functions, within the Company and in corporate communications its employees are typically referred to as "Crew Members". Each of them is provided with a copy of the Company's *Crew Member Handbook*.

o Pension

The Company participates in the scheme administered under the Public Service Pension Board (PSPB), in keeping with the Public Service Pensions Law. All employees are entitled and required to join the Company's defined contribution pension plan with the **Public Service Pension Plan** in compliance with the Public Service Pensions Law. Under this scheme, the employees and employer participation is mandatory. Currently, employees are required to contribute **6%** of their salaries to the pension fund and CTC matches this contribution. For further details of this plan, please contact the PSPB. Their website URL is: <http://www.pspb.gov.ky>.



o Medical Insurance Coverage

Medical insurance for the period was provided by a private company – **Cayman First Insurance**. The broker for this was **Aon Risk Solutions (Cayman) Ltd**. All employees are entitled to join the Company's medical insurance scheme unless they present documented proof of health insurance coverage by some other means such as a spouse working for a different employer in a different health insurance scheme.



The Company would otherwise contribute towards their premium the same amount as we do for other Company employees on the standard group medical insurance plan. Otherwise, for each of our employees covered under our scheme the Company will pay **50%** of the monthly premium applicable to the employee in the specific medical insurance scheme, and the remainder of the premium is deducted from the employee's payroll to be consolidated into the monthly premium payment to the medical insurance provider. If the employee applies to add a spouse or

child, they are responsible for full payment of the premiums relevant to the dependent(s).

o Headcount

As at 31st December 2019, the Company has 109 FTE's some of which are part time. The authorised headcount for the fiscal period was 110.

o **Demographics of Immigration Status**

The Company is exemplary in employing and developing local people. Of all these 109 FTE's, as at 31st December 2019 the Company has only five (5) employees on Work Permits. **This ratio of 95.3% (of locals): 4.7% (of expatriates requiring Work Permits) is exemplary and particularly outstanding in our nation where consistently approximately half of the workforce on a national basis is non-Caymanian.** It demonstrates the results of years of dedicated efforts in our deliberate, determined strategy to hire and develop local people wherever possible.

o **Huge Strides in Conservation**

In October 2015 the results of a Darwin Plus study conducted by the Department of Environment in collaboration with the University of Exeter were published, revealing that by providing affordable captive-bred sea turtle meat, the Company has a huge positive conservation impact in the reduction of the likelihood of turtles being poached.

Another part of the Darwin Plus study was done in collaboration with the University of Barcelona and revealed by painstaking DNA analysis that a minimum of 90% of Cayman's current nesting green sea turtle population shows genetic relationships to the Company's breeder turtles: in other words, at least 90% of Cayman's current breeding population came from turtles the Company had released in prior years. In Grand Cayman, green turtle nest totals for the decade ended 2019 were 289% of the corresponding total for the previous decade ending 2009, as more of the turtles released by the Company and its predecessors in prior years are coming to maturity and returning to the island's waters to breed and to their "natal beach" (from which they began their ocean swim) to make their nests and lay their eggs.

The results in nesting numbers are even more remarkable when examined over the full span of known nesting data.

- ❖ When the Department of Environment began the recording of nest counts in Grand Cayman in 1999, there was only one (1) green turtle nest on the island that year.
- ❖ For 2019, there was an all-time record 342 green turtle nests on the island, an outstanding success by any measure, as more and more of the green turtles the Company and its predecessors released over the years are eventually coming to maturity and reproductive age.



Summary Results of Key OWNERSHIP AGREEMENT STRATEGIC GOALS & OBJECTIVES

The full set of Strategic Goals and Objectives of the Company from an ownership perspective for the 12-month fiscal period 1st January 2019 – 31st December 2019 are contained in Section 3 *Strategic Ownership Goals* of the document *"Ownership Agreement Between The Cabinet of the Cayman Islands Government and Cayman Turtle Conservation and Education Centre Ltd for the*

2018 financial year ending 31 December 2018 and the 2019 financial year ending 31 December 2019". The following analysis summarises achievements against key strategic objectives for the financial year ended 31st December 2019.

Turtle Conservation & Ecotourism

❖ Continue annual releases of "head-started" sea turtles into the wild:

- Pre-release quarantine tests and protocols to be sustained to continue to support clinical health status of "head-started" turtles for release;

Achieved: Pre-release quarantine tests and protocols were sustained. CRCO organized a representative of University of Georgia's Infections Disease Laboratory (IDL) to train Phoenix Health Services (a privately-run health care facility functioning primarily as a clinical laboratory) in Grand Cayman to perform turtle blood counts. Other types of tissue analysis continue to be performed in the CTCEC Veterinary Laboratory and in the IDL. These quarantine tests and protocols have enabled continuation of well-managed releases of 78 total head-started turtles that have been performed in Grand Cayman and in Cayman Brac. During this period samples from each individual head-started turtle to be released were collected and submitted for laboratory analysis, in compliance with the Company's pre-release protocol.

In addition, all head-started turtles for release were implanted with a Passive Inductive Transducer ("PIT tag") to uniquely identify the animal so that if in future a biologist in our country or elsewhere were to scan the turtle for its PIT tag, the unique serial number will provide the link to the database that will contain the details of the origin of the turtle and its release.

- Collaborate with beach-front tourist accommodation properties in Grand Cayman, Cayman Brac and Little Cayman as sites for turtle release events in various months and seasons of the year, to:
 - Create new eco-tourism products and promotional opportunities, thereby supporting development and enhancement of our country's tourism industry;

Partially Achieved: Head-started turtle releases were done at various public beaches (which several tourists attended) and tourist accommodation properties in Grand Cayman during the year. In addition, some private releases were done for incentive groups and convention groups at major hotels. Eight (8) head-started turtles were released at the Public Beach in Cayman Brac, which several tourists also attended. Following are the head-started turtle release numbers for the year 2019:

5	Privately-Sponsored Head-Starts Beach-Released
16	School & Summer Camp Head-Starts Beach-Released
8	Complimentary Private Head-Start Released
15	Dept. of Tourism Head-Starts Released
26	Grand Cayman Head-Starts Public Released
8	Cayman Brac Head-Starts Public Released
78	Total Head-Starts Released

- Encourage properties to implement “turtle-friendly” beach-front lighting, beach grooming, and beach furniture placement thereby enhancing the likelihood and success rate of sea turtles attempting to nest on tourist-zone beaches;

Not Achieved: *The intended strategy was to adopt a collaborative approach with turtle conservation experts in the Department of Environment so that together we would have approached beach-front property owners, including tourist accommodation properties, and rewarded them by conducting the various “turtle tourism” activities on their site, thereby encouraging and reinforcing their compliance with “turtle-friendly” beach-front lighting, beach grooming, and beach furniture placement. However, the Department of Environment has persisted in refusing to collaborate with CTCEC on such initiatives and has rebuffed CTCEC’s attempts to create robust species conservation plans for green sea turtles and for hawksbill turtles, respectively. The seriousness of that impasse has been escalated for the Cabinet to attend to.*

❖ Continue annual translocations of captive-bred sea turtle eggs into the wild:

- Collaborate with beach-front tourist accommodation properties in Grand Cayman, Cayman Brac and Little Cayman as sites for turtle nest implantation and hatchling emergence events using translocated captive-bred sea turtle eggs during turtle breeding season each year, to:
 - Create new eco-tourism products and promotional opportunities, thereby supporting development and enhancement of our country’s tourism industry;

Partially Achieved:

Egg translocations:

Translocations were done in Grand Cayman during the year onto beaches popular with tourists. A total of 116 captive-bred hatchlings were released when they emerged from the nests of translocated eggs and made their way into the sea.

This was the third year that CTCEC conducted this innovative research and development program of increasing the wild turtle population directly from captive-bred eggs emerging from a limited number of prototype nest implantations at selected beach-front properties in the eastern and western portions of Grand Cayman. Such a program using captive-bred eggs had never been done before, anywhere in the world: all the techniques, protocols, emergence date estimation methodologies, and logistical arrangements for this were developed in Grand Cayman by the CTCEC team. This β-tested the biological critical success factors, physical beach placement parameters, equipment and manpower logistics, translocation and emergence timing, protocols involving the beachfront property management, observer training, audience participation rules and educational components, and the “turtle tourism” visitor



response potential of a brand new and innovative approach to conservation that has been pioneered in the Cayman Islands.

JumpStart Hatchling Releases:

CTC teamed up with local watersport organisations for a second year in a row, to help give turtles just hatched at the Centre a “jump start” in their early days of life, getting them past the gauntlet of threats and predators on the beach where they emerge and in the shallow water where they begin their ocean swim at the start of their life in the wild. This particular turtle conservation programme involves the transportation of the hatchlings to be released near large floating rafts of sargassum seaweed in the deep sea of Cayman’s surrounding waters. The sargassum serves as a nursery for the hatchlings, providing cover, a structure in which to hide from predators, as well as habitat rich in several sources of food for them.

Hatchling Beach Releases program:

Hatchling Beach Releases took place within a day or two of the hatchling emerging from its shell in the Company’s Hatchery. These releases were scheduled in the evening under the protective dark cover of the night, so the turtles can swim out to deeper water in search of shelter in a floating sargassum mat before the dawn.



