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Aripo Savannas Scientific Reserve: A Description and Short History

John Lum Young

The Aripo Savannas Scientific Reserve, roughly triangular in shape with an acreage of approximately 1,800 hectares of which about 250ha is comprised of savannas (Forestry Division 1980), is bounded on the west by the Aripo and Valencia Rivers, on the south by the old train line from Cumuto to Guaico Trace and on the east by the Valencia Stretch. There are 10 Savannas scattered through out the reserve that occur naturally as a result of soil conditions that severely restrict tree growth. These are the last remaining undisturbed flat savannas in the country (the flat Piarco and O'Meara Savannas have long since given way to development).

The vegetation of the Scientific Reserve is unique to the country. Of the two hundred and forty-three recorded species of plants representing fifty-nine families there are twenty-eight species that do not grow elsewhere but are unique to the Aripo Savannas including an endemic sedge *Rhynchospora aripoensis* (Comeau 1990) and the savanna roseau (*Bactris campestris*). There are also insectivorous plants (sundews and bladderworts) and parasitic ones.

In addition the Reserve contains the only Palm/Marsh Forest in the country. The forest has two levels. The lower stratum is irregular and consists mainly of palms such as palma real (*Oenocarpus bataua*), timite (*Manicaria saccifera*), manac (*Euterpe precatoria* and *E. oleracea*), cocorite (*Attalea maripa*) and royal palm (*Roystonea oleracea*). Associated with the palms in the lower storey are biscuit wood (*Ilex arimensis*), agalie (*Ficus sp.*), wild calabash (*Tabebuia stenocalyx*), bois charbon (*Diospyros ierensis*) and matapal (*Clusia palmicida*). Species in the upper storey include galba (*Calophyllum lucidum*), wild kaimit (*Pouteria sp.*), yellow mangue (*Symphonia globulifera*), bois bande (*Parinari campestris*), incense (*Protium guianense*), cajuca (*Virola surinamensis*), cuchape (*Coccoloba latifolia*) and the only native conifer, wild pine (*Podocarpus coriaceus*).

The forest on the borders of the savannas and on islands within the savannas are dominated by moriche palm (*Maurita flexuosa*) in the upper storey and fat pork (*Chrysobalanus icaco*) and savanna serrette (*Brysonima crassifolia*) in the under stratum. Moriche is not found in Tobago and only grows naturally in five areas of Trinidad.

Commercially valuable trees such as purple heart, galba, cajuca, and olivier have been fully exploited. (Illegal logging continued up to 1982 though it was rife between

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WWII and the mid 50s when the US Army was the absentee landlord.) Though there is no more commercial timber to be stolen raiders keep cutting the recovering forests for posts. This is a perennial problem.

The fauna includes the much hunted agouti, tatoo, lappe, deer and manicou. There are many species of rats, mice, squirrel, matte and the introduced mongoose. There are birds associated with the Reserve that are considered to be endangered. The sulphury flycatcher (*Tyrannopsis sulphurea*) is a rare resident usually found in small flocks at the top of the moriche palms. Another uncommon resident is lesser elaenia (*Elaenia chiriquensis*). There are only records of the bird nesting in the Savannas so it could possibly be a migrant. The scarlet-shouldered parrotlet (*Touit huetti*) has only been recorded in the Reserve during the last 100 years, possibly a recent visitor. The white-tailed golden throat (*Polytmus guainumbi*) is a hummingbird confined to this habitat. The savanna hawk (*Heterospizias meridionalis*) and common snipe (*Gallinago gallinago*) frequent savannas and swamp edges. The red-bellied macaw (*Ara manilata*) is another bird closely associated with the moriche. Another uncommon savanna and swamp resident is the fork-tailed palm swift (*Reinarda squamata*). The moriche oriole (*Icterus chrysocephalus*) is a scandalous whistling cage bird with varied notes capable of mimicking most sounds, especially when it rains, and that versatility made it a target for bird catchers which led to its demise in its natural habitat of swampy forest and forest edges.

The Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

October – December 2006

Editor……...…….. Reg Potter
Assistant Editor…….
Contributors……John Lum Young, Paula Smith, Ian Lambie
Photographs…… Reg Potter
Design & Layout…… Reg Potter
Technical Support ……...