In these three programs, during 2019 in 24 release events that proved to be very popular with tourists as well as residents, CTCEC released a total of 376 hatchling green turtles to augment the wild population.

However due to having to divert the focus of key executive-level attention onto the issues in contention with the Department of Environment, in light of the complexities of planning and resourcing the inter-island operations and logistics no egg translocations were able to be done in Cayman Brac or Little Cayman.

- Encourage properties to implement “turtle-friendly” beach-front lighting, beach grooming, and beach furniture placement thereby enhancing the likelihood and success rate of sea turtles attempting to nest on tourist-zone beaches.

Not Achieved: *See above and below regarding the issues with the Department of Environment, the seriousness of which has been escalated for Cabinet attention.*

- ❖ Thereby release a combined total of at least 500 sea turtle hatchlings and “head-starts” per annum into Cayman Islands waters.

Substantially Achieved: Following is the breakdown of all types of hatchling and head-start releases during 2019:

190	Jump-Start Released Hatchlings
70	Beach-Released Hatchlings
116	Hatchlings Released from Translocated Eggs
376	Total Hatchlings Released
5	Privately Sponsored Head-Starts Beach-Released
16	School & Summer Camp Head-Starts Beach-Released
8	Complimentary Private Head-Start Released
15	Dept. of Tourism Head-Starts Released
26	Grand Cayman Head-Starts Public Released
8	Cayman Brac Head-Starts Public Released
78	Total Head-Starts Released



454 Grand Total Released in 2019

- ❖ Develop, document and implement strategies aimed at restoring endangered indigenous sea turtle species.

Partially Achieved: CTCEC in collaboration with the University of Georgia Research Foundation created two robust, thoroughly researched, fully documented and comprehensive species conservation plans for sea turtles in the Cayman Islands: one each for green sea turtles and for hawksbill turtles. These were presented to the Caucus and in turn the Cabinet, with very favourable responses. However, these were rejected by the Department of Environment and in turn, by the National Conservation Commission. See more above regarding the issues with the Department of Environment, the seriousness of which has been escalated for Cabinet attention.

- ❖ **SPS alignment:** These initiatives contribute to achievement of:
 - 2018 and 2019 SPS Broad Outcome 1: A Strong Economy to Help Families and Businesses
 - b) Implement a new National Tourism Plan;
 - f) Develop and implement sector-based plans that support the diversification of the Caymanian economy;
 - g) Develop and implement area-based plans that support economic growth across Grand Cayman and the Sister Islands;
 - 2018 and 2019 SPS Broad Outcome 7: Ensuring Caymanians Benefit from a Healthy Environment
 - This also supports continued achievement of 2016/17 SPS Broad Outcome 10: Conservation of our biological diversity and ecologically sustainable development;
 - and more specifically Outcome 10(b): Contribute to the conservation of sea turtles in the wild around the Cayman Islands, by resuming annual releases of turtles ...

Turtle Conservation & Cultural Traditions

- ❖ Contribute to the conservation of sea turtles in the wild around the Cayman Islands, and to sustaining local culinary traditions practiced by residents, by making available from self-sustaining closed-cycle farming a stock of green sea turtle meat for local consumption thus suppressing the risk of turtles being poached from the wild.
 - Production Rate: Maintain turtle meat products production capacity of at least 40,000 pounds per annum (equivalent to at least approx. 900 turtles per annum), unless and until demand for such products is reduced below that level.

Achieved and exceeded: There were 86,719 pounds of edible turtle meat products produced in 2019, from a total of 1,745 harvested turtles. This quantity, though substantially higher than the minimum production target for these subsidized products, was required to keep pace with the demand during the year, and thereby to suppress the risk of poaching. Note: As of 31 December 2019, there were 256 green turtle breeders sustaining the Company's captive breeding program..
- ❖ **SPS alignment:** This program contributes to achievement of:
 - 2018 and 2019 SPS Broad Outcome 7: Ensuring Caymanians Benefit from a Healthy Environment
 - This also supports continued achievement of 2016/17 SPS Broad Outcome 10: Conservation of our biological diversity and ecologically sustainable development;
 - and more specifically Outcome 10(b): Contribute to the conservation of sea turtles in the wild around the Cayman Islands...

Research & Education

- ❖ Continue participation in research on sea turtles in-house and in collaboration with overseas researchers.

Achieved: Research continued in collaborative research projects with universities in Australia and USA. Peer-reviewed scientific research papers published during the year included:

Anna Barbanti, Clara Martin, Janice M. Blumenthal, Jack Boyle, Annette C. Broderick, Lucy Collyer, Gina Ebanks-Petrie, Brendan J. Godley, Walter Mustin, Víctor Ordóñez, Marta Pascual, Carlos Carreras. *How many came home? Evaluating ex-situ conservation of green turtles in the Cayman Islands.* Molecular Ecology 28(2) · January 2019

- ❖ Host students from local and overseas schools, educating them on sea turtles and other island wildlife.

- 2,140 students and chaperones were hosted in 2019. The Ownership Agreement target was 2,000.
- Host interns where possible. We hosted 14 interns (12 high school and 2 residents).



- Host Masters and PhD level university students conducting research where possible. We continued hosting of the University of Florida's Archie Carr Centre for Sea Turtle Research's PhD student.

- ❖ **SPS alignment:** *This program contributes to achievement of:*

- *2018 and 2019 SPS Broad Outcome 3: The Best Education Opportunities for All Our Children, and in particular*
 - *f) Invest in programmes that support improved attainment in academic disciplines at all levels with a key focus on ... science ...*
- *This also supports continued achievement of 2016/17 SPS Broad Outcome 7: A centre of excellence in education*

Tourist Attraction

- ❖ Provide a high-quality attraction for visitors to Grand Cayman offering display and interaction with sea turtles and other island wildlife.

- Sustain CTC admission market shares of stay-over and cruise visitors above 10% of visitors per annum in each category.

Achieved: *Market shares: stay-over visitors: 14% cruise visitors: 10%*

- ❖ Collaborate with other entities and entrepreneurs in the tourism industry to offer visitors "packages" incorporating a visit to CTC together with other products and services (e.g. transportation, visits to other attractions) thereby producing additional positive impact on the islands' economy and employment.

- Maintain and develop relations with tour bus companies, watersports companies, other attractions and other tourism service providers to offer "combination" packages for cruise shore excursions.
- Maintain relations with independent car rental companies, hotels and tourist condos to promote CTC visitation by stay-over visitors, through admission discount offers.
- Maintain relations with taxis that have a high percentage of tourist clientele, to promote visitation to CTC by offering CTC admission discount vouchers to their patrons.

Achieved: *During the year we have conducted recurrent training for all Independent Tour Operators on the tour narrative and delivery, and issued each individual a certification ID.*

Taxi and tour operators are offered a discounted rate for the Turtle Exploration tour to “package” and offer with their fares.

➤ Further develop relations for cross-promotion with Cayman Airways:

- Conduct cross-promotion on social media and CTC admission discount to visitors on presentation of Cayman Airways boarding pass stubs
- Offer CTC admission passes as prizes for in-flight “competitions”/raffles on inbound Cayman Airways flights from international gateways

Not Achieved: *The Cayman Airways promotion has been delayed due to the grounding of the 737 MAX aircraft. As an integral component in pursuit of these objectives CTCEC was to have purchased advertising space on the Sir Turtle Entertainment Airfi system, but that did not proceed due to the grounding.*

❖ **SPS alignment:** *These initiatives contribute to achievement of:*

- *2018 and 2019 SPS Broad Outcome 1: A Strong Economy to Help Families and Businesses*
- *2018 and 2019 SPS Broad Outcome 2: Achieving Full Employment - Jobs for All Caymanians*
- *This also supports continued achievement of 2016/17 SPS Outcome 1 (d): Encourage collaboration between the Cayman Turtle Centre and other local attractions, with entities and entrepreneurs in the tourism industry (such as tour bus companies, watersports companies, hotels) to offer visitors “packages” thereby producing additional positive impact on the island’s economy and employment*

❖ Revenue goals:

➤ Tours:

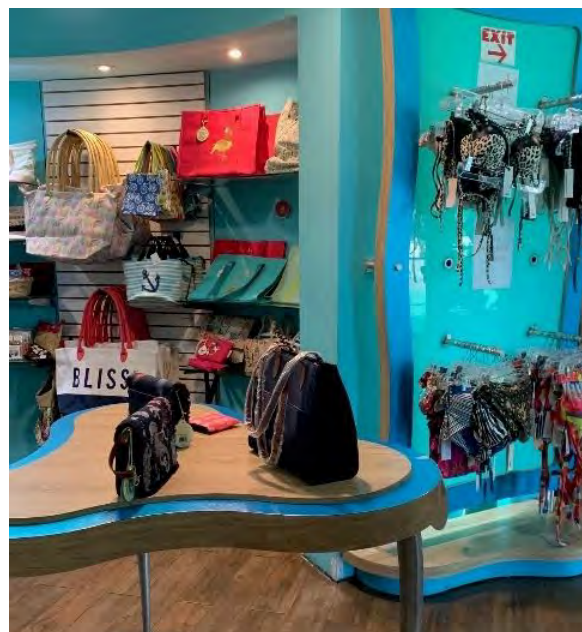
- Increase CTC admissions sold to “stay-over” guests by at least a factor of 50% of the percentage increase in air arrivals per annum (Year-on-Year for the fiscal period).

Achieved: *The Department of Tourism reported 502,739 air visitor arrivals in 2019, compared to 463,001 for 2018, an increase of 8.6%, therefore 50% of this would be 4.3%. Our data indicated 92,443 stay-over guests in 2019 compared to 87,250 in 2018, an increase of 6.4%.*

➤ Gift Shop:

- Increase Retail (gift shop sales) Contribution per annum by at least a factor of 50% of the same percentage as annual increase in cruise tourist arrivals (Year-on-Year for the fiscal period).

Not Achieved: The Department of Tourism reported 1,831,011 cruise visitor arrivals in 2019, compared to 1,921,057 for 2018, a decrease of (4.9%) Our financial data indicated that the decrease in revenue from the gift shops in 2019 from 2018 was (3.5%), therefore numerically this goal was not achieved.



➤ Food & Beverage:



- Increase F&B Contribution per annum by at least a factor of 50% of the same percentage as annual increase in cruise tourist arrivals (Year-on-Year for the fiscal period).

Achieved: The Department of Tourism reported 1,831,011 cruise visitor arrivals in 2019, compared to 1,921,057 for 2018, a **decrease** of (4.9%), therefore 50% of this would be (2.5%) Our financial data indicated that the food and beverage revenue increased by 3.6% in 2019 over 2018 and therefore this goal was achieved and exceeded.

❖ **SPS alignment:** These initiatives contribute to achievement of:

- 2018 and 2019 SPS Broad Outcome 1: A Strong Economy to Help Families and Businesses
- 2018 and 2019 SPS Broad Outcome 2: Achieving Full Employment - Jobs for All Caymanians

Events Hosting

- ❖ Offer the park as a venue for various corporate, social and community events, including catering of food and beverages.

Achieved: CTCEC achieved this by successfully furthering their offerings to the Meetings, Incentives, Conferences, Exhibitions (MICE) target audience on island. This was done by strengthening relationships with vertical market industry partners and the addition of an Event Representative on our F&B Staff in the third quarter of 2019. Through MICE marketing initiatives F&B saw an uptrend in corporate bookings for team building and for seasonal bookings. F&B added an additional corporate rental space (Yellow Cottage) hosting as many as 18 in a board-room environment with F&B service with computer access, smartboard and beautiful views. These event bookings include value-added incentives such as team-building supplementary materials, assistance with rental arrangements and assistance with group entertainment and employee motivation. Additionally, at the end of 2019, F&B ordered a custom Food Trailer to offer catering of food and beverages, available island wide.



CTCEC also achieved community wide awareness by participating in several island-wide events including annual fundraising events for Meals on Wheels, Jasmine's Flag Day, Various Beach Clean Ups, Deputy Governor's 5K, The Cayman Islands Marathon, Chamber of Commerce Earth Day and the Earth Day Clean up as well as sponsoring and hosting three very well attended public turtle releases. In June 2019, CTCEC released 10 Turtles at Public Beach with thousands in

attendance. This was successfully followed in October with an exciting trip to our Sister Islands where on the Brac eight (8) Head-started turtles were released. Last, but certainly not least, the annual Pirates Week turtle release also saw thousands turn out to witness twenty (20) Head-started turtles released into the water at Governor's Beach along with a guest appearance by Captain Jack Sparrow!

CTCEC also sponsored many other community events throughout the year that drew in many school-aged children including an Easter event and a Halloween event, both in partnership with DMS radio stations.

Debt reduction

- ❖ Continue reducing and extinguishing debt in accordance with the debt repayment schedule:
 - Continue quarterly bond debt payments in accordance with the schedule.
 - The bond debt to be finally paid off upon bond maturity in March 2019.
 - ***Achieved:*** *This last remaining long-term debt, the “bond”, was finally paid off on schedule in March 2019.*
 - (Note: The last remaining bank loan had been paid off in August 2017.)
- ❖ ***SPS alignment:*** *This program contributes to achievement of:*
 - *2018 and 2019 SPS Broad Outcome 8: Stable, Effective and Accountable Government*



AUDITED FINANCIAL STATEMENTS

The audited financial statements for the year ended 31st December 2019 are attached as **APPENDIX 3. Audited Financial Statements of the Company.**

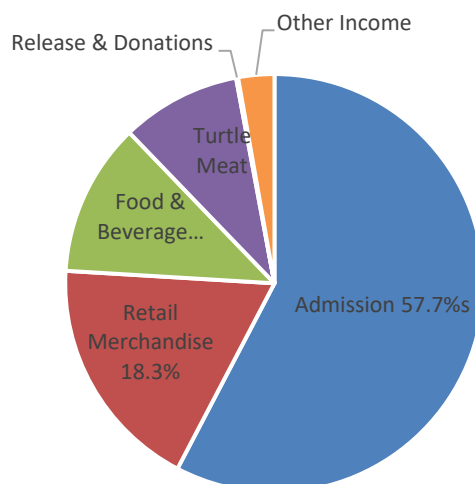
This audit was performed by Grant Thornton and the Office of the Auditor General, with the unqualified Audit Opinion issued by the Auditor General of the Cayman Islands.

During the year, as mentioned above, as a result of the final payments on the “bond” the principal amount of remaining long-term debt decreased to zero.

- **Breakdown of Revenue Sources**

Table 1 Income Analysis

	2019 FY	
Revenues	CI\$	%
Admissions ("Retail Tours")	4,693,810	57.7%
Retail merchandise sales	1,487,947	18.3%
Food and beverage	964,194	11.8%
Turtle meat sales ("Wholesale Sales")	753,194	9.3%
Turtle sponsorships ("Turtle Release Program")	12,707	0.2%



Breakdown of Revenue Sources:

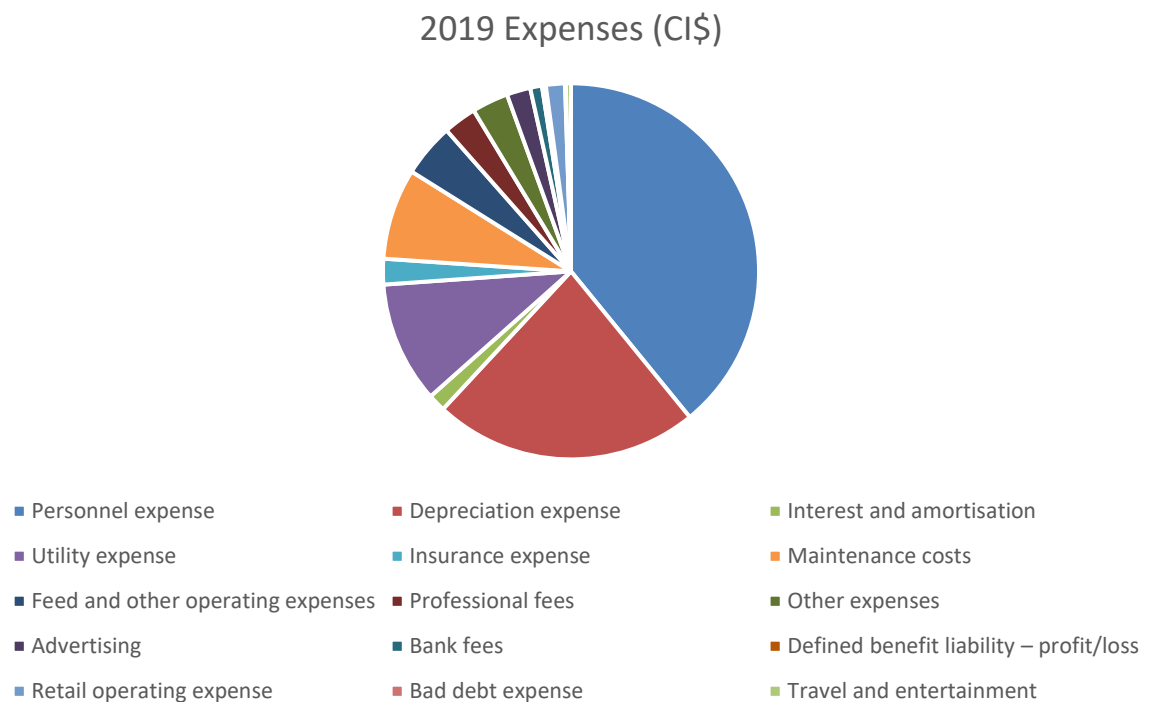
- The “Tours” revenue is derived from admission charges. Admissions are sold wholesale to cruise lines and local Tour Operators and attractions and sold retail directly to visitors and residents on site and through our web booking facility. The “Retail Merchandise” revenue is from CTC’s “Splash Gift Shop” on site and from the gift shop in the kiosk at Royal Watler (cruise) Terminal. The “Food and Beverage” revenue is from CTC’s “Schooner’s Bar & Grill”, “Turtle Nest Café” and “Budgie’s Snack Shack” on site, and this includes revenues from food and drinks catered to birthday parties and corporate events hosted on site.
- The total of the foregoing three categories comprises total earnings from the “Visitor Attraction” line of business, which made up 87.8% of the Company’s revenues.
- **Breakdown of Expenses**