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Website: http://www.wow.net/ttfnc
Contact: The Secretary, TTFNC c/o P.O. Box 642, Port of Spain. Email: ttfnc@wow.net

MISSION STATEMENT
To foster education and knowledge on natural history and to encourage and promote activities that lead to the appreciation, preservation and conservation of our natural heritage.

Kingsley's visit to the Savannas (Kingsley 1871) is probably the first public record of the extensive grasslands which he described as "*a large sheet of grey-green grass; bordered by the forest wall as far as the eye could see and dotted with low bushes weltered in mirage; while stretching out into some half a mile off, a grey promontory into a green sea, was an object which filled me with more admiration than anything I had seen in the island. It was a wood of moriche palms*". Over the subsequent years the grasslands have been the subject of positive attention, disturbance and threats. The area has been logged, mined, burnt and squatted upon. Squatting is a major social issue. Present information suggests that there are over 100 squatters on the "edge" of the Reserve on about 375ha of lands. In 1998 42 squatters were charged under The Forest Act. Judgement was made and eviction notices were served but no action was taken and the law breakers subsequently received letters of comfort (EMA).

In 1930 selected timber harvesting began including wood for charcoal burning, firewood, handicraft and rods. In 1934 the

Aripo Savannas became part of the Long Stretch Forest Reserve proclamation. In 1935 Forestry Division prepared a management plan for controlled timber harvesting. This came to nought with the advent of World War II. By 1940 1,660ha of the savannas and adjacent lands were leased to the United States for the establishment of Fort Read. Many buildings, drains, ammunition bunkers and roads were constructed in several sections of the forest and savannas. Some of these roads are now cleared and used as firebreaks by Forestry. Beard (1946) classified the unique vegetation of the Aripo savannas. In 1956 the US returned Fort Read to Trinidad and Tobago by which time the illegal loggers had stolen all valuable timber.

In 1961 eight quarrying licenses were granted for extraction of sand and gravel. In 1966 a project to use 60ha in the southern sector of the reserve for pig farming was stopped due to public criticism. Also in 1966 a section of Savanna I was bulldozed for the planting of pangola grass. Dr. J. Kenny, then a young lecturer in Zoology at UWI, chanced to be driving by, noticed the destruction and promptly contacted the right people in government who immediately halted the land clearing. Savanna I has since returned to grassland with no indication that bulldozers had been at work.

The Water and Sewage Authority was permitted to clear a 30m passageway across the northern sector for an underground pipeline in 1977. The pipeline, which is buried 1.2m deep, cuts through the adjacent forests and Savannas IX and X. WASA keeps the passageway clear and the only special condition as to the use of the route is that no structures may be built directly over the subterranean pipeline.

In 1980 Forestry developed a plan to protect the Aripo Savannas ecosystem and to provide for research and educational use through the management of the area as a Scientific Reserve. In that year also Town and Country identified the Savannas as a critical conservation area of natural and scientific interest to be preserved and protected. In 1987 the Reserve was declared a Prohibited Area under the Forests Act.

In 2002 the EMA prioritised the Aripo Savannas for designation as an Environmentally Sensitive Area (ESA). In 2004 the Ministry of Public Utilities and the Environment, acting on advice from the EMA and Forestry, awarded a contract for the boundary description of the Reserve for the purpose of ESA designation and in 2006 the EMA set up a Stakeholders Management Committee to advise on the management and development of the Reserve (Environment Management Authority 2006).

At the same time moves are afoot to designate the reserve an ESA, the extension of the Churchill Roosevelt Highway to Sangre Grande is being proposed. Frankly any extension of the Highway that does not follow the old train line on the southern boundary or pass east of Valencia will materially impact on the Reserve and in fact herald its destruction. It is hoped that the Government of Trinidad and Tobago will accept the recommendation of the Global Strategy for Plant Conservation Committee, which has deliberated extensively on this issue, that the road pass elsewhere.

The proposed highway though is not the latest threat to the Reserve. With the establishment of E-Teck Park, the University of Trinidad and Tobago and a technological industrial estate (expected to employ 15,000 people) in Wallerfield, the pressure to provide nearby housing will intensify and the government of the day may find it politically more expedient to create new settlements in the Reserve rather than relocate families from surrounding agricultural holdings.

There may be no widespread outcry to the usurping of the Reserve for housing just as there is no outcry with regard to the highway extension, so members are advised to watch this development. The Palm/Marsh Forest and flat Savannas are part of our natural heritage and an important scientific and educational resource that must be preserved!

Author's Note: The author thanks Victor Quesnel for his guidance in writing the article.

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FIELD TRIP REPORTS

UNION ESTATE / LOS BLANQUIZALES LAGOON. October 29th 2006

Reg Potter

After collecting participants at St. Mary's College and Grand Bazaar we headed south and were at the fire station, at Mon Repos by 7.20 am. The weather was dark and threatening and intermittent showers dogged us all day. Altogether there were 15 members and 5 guests on the trip.

Next stop was at the Union Industrial Estate where we viewed the large scale devastation near the western end where it crosses the main road and extends onto the sea. The whole area (about 1000 acres) has been bulldozed and levelled, creating flat ground where once could be found hills and valleys. Reg Potter gave a brief description of the development saying that the Alutrint smelter (the one industry scheduled for that space thus far) EIA was still with the EMA awaiting approval. The EIA for the ALCOA project at Chatham is still being prepared, while the EIA for the site on which the smelter will be built has an EIA pending also. Strangely, the people residing in Union Road nearby, having been offered compensation to relocate, have not heard anything recently about the relocation plans. Only two non-resident persons had accepted payment for their homes and the rest suspect the initial offers have been withdrawn. We do not know if this indicates some uncertainty on the part of the developers as to where the project is going. Jallaludin Khan and Dr. Victor Quesnel also spoke of the dangers of release of pollutants from storage at the plant and the cumulative effects of smelters crowded into this small area. A sign at the roadside announced "Union Industrial Estate, South of Vessigny, Syngas Ethylenside, Client NGC, Completion Date December 31st 2005 ??".

Ospreys (*Pandion haliaetus*) and Raptors were seen circulating above the estate and also a Yellow Headed Cara Cara (*Milvago chimachima*).

We drove on, passing Point Fortin, sighting a cemetery signposted as "Stiff Hill". The next stop was intended to be the site of the proposed ALCOA smelter, but having passed the camp used

by protesters (all were up at UWI that weekend) our convoy continued on, missing the turn off to the proposed Chatham smelter site, and turned at Chatham junction to the beach at Irois Bay. This is a historic site which was occupied by prisoners in a penal colony in the 19th century. Prison labour was used to fell the abundant trees that once stood there, reflecting the scant regard that was placed on the environment, in an era when it seemed infinite. Vegetation now consists largely of secondary growth scrub. This location was also a scheduled stop for the round the island steamer for the estates that later were developed. The offshore oil platforms of Trinmar are clearly seen from this location plus the large flares of Atlantic LNG at Point Fortin, and there is evidence of severe coastal erosion.

We then intended to approach the Los Blanquizales lagoon from the north and search for an entry, so turned off the main road to Coromandel. This road heads south, then turns west and parallels the main road, but all along the swamp edge there was no obvious trail and it was fenced off with barbed wire. So we continued west to Bonasse and turned south toward Galfa Point. Here the major part of the tour took a wrong turn ending at the beach where some went for a swim. Eventually they were regrouped and brought to Point Galfa, our intended destination, which is also on the beach, further to the east.

Point Galfa appears to be on high ground formed by a mud volcano separating it from the beach, which continues all the way to Icacos. To the east is the western extremity of the Los Blanquizales swamp or lagoon.

After a visit to a producing oil well with a production rig in attendance, where Reg Potter gave brief description of the components, we walked east towards the swamp. We walked up the beach to mangrove growing along the southern edge of the swamp. This mangrove at the western edge consists of large red mangrove (*Rhizophora mangle*) giving way to smaller ones further east. Entry was attempted into the swamp but wet ground and dense mangrove aerial roots blocked the way. A few members went a short distance into the mangroves where it was possible to see the more open lagoon area.