Table 2 Expenses Analysis

Expenses	CI\$	%
Personnel expense	5,348,115	39.4%
Depreciation expense	3,117,291	23.0 %
Interest and amortisation	206,589	1.5 %
Utility expense	1,428,954	10.5 %
Insurance expense	300,917	2.2 %
Maintenance costs	1,070,021	7.9 %
Feed and other operating expenses	627,614	4.6%
Professional fees	389,583	2.9%
Other expenses	427,615	3.2 %
Advertising	278,867	2.1%
Bank fees	138,281	1.0%
Defined benefit liability – profit/loss	(45,000)	(0.3%)

Retail operating expense	224,411	1.7 %
Bad debt expense	(9,529)	(0.07%)
Travel and entertainment	59,576	0.4%
	13,563,305	100%

Figure 2 Expenses



The largest single expense is Personnel expense. For the fiscal period, the Company had a budgeted maximum headcount of 110 FTE's.

o Equity Injections

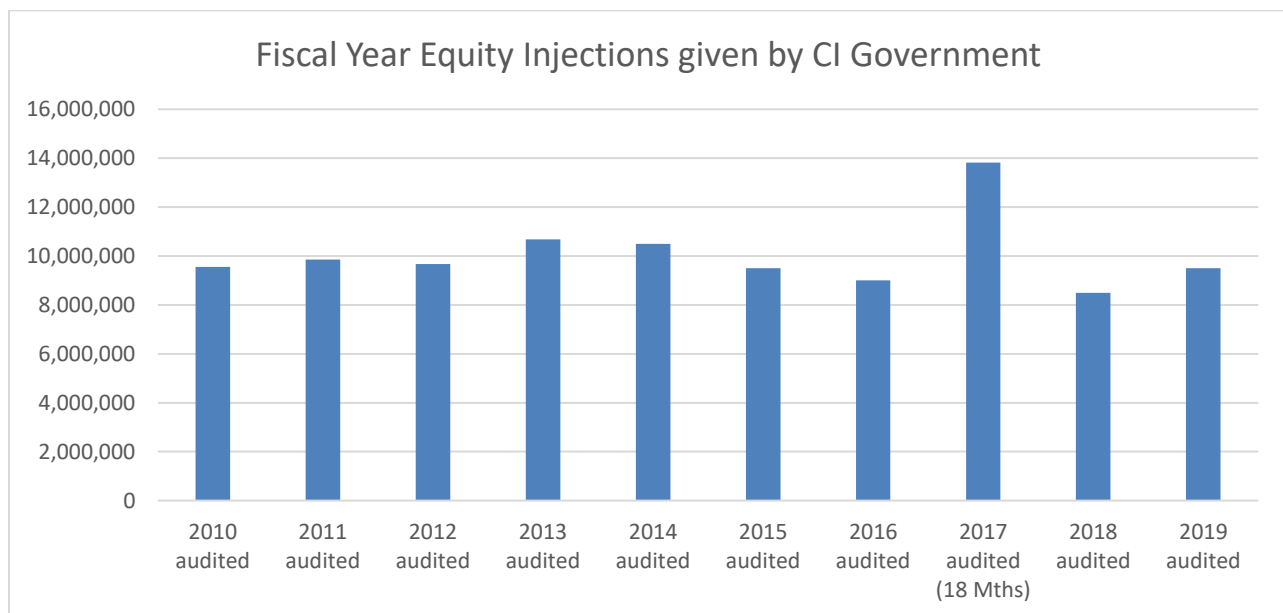
The “subsidy” provided by the government, which comes in the form of equity injections, has been steadily reduced as the financial performance of the Company has improved.

Fiscal Year	<i>El portion in cash (for debt servicing + cash shortfall)</i>
2010 audited	9,555,610
2011 audited	9,852,569
2012 audited	9,669,418
2013 audited	10,678,771
2014 audited	10,503,078
2015 audited	9,506,349
2016 audited	9,002,749
2017 audited (18 Mths)	13,815,709
2018 audited	8,500,000
2019 audited	9,500,000

Table 3 El Injections per Fiscal Year

The Equity Injection for 2019 was higher than in 2018 largely because, of the “cash” amount of the Equity Injection, \$4,536,000 went toward extinguishing all of the remaining long-term debt, comprising the scheduled final payment on the Notes Payable on March 1, 2019.

Figure 3 Trend in Reduction of Equity Injection required



o **Capital Withdrawals**

There were no Capital Withdrawals made by the Governor in Cabinet from the Company during the financial year.

o **Dividends or Profit Distributions**

There were no Dividends or Profit Distributions paid by the Company during the financial year.

o **Loans**

There were no new loans to the Company by the Governor in Cabinet or by any financial institution, during the financial year.

The loan and bond debt balances totalled CI\$0 as at 31st December 2019: The Company had no remaining long-term debt.

o **Guarantees**

There were no new Guarantees relating to the company made by the Governor in Cabinet during the financial year. The Governor in Cabinet continues to guarantee the CI\$4.2 Million for the Overdraft facility held with CIBC First Caribbean International Bank.

RISK MANAGEMENT

- **Key Risks and Risks Mitigation**

In this section we discuss below in depth a few of the main risks facing our Company.

Key Risk:

Continued dependence on Government subsidy, provided annually in the form of Equity Injections.

This is expressed as an *Emphasis of Matter* note each year in the Audit Opinion, with typical wording as follows:

We draw attention to note 11 of the financial statements which discloses that the Company is dependent upon the continued financial support of the Government of the Cayman Islands to enable it to meet its obligations as they fall due. Without this ongoing support a material uncertainty exists that casts significant doubt about the Company's ability to continue as a going concern. Our opinion is not qualified in respect of this matter.

- In other words, this risk does not cause an “audit qualification” but it is given “emphasis” as a significant risk in terms of the future viability of the Company.

Risk Mitigation: The risk of Government withdrawing its annual financial “subsidy” is minimized by the Company delivering huge benefits for the nation and its people, coupled with the Company highlighting these benefits in its contacts with government decision-makers and key influencers. These benefits include major successes such as:

- Functioning effectively in our conservation and research roles with results giving clear evidence that the Company is a vital and very active Key Success Factor in ensuring that green sea turtles, and other sea turtle species in turn, remain in the wild in the waters of the Cayman Islands to delight visitors and residents who swim, snorkel, or dive and have as many opportunities as possible to see these magnificent creatures in their natural habitat. The powerful evidence of that impact is discussed above in the portions of the report that relate to conservation and research, and the huge positive impact of captive-bred turtle meat availability as well as captive-bred turtle releases and turtle egg translocations to wild beaches.
- Providing a world-class, very popular tourist attraction which is a positive factor in prospective stay-over guests choosing the Cayman Islands as their destination, and prospective cruise visitors choosing Grand Cayman to be in their itinerary. Furthermore, this attraction motivates cruise visitors to come ashore when their ship calls at Grand Cayman, thereby generating spin-off passenger spending within the country rather than passengers remaining aboard the ship.
- The Company stands out as an exemplary role model of deliberate, determined efforts to recruit, train, develop, and retain Caymanians. In turn the Company is providing employment which is a primary means of income to support over 100 families, and no doubt in some cases this helps to support extended families. With only 5 FTE’s (less than 5%) out of our total headcount of 109 FTE’s requiring Work Permits, by far the highest percentage of our employees is Caymanian.

The Company also stands out as an exemplary role model of deliberate, determined efforts to assist other public sector entities in being successful in their endeavours. Our spirit of partnership with such entities as the government's Tourism Attractions Board (TAB), coupled with our track record of reliable execution and delivery of high-quality, safe experiences for visitors, have resulted in the tangible benefits of attracting a significantly large number of guests on "combination" shore excursions that demonstrate the Company's competences in collaboration, sales and marketing.

Key Risk:

Large dependence on revenues from cruise lines and cruise passenger spending.

As seen in the financial results and revenue graph, by far the largest revenue sources the Company presently has, relate to visitors to the park and on shore excursions that the Company sells both wholesale and retail. In turn, within those revenue streams the largest numbers of customers are cruise passengers. Therefore, there are significant related risks:

- The ongoing lack of a Cruise Berthing Facility (CBF) in Grand Cayman is a major impediment to cruise lines maintaining existing numbers of cruise passengers and is presently a significant barrier to cruise lines being able to significantly increase the numbers of cruise passengers that they bring to our island. Coupled with the cruise industry moving very visibly toward ordering and progressively deploying larger ships for which tendering is considered unacceptable, the risk of decline in cruise numbers is growing and gets steeper every time we hear another cruise line announcing the anticipated date that they will be deploying another large ship in their Caribbean itineraries. Of all the Caribbean islands which BREA surveys every three years to determine the economic impacts of cruise tourism in our region, the Cayman Islands is the only island nation that still does not have a cruise berthing facility. The cruise lines therefore, which typically plan their itineraries and commitments (especially for their large ships) years ahead, have to take that into account as to which ports they are going to include in their itineraries in the cruise season, the year, and the future years ahead.
- Inclement weather that results in ships bypassing Grand Cayman, has a large detrimental effect on our revenues. Given that many of our major cost components are not variable, we still have those costs to bear on those days when we lose customer revenue because their ships cannot come to our port due to unacceptable risks of tendering in such weather that would have been within acceptable weather minimums for berthing. The expert predictions are that the proposed Cruise Berthing Facilities (CBF) will mitigate this risk down to a small fraction of the current typical "days lost due to inclement weather conditions for tendering" per annum. Realistically however, the CBF is not likely to be in operation for another three or maybe even more years hence while we continue to face this risk.
- If cruise lines are influenced by other factors to stop doing business with the Company for whatever reason whether perceived or actual, each cruise line that makes such a decision will leave a significant "hole" in our revenues.

Risk Mitigation:

- The ongoing risks related to lack of a CBF are being addressed on an ongoing basis by the Company's top management assisting in influencing and encouraging for the CBF to be built as soon as it can be properly done. The CEO and CTCEO have for years invested considerable

time and efforts in these endeavours, through various industry organizations such as ACT (The Association for Advancement of Cruise Tourism), the FCCA, CITA, and related entities.

- The potential risks of cruise lines withdrawing from business relationships with the Company are mitigated by sincere, deliberate and frequent positive interactions and mutually beneficial business deals with the cruise line executives and with the FCCA leadership. To that end, the Company became a Platinum Member of the FCCA, and furthermore the Company demonstrates its commitment to the cruise industry partners by its CEO, CTCEO, and other executive level senior managers attending the FCCA's annual Conference and Trade Show, at which these executives are able to take many formal and informal opportunities to build on our excellent relationships with cruise lines and their industry leaders.
- To add some measure of mitigation of this large dependence on cruise passengers, the Company has also extended its outreach to stay-over tourist industry partners, accommodation properties and especially resorts in the "Seven Mile Beach" touristic zone. This outreach has resulted in increased stay-over visitors coming to our park, and it is with pleasure that in a prior year we have had to increase from one to two Courtesy Shuttle minibuses to keep pace with the growing demand for this facility from the resorts. There are several other factors in our strategic developments in that direction, including a part-time employee who is tasked with liaison with the accommodation properties in addition to Courtesy Shuttle duties, and places marketing materials in those properties to help concierges and front desk staff in promoting our park attraction.
- To further enhance and develop the Company's relationships with stay-over visitor accommodation properties, the senior management of the Company and our scientific staff during the three years including 2019 have launched and refined projects in which we have proven the potential for new product developments in "turtle tourism". For example, by our positive interactions with property managers in placing our egg translocation projects on beaches in front of prominent tourist accommodations, they have been able to see the very positive interactions and engagement this creates with their guests and the "once-in-a-lifetime" memories it creates for individual guests and multi-generational families that this project gives them, to observe up close and in person the emergence of turtle hatchlings on a beach and their crawl to enter the sea and swim away as they commence the first stage of their lives in the ocean.
- The Company has also put in place the infrastructure and the protocols to enable us to be able to offer private turtle releases, such that guests celebrating a milestone can have an event in which they and their loved ones or business associates can participate in an event releasing one of our head-started turtles into the wild. We conducted the first set of such events starting in May 2016, and from the experience we gained from subsequent events during the ensuing years up to and including 2019 we have now refined the processes and the marketing collateral used with the Department of Tourism and other stayover tourism industry partners in creating these events.

Key Risk:

Property Loss and Public Liability, and Risk Mitigation.

Various commercial risks including loss and damage to property, and public liability, are mitigated by insurance coverage under the umbrella of CI Government's Risk Management Unit and the

insurance policy they oversee. The Company pays to CI Government its assessed share of those premiums.

In terms of various other risks, key items are discussed below in brief summary:

Reputational Risk:

There are various potential sources of reputational risk therefore the prime ones are discussed below along with our mitigating actions:

Reputational Risk Mitigation:

- Misunderstanding of the Company's role in turtle meat production, and lack of understanding as to why that is essential for sea turtle conservation in our country, subsequent to the financial year-end has been partially mitigated by the creation of a separate brand for those functions.
 - *"Cayman Turtle Products"*, the brand applied for that purpose, was launched mid-September 2016 and is the identity under which those aspects of our operations are conducted, separate and distinct from our Cayman Turtle Centre brand.



- Complementary to that change, the Company's functions as a tourist attraction and as a leading centre for sea turtle conservation, education and research are conducted and marketed under the brand *"Cayman Turtle Centre"*.



- *Note:* For ease of transition and to retain customer and industry partner familiarity with those elements of our business, we have retained the same logo style and image but we no longer use the brandname "Cayman Turtle Farm" so as to differentiate the new identity as distinct from the aquaculture commercial "farming" aspects that are now identified under the Cayman Turtle Products brand.
- In the past there arose the reputational risk of Special-Interest groups attacking the Company's reputation especially with accusations of animal welfare violations and related allegations. Those risks have now been mitigated by the regular inspections by the Animal Welfare Unit of the Department of Agriculture, typically done four times per year.
- If there are customer complaints in relation to their experience or observations at our park, there is a reputational risk on social media especially on TripAdvisor.com which is a popular

reference source for travellers. This risk is mitigated by constant attention to delivering a high quality, safe experience for our guests.

Compliance Risks:

Procurement:

This risk has been mitigated by familiarizing senior managers involved in purchasing, with the procedures and business controls which our COO and her team reinforce so that we remain within the rules of the various legislation governing procurement, and we have contracted with EASiBuy to assist us in these processes also.

Conflicts of Interest:

Annually the executives and Directors update their declarations of interest and our COO maintains a register of these declarations.

Regulatory Compliance:

There are two main regulatory bodies that could adversely impact the Company's ability to remain in compliance.

Water Authority

This Statutory Authority has regulatory functions under which it regulates our water extraction, sewage treatment and sewage effluent discharge, and it also regulates the discharge from our flow-through seawater system in our captive-breeding facility. That system carries salt water pumped directly from the sea into our various turtle tanks and then discharges that water back into the sea after it has flowed through those tanks. In regard to the latter system, there is the requirement for a Marine Discharge Permit which is a form of permission issued by the Water Authority. The last license issued was for 24 months and had specified three 6-monthly checkpoints with specified aspects targeted to be achieved by the end of each of the four 6-month periods. The Company complied as far as we were able to comply, which came at the second of the checkpoints by which time we were required to submit to the Water Authority for approval, a full RFP for a wastewater treatment system to result in reduced figures for various measurements that are regularly taken of the water in our outflow stream. We submitted the full RFP to the Water Authority by the specified deadline, and we wrote that RFP making use of the relevant FIDIC template¹³. There now remains somewhat of a risk however because:

- The Water Authority has to date not been able to approve the RFP. Anecdotally we believe that in some aspects beyond our control as to the national infrastructure in which the extracted sludge would be treated, it is likely that the volume needing to be treated is simply not feasible in our island.
- Whether it was for that reason or some other, the criterion of subsequent checkpoints that relate to procurement and implementation of the plant that was the subject of the RFP, obviously could not be fulfilled without the required approval of the Water Authority and furthermore it appears that subsequent to implementation, the

¹³ FIDIC is the International Federation of Consulting Engineers: <http://fidic.org/>

logistics of operation would in any case have resulted in requirements for which it is most likely not going to be feasible for the national infrastructure to accommodate.

Risk Mitigation: This risk in relation to the Water Authority has been mitigated as follows:

- When the Marine Discharge Permit was coming up to its expiry date, the Company filed the application for renewal of the Permit. To date the Water Authority and its regulatory successor, OfReg has neither refused nor issued a new Permit.
- In our original discussions leading up to the issue of our last License, we had suggested quite a different approach for handling the outflow water and for which the engineering appeared more feasible.
- In the meantime, the Company continues to cooperate well with the Water Authority in the other elements of compliance with the Marine Discharge Permit. The Company funded the video transects, and the Company continues to regularly submit the water samples as required for monitoring parameters of the discharge water.
 - It should be noted that the video transects that we have seen to date, do not indicate that the outflow is causing a progressively worsening situation. To the contrary, anecdotal evidence from the management of a nearby dive site suggests that the nutrients in the outflow may actually help considerably in attracting fish and other marine wildlife to the area which in turn helps to maintain the dive site's reputation as one of the best shore dives on the island.
- Therefore, we consider that if the good spirit of cooperation and the practice of pragmatic approaches that have characterized the Company's relationships with the Water Authority to date are continued, this risk can be mitigated. There does not appear to be a compelling case for urgency and so there is a positive outlook that eventually whatever is done in respect of the Permit issuing, the way ahead can be feasible and sensibly "beneficial to all concerned."
- In summary therefore in light of what we have observed in the approach the Water Authority has taken, we do not perceive this to be a large risk but rather we have included it for the sake of completeness and disclosure to our Shareholder.

National Conservation Council and Department of Environment

This Council, which is appointed by the Governor in Cabinet and empowered by the new National Conservation Law (NCL), has now been given sweeping powers by the recent coming into force of various Sections of the NCL. That has the potential to present large risks to the survival and success of the Company if there emerges "regulatory activism" and if "ideologues" are allowed to set or influence the agenda. There are various sections of the NCL that if not properly handled and sensibly administered by this Council, or by the leadership of the Department of Environment as delegated by the Council under the NCL, could be disruptive to our operations, damaging to our business prospects and hazardous to our success in fulfilling our mission.