Some members extended the walk back onto Point Galfa where the geology is of interest. Sediments exposed in the eroded cliff show sharp local distortion, apparently by faulting, and what appears as an old mud flow. On the beach several specimens of iron pyrites (fool's gold) were collected, plus hard crystalline rocks formed by some process of secondary mineralization in the sedimentary sequence. Bubbles of gas have been seen here in the past, and pebble conglomerates, all suggestive of a mud volcano, which brought up fragments from lower sedimentary levels.

The trip ended here for the majority of the expeditioners who opted to return home in view of the continued bad weather. A few members continued onto Columbus Bay where three of the Los Gallos rocks are still visible despite significant erosion, then onto Icacos. A large area of swamp has been cleared and partially infilled in what is thought to be an unauthorised land development at Icacos. Photos were taken for a report to the EMA.

Hans Boos, Stephen Smith and Jallaludin Khan stayed until darkness in the area and collected several minute frogs and listened to calls of many unfamiliar species.

CANARI FLAT November 26th 2006

John Lum Young

The Club previously visited Canari Bay on the south coast, about 5 miles east of Gran Chemin Moruga, in the '70s by boat from Gran Chemin but never on foot from off Edward Trace. The small group therefore was keen to make this trip.

Land use conflicts in this area were minimal. Historically the vegetation was only disturbed for oil and gas exploration. In more hospitable coastal areas cocoa and coffee estates were established. Initially the walk started through disturbed forests then evergreen seasonal forests, semi-evergreen seasonal or drier coastal forest, ending in abandoned estate.

Numerous hunting trails crisscrossed the bush making it relatively easy to get lost if concentration lapsed. The forest was also busy that morning with hunters and dogs out in full force. We walked generally southeast and south to the coastline. This route generally avoided the higher ground except when crossing the watershed between Canari River and the coast. (Canari River is a tributary of Moruga River.)

The disturbed forests contained hog plum (*Spondias mombin*), bois mulatre (*Pentaclethra macroloba*), cocorite (*Attalea maripa*) royal palm (*Roystonea oleracea*) and numerous shrubs belonging to the melastome sp. Bois canot (*Cecropia peltata*), the only member of the CECROPIACEAE family in Trinidad and Tobago, was also well represented.

It was immediately apparent when we entered original forest cover. The canopy was higher and the trees tall and straight in their competition for sunlight. We also passed through mora (*Mora excelsa*) though *M. excelsa* was not as dominant as there were many other competing species including *P. macroloba*. The forest was also interspersed with many palms including carat (*Sabal mauritiiformis*), *Euterpe precatoria*, *E. oleracea* and those of the *Bactris sp*. The undergrowth included tirite, the climbing palm *Desmoncus sp*. and plants of the *heliconia sp*. Mountain rose (*Brownea coccinea*) and bois pois (*Swartzia pinnata*) were among the understory trees.

Interesting aerial roots near Canari estate

The trail petered out on the bank of the Canari River by a yellow mangue (*Symphonia globulifera*). Interestingly *S. globulifera* has roots that surface to form hoops away from the base of the tree. A make shift crossing was established and the trail picked up on the other side. L'epinet (*Zanthoxylum martinicense*) was also spotted with its characteristic smooth bark and stout prickles. This wood was used to clad board houses in times past. Tantacayo (*Albizzia caribaea*), an emergent, was also noted.

A breeding pair of capuchins (*Cebus capucinus*) was spotted. After the mother with young was safely beyond the walkers the inquisitive male came down from the canopy to take a closer look at the intruders. Capuchins are very intelligent animals and having satisfied his curiosity the monkey continued on his journey. A worm snake (*Leptotyphlops albifrons*) was spotted among the loose-leaf litter along the trail.

The tide was out at Canari Bay so the expanse of flat sandy beach was sizeable, about 400m wide by about 30m deep. The high water mark however was about 3m from the steep slope making the beach almost nonexistent when the tide was in and I wondered if this beach would exits in another 10 years, even at low tide. Rising seas due to global warming were a real threat to beaches such as this.

Canari Bay

In 1998 the first uninhabited islands in Kiribati, a Pacific atoll nation, vanished beneath the waves. In 2006 Lohachara, in the Bay of Bengal and home to 10,000 people, became the first inhabited island to be washed from the face of the earth (Lean). In about 2014 the populated Carteret Islands off Papua New Guinea are expected to be submerged. Yet the political directorate of some developed countries that are major contributors to global warming refuse to recognise the problem and take concrete steps to reduce greenhouse gases.

Lester Doodnath, Nicholas See Wai, Clayton Hull and Kay Hinkson identified a number of birds along the way including palm tanager (*Thraupis palmarum*), tropical pewee (*Contopus cinereus*), yellow-bellied elaenia (*Elaenia flavogaster*), smooth-billed ani (*Crotophaga ani*), gray-breasted martin (*Progne chalybea*), rufous-breasted wren (*Thryothorus rutilus*) and the hummingbirds; white-chested emerald (*Amazilia chionopetus*) and blue-tailed emerald (*Chlorostilbon mellisugus*). At Canari Bay the spotted sandpiper (*Actitis macularia*), pelican (*Pelecanus occidentalis*), magnificent frigatebird (*Fregata magnificens*) and white-winged swallow (*Tachycineta albiventer*) were pointed out.

Not a bad trip to end the year!

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BOTANY TRIP

ARIPO SAVANNAH'S V – VIII. OCTOBER 21st 2006

Paula Smith

We arrived at St Mary's college at 6:10am, collected people and then on to UWI south entrance for 6:40 am to collect the others, finally departing on our journey at 7am. Twenty seven (27) people came on the trip. On today's hike there were 2 groups; the TTFNC, and Yasmin Comeau's group of researchers doing their study of plants for the next 2 years in Trinidad & Tobago, and today they would conduct research in the Aripo Savannah. Other people on today's hike were from Canada, and a professor of soil science from St. Lucia.

We passed the pillars that mark the entrance into the American Army Base in World War II, then Demerara Rd near Arima then turned right into Wallerfield onto the Cumuto road, and in 5 minutes we arrived at the starting point of our hike.

While Dan Jaggernauth talked to us about today's trip, introduced and welcomed visitors to the club, a light drizzle blessed our trip. Victor Quesnel gave us a history talk of the area as he knew it in the 1940's. It was in-depth and informative, and he talked about various trees. He told us that the Aripo Savannah is about 1800 hectares. It borders Wallerfield which was the largest American Air Base for training during WWII. We were starting our trip on the eastern side of the Savannah through Savannah's 5 -8. Savannah 4 is past Valencia, nearer to Sangre Grande.

The beginning of the hike started in thick forest vegetation, and damp soil. One of the first trees seen was a bois bande tree (*Parinari campestris*), this tree is known to enhance men's sexual performance. Other trees we saw were moriche palm trees (*Maurita flexuosa)*, a balata tree, cocorite palm (*Attalea maripa*) in fruit, which is called sweet coconut. Someone told us of a tree *(Podocatus trintenis)* that is the only native Conifer plant to Trinidad & Tobago. It has thin long shaped leaves. We also observed the thorny palm *(Backtris sp).* All along the way there was a winding water course that we crossed many times. We stopped at a clearing where Edmund Charles gave us a little history, saying that the savannahs were occupied by the Americans from 1945 -1956, after which Trinidad got re-possession. Edmund told us of the trees harvested on the land such as galba (*Calophyllum lucidum*), crapaud, olivere and purple heart. He said that this is a Juvenile Forest in recovery.

In 1987 the area was declared a Prohibited place for squatters but sadly these laws were not enforced and one can see people in illegal occupation. In the early days squatters fought over lots. He also told us that the Reforestation Program is maintaining the trails to the different savannahs. The old American road leading to the savannahs ran through the location where Edmund addressed us. Wild animals such as agouti that live in the savannahs feed on the Balata fruit and disperse them all over the savannah, explaining the numerous young Balata trees.

We stopped at a junction of roads, one of which takes you back to the Cumuto road. We saw olivere and matapal (*Clusia palmicida*) trees, small balata trees and hot lips flowers. The matapal plant is a parasite that is like a tree with a network of smaller branches wrapping itself around the host tree that block the sunlight thus killing the tree, then feeding off the rotting bark. This type of parasitic relationship we were told is a common characteristic of tropical forests.