Risk Mitigation: The primary channel of compliance risk mitigation in relation to the NCC, rests with the Governor in Cabinet. Whereas the NCL makes provision for the Cabinet to have the power to mitigate such risks, for example by giving "directions" to the NCC, to date it appears that few if any of those needed "directions" have been effectively given.

During the year there has been clear evidence of possible risks of “regulatory overreach” by the NCC and/or the DoE leadership. In addition, the DoE leadership has made statements which reveal a tendency toward being influenced by “perceptions” especially of persons or organizations based overseas, whereas our senior management insist that policymaking should be evidence-based and science-led. This regulatory risk therefore requires further attention by the Cabinet in order to avoid such risks arising and propagating to the detriment of our Company and its beneficial impacts in our nation-building, and thereby Cabinet will need to direct these entities toward outcomes that are ultimately sensible, evidence-based and to the national benefit. In this regard we have submitted for Cabinet attention the matter of species conservation plans, the impasse situation with the Department of Environment and the National Conservation Council, and a QC’s legal opinion in that regard.

ACTUAL LOSSES/DAMAGES, Write-offs, and related Payouts

There were no material losses, damages claimed, write-offs or related payouts required for the financial year ended 31st December 2019. However, in January 2018, anomalies in certain cash balances/transactions were identified. The Company engaged legal counsel and an independent forensic firm to investigate historical cash transactions. This uncovered missing cash of CI\$324,390 which was provided for in the period ended December 31, 2017 (Note 17 in the audited financial statements). The Company took remedial actions with respect to this matter, some of which are ongoing.

Further, in June 2018, irregularities in purchases of information technology-related items amounting to CI\$434,999 were identified in relation to Property, Equipment and Exhibits. The necessary adjustments were made in the financial statements (Note 18) and this matter was passed over to the Anti-Corruption Commission for their investigation which remains ongoing.

FINANCIAL PERFORMANCE and ANALYSIS

- Details of Actual vs Prior Year and Actual vs Budget

The key strategic goals and objectives (from an ownership perspective) for The Cayman Turtle Conservation and Education Centre Ltd set for the 12-month fiscal period ended 31st December 2019 are shown on p.34 and following pages.

SUMMARY of ACHIEVEMENT of Ownership Performance TARGETS

Overall: The Company remains dependent on Government for subsidies. In the financial year ended 31st December 2019, the “cash” portion of the Equity Injection was CI\$9,500,000. This was an increase of 11.76% from the year ended 31st December 2018 (CI\$8,500,000). This increase

relates to the extra funding to make the final payment on the Notes Payable which commenced on September 1, 2006 and the final payment of CI\$4,536,000 was made on March 1, 2019.

The Ownership Performance Targets as specified in schedule 5 to the Public Management and Finance Law (2018 Revision) compared with actual results for the 2019 fiscal year are as shown in Table 3 Ownership Performance Targets & Actuals.

- **Financial Performance**

Financial Performance Measure (CI\$000)	2018 Actual CI\$000	2019 Budget CI\$000	2019 Actual CI\$000
Revenue from Cabinet	0	0	0
Revenue from ministries, portfolios, statutory authorities and government companies	0	0	0
Revenue from other persons or organisations	7,995	7,769	8,139
Surplus/(deficit) from outputs	(7,558)	(6,692)	(7,017)
Other expenses	88	(150)	147
Net Surplus/(Deficit)	(7,470)	(6,842)	(6,870)
Total Assets	25,111	23,239	21,698
Total Liabilities	8,053	2,620	2,009
Net Worth	17,059	20,618	19,689
Cash flows from operating activities	(3,339)	(3,535)	(4,189)
Cash flows from investing activities	(336)	(1,100)	(764)
Cash flows from financing activities	4,979	4,964	4,964
Change in cash balances	1,304	(110)	10

Financial Performance Ratio	2018 Actual CI\$	2019 Budget CI\$	2019 Actual CI\$
Current Assets: Current Liabilities	0.62:1	3.22:1	2.57:1
Total Assets: Total Liabilities	3.12:1	8.87:1	10.8:1

Maintenance of Capability

Human Capital Measures	2018 Actual CIS	2019 Budget CIS	2019 Actual CIS
Total full-time equivalent staff	101	110	109
Staff turnover (%)	19.4%	5%	18.7%
Average length of service (Number)			
Senior management	5.9	6.8	6.6
Professional staff	1.0	8.4	2.6
Administrative staff	12.2	9.1	13.5
Significant changes to personnel management system	No changes	No changes	No Changes

Physical Capital Measures	2018 Actual CIS\$000	2019 Budget CIS\$000	2019 Actual CIS\$000
Value of total non- current assets	20,588	19,556	18,235
Asset replacements: total assets	1.3%	1.8%	3.5%
Book value of depreciated assets: initial cost of those assets	37.7%	33%	33%
Depreciation: Cash flow on asset purchases	9.29:1	2.96:1	4.08:1
Changes to asset management policies	No changes	No changes	No changes

Major Expenditure Repair Projects	Capital and 2019 Spent CI\$000	2019 Budgeted CI\$000	2019 Remainder CI\$000
Multipurpose building	0	320	320
Visitor and Veterinarian Centre	0	100	100
ALSS components, and Seawater and other Pumps	209	0	(209)
Turtle Tanks, incl. water distribution improvement	27	300	273
Water Park	0	200	200
Equipment for Schooners & Cafe	35	0	(35)
Various Misc. Projects	245	0	(245)
Furniture & Equipment	71	50	(21)
Computer Hardware	107	50	(57)
Computer Software	70	50	(20)
Motor Vehicles	0	30	30
Total 2019	764	1,100	336

Table 3 Ownership Performance Targets & Actuals re Capital Expenditures

The remainder will be used during 2020 to:

- To start seawater supply lines replacement project as well as upgrades needed to the ALSS.

• **Analysis of how the Equity Injection was Utilized**

As shown the Company's audited Financial Statements, the total Equity Injection made by the Governor in Cabinet in the company during the financial year was CI\$9,500,000. This amount was contributed in "cash".

Of the "cash" amount of the Equity Injection, \$4,536,000 went toward debt servicing, for the final payment on the Notes Payable on March 1, 2019. \$764,236 went toward the purchasing of property, plant, equipment and exhibits. The remainder, \$4,199,764 was used to assist with payments for personnel and utilities expenses to cover the shortfall in cash needed for these payments.

CI\$ equivalent		Application of Equity Injection 2019
9,500,000		Total Equity Injection from Government (Note 11)
9,500,000		"Cash" Contribution of Equity Investment (per the Appropriation Law – EI 49)
	(4,536,000))	Repayment of Guaranteed Senior Notes (Note 8 & Statement of Cash Flows)
	4,536,000	to Debt Servicing - total
(764,236)		to Capital Expenditure projects (Note 7)
(4,199,764)		to "subsidise" shortfall between Revenues and OpEx BITDA for Personnel and Utilities expenses

Table 4 Analysis of Application of Equity Injection

SCRUTINY by Parliament and the Public

Parliamentary Questions

The Company's Management is not aware of any Parliamentary Questions nor any outstanding questions from the PAC directed toward the Company or its business affairs.

FOI Requests:

Only one FOI request was received and responded to in 2019: dealt with:

FOI Ref. #: 88425

Sent to CTC via email: 2019-Nov-2

Received by CTCEC: 2019-Nov-2

Summary of request regarding recent hire of Restaurant and Events Manager:

- Does the hiree have Caymanian Status or the Right to Work without needing a work permit?
- At what companies has the hiree been employed and in what positions in the Cayman Islands?
- What Food and Beverage Events has the hiree contracted, organised and controlled?
- What awards has the hiree received from the Cayman Islands Government in recognition of his work in the Tourism Industry?

Date answered: 2019-Dec-10

Complaints:

The Company's management is not aware of any official Complaints against the Company filed with the Complaints Commissioner during the 12-month fiscal period ended 31st December 2019.

CROSS-GOVERNMENT COMMITMENT

The Company assists the Department of Environment (DOE) in various ways. For example:

- The Company's Head Veterinarian on an *ad-hoc* voluntary basis has assisted the Department of Environment with sea turtle rehabilitation (off-site)¹⁴ after rescue from poachers.
- The Company's Curator – Terrestrial and Education has assisted the Department of Environment with various information, such as parrot husbandry protocols and visual characteristics used to determine the age and sex of Cayman parrots.

The Company is also committed to working with other government entities that are engaged in the tourism industry, for example:

- the Tourism Attractions Board: In particular, continued collaboration on offering cruise lines "combination" shore excursions incorporating a visit to Pedro St. James National Historical Site plus a full-access visit to CTC;
- Cayman Airways: CTC offers tourists admission discounts upon presentation of a recent Cayman Airways boarding pass, and provides admission vouchers as prizes on in-flight contests during Cayman Airways anniversary celebrations;
- the Department of Tourism (DOT) and the Port Authority of the Cayman Islands: CTC joins with these entities in representing our country's cruise tourism product in FCCA trade shows.

FORWARD-LOOKING

The Company's *Strategic Goals & Objectives* have been set out in the *2020-2021 Ownership Agreement*.