We saw white cedar, a tall tree with flowers, (*Amonzonia campestris).* Some way further down the path some people spotted a scary looking spider called an Orb Weaver. It is so named because the web is shaped like a circle. It is about 3 inches in length, a rectangular shaped body with 1/3 white and the rest brown with long brown and yellow legs. A verveine plant was seen as a healthy green with bright purple flowers. Selwyn Gomes explained there are other species of verveine, but that one is the most common and hummingbirds frequently visit the flowers.

Continuing to **Savannah VI,** walking through a wet clay path, Victor showed us a tiny plant, red in colour with radiating arms ending in flat bulbous ends, covered in fine hairs. He said the plant is called androsa or sun dew. It is an insectivorous plant, meaning it eats insects. It traps insects when they stick to the hairs of the plant. When the insect is stuck in the hairs, it drains its juices. Fluid from the insect causes growth at an abnormal rate until it contains it, covering the insect with the body of the plant, and the insect is totally consumed. Victor said the plant has a restrictive flowering season, but some time later I spotted a small white flower much to Victor's surprise. Victor also said there are other insectivorous plants found in water.

A little way further on Steve saw a Galap, which is a small turtle. He found it in a small pond of muddy water, caught it, and everyone took pictures. It is dark brown with orange spots on its head. They said that if it bites you, it will take a piece of your flesh, so everyone treated it with caution. We got a final picture of it in its natural habitat when it went back into the pond and tried to burrow itself into the mud.

Going into **Savannah V,** the first tree encountered is a fat pork Tree. We were told by the St. Lucian Professor that the savannah consists of sandy soil with a clay base and a hard pan, made of

water and iron, layers. We saw moriche palms which grow in five places in Trinidad, they are Nariva, Blanquizales Lagoon in Cedros, Erin Savannah. Also seen were Love vines, which are yellow-orange in colour and known as a "cooling", scattered about the savannah and more of the sun dew plant.

The researchers were looking at trees in a particular area where Dan caught a small frog called *Lepto-dactylus, or typho-nus* common name called a weep frog because of the sound it makes - "weep weep". It is dark brown in colour with seven yellow ridges on its black. Dan held it so it would not hop away but it managed to jump out his hand. The second time he caught it he did not hold it down and surprisingly it sat in his hand for people to marvel over and take pictures.

The fat pork tree is grows naturally all over the Savannah and the sandalwood tree as well. We saw several birds including the southern lapwing. As we walked on now almost out of Savannah 5 nearer the edge of the forest, the soil changed, and became little ditches arranged in a network, caused, John Lum Young told us, by worms that burrowed in the soil and made natural water courses. On the edge of the forest we saw a 'yellow man' tree with red bark and thick creamy yellow sap oozing slowly down the trunk. Steve spotted a *Polychrus* lizard posing gracefully on the trunk of a tree. It looks like a dry twig. The lizard is a camouflage dark brown with pale coloured spots on its back. We saw hot lips flowers and another flower called *Amazonic*, red in colour with yellow pistils.

Passing through the river we heard a strange animal call, repeated every two seconds. I saw two rare flowers, one red and the other a shiny blue-purple colour, with 3 hard, pod-shaped petals, which were smooth to the touch. We were told of a tree *(Backtris Camppertis)* which has tall thin bark and black thorns, found only in Trinidad & Tobago.

Now into **Savannah VII**, Edmund showed us the incense tree, used to make incense sticks and used in candles. It is a tall tree with red flowers. We came across many bois bande trees with green edible fruit. It is a distinguished tree with a bent trunk (a drooping tree), fine leaves, and a large network of branches. The bark of the tree is striped to make the potion for the men. The bark is boiled to extract the nutrients, strained, and drunk like mauby. Edmund said that the way the bark works to produce the drive in men, is by producing massive amounts of testosterone. The fruit is small with a rough grey skin, when eaten it has the effect of tying up one's mouth, like chennette.

Victor Quesnel also explained that the soil of the Savannahs consists of a hard pan, which impedes drainage. The Savannah flora is restricted to grasses and sedges. In the wet season the Savannah is wet and swamp-like, and in the dry season the savannah is dry and parched. He also told us of an endemic plant found only in the savannah. From here it was 35 minutes to arrive at the Savannah.