APPENDICES

APPENDIX 1. Economic Impact Assessment

In March 2013, the Company engaged PricewaterhouseCoopers (PwC) to produce a study of the economic impact of the Company. PwC gathered information from the Company, the Cayman Islands Government (CIG), the Department of Tourism, the Economics & Statistics Office, private sector tour operators and tourism attractions owners, and BREA (Business Research & Economic Advisors). The approach used was consistent with that used in the UK by HM Treasury. They completed the study in May 2013 and produced a report on the study¹⁵. It is available from the FOI section of our website:

<https://www.turtle.ky/about-us/freedom-of-information/>

The scale of the estimated impacts on Cayman's economy used two indicators: economic output as measured by Gross Value Added, and employment. CTC has direct, indirect and induced economic impacts, but a key determinant of CTC's net economic impact is its wider effect on

¹⁴ In order to minimize the risk of contamination from wild-caught animals introducing pathogens to the Company's collection of thousands of live animals, such rehabilitation operations are performed off-site (rather than on the Company's premises).

¹⁵ PricewaterhouseCoopers. *Economic Impact Study Cayman Turtle Farm*. www.turtle.ky. N.p., May 2013. Web. 27 Sept. 2016. <<https://www.turtle.ky/upimages/1396990996CTF-Economic-Impact-Study-16.5.2013.pdf>>.

enabling and encouraging greater visitor spending in Cayman which of course also translates into employment.

The study estimated the current impact of CTC on Cayman's economy for a one-year period (2012), and went on to estimate the net present value of the economic impact of CTC over an estimated 15-year economic life period in "counter-factual" scenarios, in other words what is the impact of CTC in two different scenarios of the future, compared against a hypothetical scenario in which the Company receives no subsidy and as a result its operation is wound down over twelve months to cease operation.

The results of the study produced in May 2013, are given for the two different scenarios:

- If there is going to be no cruise berthing in Cayman, the Net Present Value of the Gross Value Added is US\$73 million with a national employment impact of 203 full-time employees.
- If there is going to be cruise berthing, the Net Present Value of the Gross Value Added is US\$220 million with a national employment impact of 603 full-time employees.

These results are summarized in a table on p.34 of the PwC report on the Economic Impact Study:

Source: PwC analysis

		Net present value to GVA: (US\$m)	Impact in terms of operational employment: (FTEs)
Scenario 2a	With subsidy – no Cruise Port redevelopment	73	203
Scenario 2b	With subsidy – Cruise Port redevelopment	220	603

Figure 4 Net Expected Economic Impacts of the Company

The economic impacts outlined above should be considered in the context of CIG's ongoing subsidy of operating losses, which, at approximately [US]\$4m per annum, equate to a net present value of [US]\$40m over the fifteen year period. In determining the value-for-money of the subsidy, the CIG should consider whether its [US]\$40m 'investment' is generating sufficient 'returns' in terms of economic benefits. This assessment should not be made in isolation but bearing in mind alternative subsidy options for cruise tourism such as, for example, subsidization of cruise berthing fees. [CTC's] conservation role discussed above and the cultural/social value of [CTC] will also be relevant in these considerations. The main observations to be drawn from the analysis are

- *Overall, [CTC] clearly has several linkages for the cruise and tour industry in the Cayman Islands. Together with attractions such as Stingray City, it offers a unique experience for cruise visitors, which is critical considering the repetition of attractions in many competitor destinations, such as dolphinariums. As a result, the wider economic impacts of [CTC] are substantial.*
- *While [CTC] has also a somewhat symbiotic relationship with the cruise lines, its presence in Cayman is not likely to be the deciding factor in cruise lines' decisions to include the Cayman Islands on their itinerary.*

- *In the absence of a redevelopment of the Cruise Port, the ongoing subsidy of operating losses may still be justifiable in the context of the overall [CTC] economic impacts. However, without a new Cruise Port an even more rapid decline in cruise tourism than expected could quickly undermine the rationale for the ongoing subsidy.*
- ***In the context of a redevelopment of the Cruise Port and a wider strategic tourism plan to maximize Cayman Islands' offering to the cruise industry, [CTC's] long term positive economic impacts could be substantial. In this scenario, the rationale for the ongoing subsidy would be clear, particularly if it formed part of the overall cruise tourism strategy***

Given the Government's firm commitment to and commencement of a deliberate systematic process aiming to redevelop the cruise terminal and berthing facilities, of the two different future scenarios studied the second scenario now appears to be an eventual likely scenario, which assumes Government will at some point be proceeding with the redevelopment of the cruise terminal and berthing facilities in George Town.

The primary purpose of this economic analysis was to inform decision making for the future. The Government guarantees almost all of the Company's debt, so the portion of subsidy that is applied toward debt servicing and reducing overdraft does not factor into this analysis because Government's debt obligations would remain whether or not the Company continues operating. Therefore, for comparison purposes the study estimated the value of the portion of Government's subsidy that goes toward subsidizing the Company's operational losses; that is the US\$40 million figure that PwC mentioned for the 15-year period.

As PwC put it, *"In determining the value-for-money of the subsidy, the CI Government should consider whether its [US]\$40 million 'investment' is generating sufficient 'returns' in terms of economic benefits. This assessment should not be made in isolation but bearing in mind alternative subsidy options for cruise tourism such as, for example, subsidization of cruise berthing fees. [CTC's] conservation role ... and the cultural/social value of [CTC] will also be relevant in these considerations."*

In summary the key numbers show that especially in the scenario of having cruise berthing facilities, there are large economic benefits from the Government subsidy to enable CTC to continue operating and having the positive net impact on the wider economy and employment in Cayman. In addition, the Company also provides other benefits in its role in conservation and in maintaining our Islands' cultural and social traditions.¹⁶

¹⁶ The report gives further detail as to PwC's methodology and findings, and is available for download from the Company's website at: <http://www.turtle.ky/economic-impact-study-of-cayman-turtle-farm>

APPENDIX 2. *Historical Background*

- **History of Turtles in the Cayman Islands**

The sea turtle has been an iconic figure of the Cayman Islands all the way back to their discovery by Christopher Columbus in 1503. The islands were first named “Las Tortugas” because of the abundance of sea turtles that Columbus observed in the sea around the islands. Over the next two or three centuries the Cayman Islands became a stopping point for ocean-going vessels in the area to catch turtles and take them aboard ship to be a source of fresh meat for the voyage. The availability of the fresh meat of sea turtles was cited as a vital factor¹⁷ enabling the colonization of the Caribbean region.

For settlers of the Cayman Islands, “turtling” became a means of survival and although by the 19th century the population of sea turtles around Cayman had been depleted, turtles remained an important part of the islands’ economy. The Caymanian “turtlers” (turtle fishermen) were skilled at sailing to the Miskito Cays off Nicaragua to catch turtles there, and transport them to Cayman and on to Florida, USA where they were sold as a delicacy for their meat. This continued into the 20th century. Caymanian turtlers earned the title of “the world’s most effective turtle fishing fleet”.¹⁸

Up to today, the green sea turtle has remained a cultural icon of the Cayman Islands, featuring on the Cayman Islands coat-of-arms and flag, in the islands’ currency, in the logo and livery of the national airline, and in the logos of the Department of Tourism, the Cayman Islands Tourism Association, and several other organisations in the public and private sectors. Turtle meat dishes still feature highly as important aspects of local culture and culinary traditions. A June 2014 to June 2015 research project conducted by the Department of Environment on “*Socio-economic aspects of turtle conservation in the Cayman Islands*”¹⁹ that was funded by the UK’s Department of Environment, Food and Rural Affairs (DEFRA) “Darwin Plus” initiative, revealed that some 62% of Caymanians by descent consumed turtle meat at least once during the year studied, and the tradition remains strong across all the age demographics: the study declared that it “*found inconclusive evidence of age differences in turtle consumption among residents*”²⁰.

- **History of the Company in the Cayman Islands**

The company started in 1969 as *Mariculture Ltd.*, a venture started by private investors from the USA and UK, to commercially raise green sea turtles. This was the first commercial enterprise to domesticate sea turtles and it is the only remaining captive breeding farm in the world for sea turtles. The green sea turtle species was chosen because of the superior quality and taste of its meat, as green sea turtles become almost exclusively vegetarian as adults.

¹⁷ Bandimere, A. (2020, March 17). Sea Turtles of the Caribbean - The State of the World's Sea Turtles: SWOT. Retrieved June 27, 2020, from <https://www.seaturtlestatus.org/articles/2020/2/25/sea-turtles-of-the-caribbean>

¹⁸ Rieser, Alison. The Case of the Green Turtle: An Uncensored History of a Conservation Icon. Baltimore: Johns Hopkins UP (2012): 18

¹⁹ Nuno, A., “Socio-economic aspects of turtle conservation in the Cayman Islands – Key results report”, *Cayman Islands Department of Environment* (2015): 16
and
Key results report *Cayman Islands Department of Environment RSS*. N.p., n.d. Web. 27 Sept. 2016 15–17

²⁰ Nuno, A., “Darwin Plus Cayman Turtle Socioeconomics,” *Cayman Islands Department of Environment RSS* 16

The primary motivation of the farm's "founding father" Dr. Robert Schroeder, was conservation with a strong component of research and education; Dr. Schroeder's passion was to find practical ways to ensure that sea turtles did not continue their population decline toward extinction. The primary methods he pursued involved captive breeding with the dual purposes of replenishing the wild population by releasing live turtles into the wild from captive-bred stocks and protecting wild stocks from human predation by selling captive-bred farmed sea turtle meat. From the farm's inception, his adopted philosophy of "conservation through commercialisation"²¹ has been both inherent and explicit; indeed green sea turtles are aptly described as "the buffalo of the sea."²² Like the North American bison which are commonly known as buffalo, the green sea turtle species in its adult life eats vegetable matter almost exclusively – specifically *Thalassia testudinum*, commonly known as turtlegrass, and in the Pacific this species eats algae – and converts it into a high quality meat with good taste, texture, and nutritional qualities.