We walked on a road back to Savannah VI, through swamp-like vegetation. Through water puddles, we went downhill and passed a watercourse to left of the trail. A plant that normally grows at high altitude was noted, unusual at the low level of the savannahs. There were many tall trees and dead rotting trees. Water was coloured like mauby. We saw more incense trees in full bloom. This is a tall tree with red flowers. The bark is used in candle wax. We came to a Y in the road, took the right fork to Savannah 8.

In **Savannah VIII** we stopped for lunch and saw many types of orchid-like plants in a tree such as *Encyclia Onciodes* epiphyte, *Epistephium Parviflorna* a red orchid, *Scaphyglottis* (sp) a minute white flowering orchid. Proceeding into Savannah 8 we saw a pond to our right some distance away and crossed a ditch then walked a few feet to get to the pond. The time was then 11:38 am. The pond had some natural gravel deposits at particular parts, with a clay-iron Hard Pan base, which allows only grass and small rooted plants to survive in these conditions. The pond was clear and a hog plum tree grew at the side, almost in the pond itself. Edmund talked of a fish that has adapted to dry conditions and has scales that act as feet to help them move on dry land from one pond to another. However, no fishes were seen in the pond. We heard Parakeets overhead. Edmund

told us of a fire after which razor grass was replaced naturally with fever grass. Edmund said the most successful tree the forestry division planted was the olivere plant, also the gulab jamon and Guava grows well here. More incense trees were seen, and balata, which is difficult to grow to maturity.

We saw a plant near the end of Savannah 8 called a savannah serrette, a natural bonsai plant with a yellow flower. This is also found in Venezuela and has edible fruit and is typical of natural savannahs. The love vine with nodes like suckers was seen, considered by some a parasite as they suck the nutrients of plants and grass. There were moriche palms in front of us that evidently survived a fire and Edmund noted their fire resistance. Coming out of the forest seemed unending for some as we walked and walked in the now pouring rains, eventually making it out onto the main road around 1.00 pm. Some people accompanied Edmund to **Savannah 4**, but to get there you had to drive, and most decided to call it a day.

CONTRIBUTIONS

Trinidad and Tobago : Ramsar and other International Conventions relative to the Environment and to Environmental Conservation

Ian Lambie

Ramsar is a city in Iran where in February 1971 representatives from interested and concerned Countries met to sign an International and Intergovernmental Treaty to provide the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources (including waterfowl habitat).

The Ramsar Treaty came into force in December 1975 and by 2006 there were 154 signatories including Trinidad and Tobago which became a signatory on 24th April,1993.

We hear a lot of talk about Ramsar and places declared to be Ramsar sites in Trinidad and Tobago but to date no Domestic Legislation has been enacted in order to give legal status to T&T as a signature to the Ramsar Treaty.

This omission is also applicable to the Convention on **CITES** and to the **Convention on Biological Diversity** to which the Government of Trinidad and Tobago is also a signatory. How unfortunate (the omission that is).

Additional information may be obtained from Mrs.Nadra Gyan of the Wildlife Section 662-5114 or from Prof. J.S. Kenny at 629-0223 (Home).

A Short Story

The Mother of all Ocelots

Ian Lambie

One night in the 1960's Mr.Pierre Quesnel was driving his car on his way home in the Caparo Valley when an animal suddenly ran into his path and was hit by the car. He did not immediately identify the animal but he reversed the vehicle and discovered it to be an ocelot.

The animal was badly injured so Quesnel got his cutlass and with the flat side ' planassed" it until it stopped moving. Thinking it to be dead he placed it in the trunk of his car and continued on his trip home.

Next morning, with the intention of skinning the animal, he opened his car trunk only to be greeted by snarls from the animal, which was alive. He could not then kill it so he transported it to the Emperor Valley Zoo where the curator summoned the veterinarian, Dr.Jones, to attend to the injured ocelot.

After some months of recuperation the animal, which was a female, was healthy enough to mate with a male ocelot which had been obtained from Surinam by Mr.Willie Dixon ,a then member of the Zoo Council.

This pair of ocelots had many progeny and the ocelots on display at the Emperor Valley Zoo today are all descendants of this original pair. Over the years, other offspring were used as "exchange" animals with other Zoos.