Initially the green sea turtle farm was located in Salt Creek, Grand Cayman, on the eastern edge of the West Bay peninsula in a natural inlet off the North Sound, with the turtles held in floating pens. In 1971 Mariculture Ltd. relocated to the "Goat Rock" site in the community known locally as Vixville, on the coastline at North West Point in the West Bay district. Thereafter the turtles were kept in concrete tanks and in a large breeding pond with an artificial beach, with seawater being constantly pumped from an intake channel cut in the shoreline and piped directly to each of the individual tanks and breeding pond. Today the intake channel remains in operation and the current combined rated capacity of the seawater pumps that are normally running is 3,500 gallons per minute.

Although the farm was initially established to be an aquaculture enterprise that contributed to replenishing wild turtle populations, from its early days there was keen interest amongst tourists to see the farm and its turtles. Within a few years of the farm's establishment it had also become a popular tourist attraction, including a gift shop.

Mariculture Ltd. exported various turtle products including meat, turtle leather, turtle shell and derived products, and turtle oil (which was prized as an ingredient for cosmetics), until around 1973 when CITES (the Convention on International Trade in Endangered Species of Flora and Fauna) in effect imposed a ban on the commercial export of sea turtle products. In 1975, Mariculture Ltd. filed bankruptcy; private investors (the Mittag family from Germany) purchased the company and renamed it "*Cayman Turtle Farm Ltd.*" In the face of the CITES restrictions, which they hoped they could eventually get lifted once the operation was correctly recognized as a legitimate closed-cycle captive breeding facility, the company struggled financially. Finally after continued losses and little progress with CITES recognition, the Mittags decided to gradually shut down the operations because they could no longer continue to fund the company's financial shortfalls, but in 1983 the Government of the Cayman Islands recognized the enterprise was a vital part of its nation-building: preserving a cultural icon and a draw for ecotourism – sea turtles; preserving local culinary traditions without depleting the wild population; and providing a unique tourist attraction.

²¹ Fisher, M., "Conservation Through Commercialisation", *Economic Affairs* 14 (1994): 15–17

²² Schroeder, Robert E., "Buffalo of the Sea", *Sea Frontiers* 12 (1966): 176-83

To complete the procurement the government created a new company named “*Cayman Turtle Farm (1983) Ltd.*”, wholly owned by the government, which bought out Cayman Turtle Farm Ltd. The official company name was changed in early 2017, with the approval of Cabinet (the sole shareholder) to “*Cayman Turtle Conservation and Education Centre Ltd.*”. It remains a Government Company, administered under the Ministry of Tourism. It operates with its own management and Board of Directors. Shareholder liaison is primarily through the Ministry for Tourism; the government is the only shareholder (“Sole Member”) and formal shareholder decisions are officially made by the Governor in Cabinet of the Cayman Islands Government.

In its “Goat Rock” location on North West Point Road in West Bay, many of the “production” tanks had been built on property Mariculture Ltd. had acquired on the “land” side of the road, but all the tanks on display, the breeding pond, the gift shop and snack bar, administration offices and the main part of the operation was on the “sea” side of North West Point Road. Given the relatively deep water immediately offshore from the site, this set-up proved to be somewhat vulnerable to heavy wave action from “nor’westers” and tropical cyclones. Over the years, damage occasionally occurred during inclement weather and finally in 2001, huge waves churned up by Hurricane Michelle caused devastating damage to the facilities and its animals. The waves swept away many of its turtles, including some two-thirds of the breeding stock as well as a large number of younger turtles. The storm-driven seawater also badly damaged the company’s administrative building that housed its gift shop and snack bar in addition to various offices and destroyed many paper records along with other infrastructure. In the aftermath of that catastrophic damage, the decision was taken to move the entire operation, except for the seawater pumping station and the turtle meat sales outlet, to the “land” side of the road.

At that time, the cruise lines were encouraging the government to take steps to see to it that the portfolio of tourist attractions on the island was expanded and enhanced. After a period of consultation, and with the engagement of experts from a saltwater wildlife attraction in Orlando, Florida, commencing in fiscal year 2004 a project that was branded “Boatswain’s Beach” increased the scope of operations to that of a theme park, boasting artificial saltwater and freshwater lagoons, a free-flight Caribbean aviary, a nature trail, a gift shop, and a bar & restaurant. Thereafter the attraction traded under the new brand-name “*Boatswain’s Beach.*”

This project had as part of its fundamental economic assumptions that there would be a cruise berthing terminal adjacent or nearby in West Bay. Although the “Boatswains Beach” project went ahead, the West Bay cruise terminal did not. Up to now all the cruise visitors that come to the attraction must be transported via tender from the ships and then over land by bus from the cruise terminal in George Town or during inclement weather, from the alternative tendering terminal in Spotts. For shore excursions therefore the tendering and bus transportation add a considerable amount of cost and significantly increase the total time that must be allowed for the excursion. Both of those factors continue to negatively impact cruise visitors’ propensity to take shore excursions to spend their shore time at the attraction.

- **Rebranding in 2010**

There were subsequently some difficulties in marketing and customer perception of the “Boatswain’s Beach” name. In August 2010, the company changed its trading name back to

“Cayman Turtle Farm” with the tagline “Island Wildlife Encounter” to portray the primary activity of the company. At that time, the company also adopted a new logo, incorporating four stylized images:



Figure 2 New Logo adopted 2010

- The image of a turtle is a reference not just to the historical residents and star performers at the farm, as well as the Island’s cultural past, but the symbol of the turtle is also a reminder of the Company’s ongoing and world renowned research and conservation activities in addition to the traditional turtle-breeding and turtle release programmes.
- The second image is that of a Cayman parrot, the National Bird of the Cayman Islands, drawing attention to both our free-flight walk-through aviary, our captive-breeding and release programs for various native bird species, and also to encounters with some of our other indigenous wildlife.
- The image of a shark directs visitors to the marine life exhibits, interactive swimming, feeding and predator tanks, as well as the excitement of seeing underwater wildlife.
- And, finally, the fourth image in the logo depicts a frond of the silver thatch tree – the National Tree - referring to the nature trails and promotion of Caymanian traditions and culture.

- **2010 Vision Statement**

Upon adoption of the new brand in 2010, the brand restated its Vision:

“To be the Cayman Islands’ premier tourism attraction where visitors and residents enjoy a world class experience, showcasing Caymanian wildlife and heritage while hosting an internationally renowned research and conservation centre for sea turtles.”

Note: Please see p.53 for the **new Cayman Turtle Centre brand now in use**, and p.53 for the **Cayman Turtle Products brand now in use**.

- **2017 Change of Name and Memorandum of Association**

By Special Resolution dated 16th March 2017 the Sole Member of the Company (Governor in Cabinet of the Cayman Islands) approved a change of name and changes to the Memorandum of Association of the Company. The new name is *Cayman Turtle Conservation and Education Centre Ltd.* which reflects the primary focus of the amended wording of the Memorandum of Association which focuses heavily on its first two statements of purpose:

*“(a) To carry on any or all of the businesses of breeding, hatching, raising and/or utilizing sea turtles, eggs, and derivatives of all descriptions as needed, **including but not limited to translocations and releases**, import and export, or other such actions as are necessary or desirable **to fulfil national and international policy objectives in sea turtle conservation, education ... and research, to benefit the genera and in turn yield benefit to existing and future generations of mankind.** Conservation and research policy objectives include the production and distribution of green sea turtle meat for human*

consumption with the **primary goals** of ***reducing the loss of free-ranging sea turtles*** to meet local and traditional demand as well as the use of secretion, excretion, fluids and tissues collected at harvest **for educational and research purposes.**

*(b) To carry on the business of providing various products and services to visitors and residents, **conservation, education and research ...***”

As detailed in the Annual Report, the Company’s brand-names are now:

- Cayman Turtle Centre.
- Cayman Turtle Products.

APPENDIX 3. Audited Financial Statements of the Company

The Financial Statements are attached in a separate signed PDF document format.

This audit was performed by Grant Thornton and the Office of the Auditor General, with the unqualified Audit Opinion issued by the Auditor General of the Cayman Islands.

► End of Annual Report: Cayman Turtle Conservation and Education Centre Ltd. 31st December 2019 ◀



CAYMAN TURTLE CENTRE
ISLAND WILDLIFE ENCOUNTER



786 Northwest Point Rd
PO Box 812, KY1-1303
Grand Cayman, Cayman Islands
345-949-3894

www.turtle.ky | www.caymanturtles.com