(Some of the above information came from Schol Pyke 622-4366 and from Vin Quesnel 643-7258)

(I have not been successful in making contact with the Asst.Curator of the E.V. Zoo, Mr. Nirmal Bipta,)

EDITOR'S NOTE

We apologise for the lateness of this issue, which resulted from the difficulties in finding an Editor. Hopefully this will soon be remedied. Calling all volunteers! Since the last issue of the Quarterly Bulletin the January AGM has been held, and election of the 2007/2008 took place. This has been recognised in the information on page 2. The Secretary's report of last year's activities will be covered in the 1st Quarter 2007 Bulletin and several interesting reports of field trips during 2006 are still outstanding.

MANAGEMENT NOTICES

SPECIAL THANKS

The Library has received 3 publications:

- Status of Tropical Forest Update. Oct 2006. International Tropical Timber Organization
- Marine Turtles Newsletter. Oct 2006
- Trail and Landscape. The Ottawa Field Naturalists' Club

UNDP AWARD

The Club received a Certificate of Appreciation on 23rd November 2006 from the United Nations Development Programme, Community Outreach and Response Initiative (CORe), Global Environment Facility Small Grants Programme and Social Development Small Grants Programme, in recognition of our contribution as a member of the National Steering Committee during the period August 2002 to May 2005.
Carrall Alexander represented the Club on this Committee throughout this period.
Congratulations Carrall.

We finally have Polo Jerseys!

Sizes: small, medium, large and extra large
Colours: khaki and green
Cost $TT50.00

THE GREENHALL TRUST

Started in 2005, in memory of Elizabeth and Arthur Greenhall, dedicated artist and zoologist respectively, the Trust offers financial assistance to aspiring artists and biologists (in the areas of flora and fauna) in Trinidad & Tobago.

Full details about the Trust are available at their website:
http://www235.pair.com/greenhal/home.htm

EACH ONE, BRING ONE

Members are encouraged to bring a friend or two to be part of our Club – their knowledge, talents and skills would be most welcome.

A HOME FOR THE TTFNC

We are seeking a permanent location to conduct our business and house our historic records and materials. Please contact the Management Committee if you can be of assistance.

Missing copies of Naturalist Magazine needed for library

- 1976 Vol. 1 No. 5
- 1981 Vol. 3 No. 9
- 1987 Vol. 6 No. 12

Your 2007 Annual Membership Fees are Past Due!!

Please view bottom right of the mailing label to check if your subscription has been paid.

WELCOME NEW MEMBERS

Vicki Beth Blanchard	
Alyssa C Gomes	Junior
Brandon McIvor	Junior
Remah Joseph	
Rhett Lewis	
Joan Massiah	
Cavan D. Mejias	Junior
Dennis McSweeney	
Kerry OwBuland	
Michael Parris	
Kellie-Marie Ramnath	
Maurice Robinson	
Damian Robinson	Junior

TTFNC'S RESPONSIBILITY TO THE NATION'S STEWARDSHIP OF THE ENVIRONMENT

Letters issued by the Club on its position on various environmental issues can be viewed on the Club's website: www.wow.net/ttfnc on the "ENVIRONMENT PAGE".

Volunteers needed… to type index for period 1986 to 1988 – 16 issues

Trinidad and Tobago Field Naturalists' Club
P.O. Box 642, Port of Spain, Trinidad and Tobago

PUBLICATIONS

- The 2006 issue of the Living World Journal has been published. Please collect your copy at the next monthly meeting.
- The 2nd Edition of the Native Trees of Trinidad and Tobago is available at $TT100.00 per copy for members
- Issues of the Living World Journal from 1892-1896 are now available on CD.
- The Trinidad and Tobago Field Naturalists Club Trail Guide is available at $200 per copy for members.

NOTES TO CONTRIBUTORS

Guidelines for Articles and Field trip reports:

Font Type: Times New Roman
Font Size: 12 point
Maximum Length: 1,750 words (approx. 3 pages unformatted)
Photos: JPEG files only

Submit to any of the following: 1) rjpotter@opus.co.tt; 2) ttfnc@wow.net.tt;
3) CPierre@energy.gov.tt; or any member of the Management Committee.

Deadline for submission of articles for the 1st Quarter 2007 issue of the Bulletin is March 1st, 2007. Please note that all field trip reports for this quarter must be in by the deadline, with the exception of the February report.