



Keep St-Barth Green, Keep St-Barth Essentiel



N°3 July-December 2013

HAPPY HOLIDAYS!

This is the end of the year and with it, comes the time to look back. But before that, my thoughts go to the elderly people hospitalized and to all those who won't spend this holiday season with family or in joy. I wish them lots of love.

2013 has been a very active year for the association, like all those since its creation in 2009. Our aim to preserve the environment and natural beauty that create the authenticity of our island, and this is not always an easy task. Facing significant development pressure, it is indeed difficult not to make enemies in denouncing illegal dumping of debris in nature, the emptying of septic tanks into nearby salt pods by 5-star hotels, or illegal rock-crushing activities! The authorities are aware of these actions, but do not react and we can legitimately ask why.

Striking a balance between the economic interests of St Barth and the preservation of our heritage, environmental or historical, is a hard battle that must be fought every day. During the year, there have been some discouraging moments, but your support gives us the strength to continue to fight and defend what we think is so important.

The 157 members of our association, our first patron—William Van Mueffling—and the recent support of the WIMCO real estate agency make us think that these efforts that we believe in, are also «Essentiel» for our island.

Thank you to you all for your help (volunteer, financial, legal ...). Have a warm and happy holiday season and see you next year!

Hélène BERNIER

INVENTORY OF FLORA

In partnership with the Territorial Environmental Agency



Prof. Claude Sastre with one of the guards of the Environment Agency during the latest campaign of inventory in November 2013.

By launching the inventory program of flora and fauna in 2011, we had two goals: a better understanding of St Barth's flora and fauna and a contribution to the biodiversity protection.

The first objective is partially achieved with the upcoming completion of the inventory of the wild flora and the establishment of a reference herbarium. If prior plant collections were made over time (the Swedes were the first to collect specimens, followed by A. Questel in 1941 whose herbarium sheets are kept at the National Museum of Natural History of Paris), this is indeed the first time that a herbarium has been achieved, and stored in St

Barth, in the offices of the association. As of today, the herbarium has nearly 1,000 sheets representing around 350 plant species. Our second objective, to contribute to the protection of our biodiversity is also underway. In late October, we signed a partnership agreement to share the results of our flora inventory with the Territorial Environmental Agency. These results will be used to complement and support the list of protected plant species that is integrated in the local Environmental code.

Similarly, the "red lists" describing the threatened species of St Barth and soon to be realized by

Professor Claude Sastre on the basis of the inventory, will be used to justify their protection.

On the island from November 7 to December 5 as part of the penultimate campaign of the flora inventory, professor Claude Sastre also contributed to the reflection undertaken by the Environmental Agency on the evaluation criteria of the dangers that plant species are facing. Following these meetings, it was mentioned that the inventory could be used as a basis for a Red List of the vascular flora of St. Barth that the Environment Agency proposes to undertake.

The next visit by professor Claude Sastre should take place in early February.



INVENTORY OF ANTS AND TERMITES

Pay attention to *Azteca delpini antillana* et *Solenopsis invicta* !

*Ph.D Leonide Celini, in charge of the inventory of ants and termites on behalf of the association, has noted of dangers presented by the increasing presence on the island of two kinds of ants: *Solenopsis invicta* and *Azteca Delpini antillana*, better known as the Large Fire Ant.*

"As part of the inventory of the fauna and flora of Saint Barthélemy undertaken by the association, St Barth Essential, we conducted an entomological mission from August 17 to 22, 2013. Its purpose was to continue the inventory of termites and ants that we started in 2011. Two ants, *Azteca delpini antillana* Forel, 1899 (determination Celini & Delabie, 2011) and the large fire ant, *Solenopsis invicta* (determination Celini & Delabie, 2011) represent a potential threat to biodiversity, both animal and plant, but also in terms of health, in the case of the large fire ant.

Azteca delpini antillana

The presence of the *Azteca delpini antillana* in St. Barth had never been reported before 2011, probably due to lack of a scientific study. This ant is known (or similar species) in the Amazon, Brazil, St. Lucia, Trinidad, and Guadeloupe. In 2011, we identified these ants on two of the 11 sites surveyed during our previous inventory missions (see the report on our

website www.stbarthessential.com). They formed sparsely populated and non-aggressive colonies. Classified in the subfamily of Dolichoderinae, *Azteca delpini antillana* measures 2.5 to 3.5 mm long. Workers have a yellow-orange head with an abdomen that alternates color from dark to light and ends with a stinger. They are easily recognized because they raise their abdomen when moving. During our August 2013 inspection, the ant was collected at sites where it seemed absent two years before. Their colonies are now very populous and show strong aggression towards vertebrates, including humans, when they're disturbed.

This ant is found in different environments, along beaches, in shrub and ravine areas. It nests in separate cavities that they dig in living trees. The cavities are located, in most cases, either at the end of the branches or at the nodes of the larger branches. Ants leave their cavities by holes to forage or defend the nest. They gradually leave the most attacked part of the plant to other more healthy parts. When an ant colony is disturbed, workers rush to sting intruders. Bites are very annoying and itchy.

This ant often nests in the Gaïac (*Guaiacum officinale*), a tree protected by the Washington Convention. This plant, native of continental tropical America and the Caribbean, is present everywhere on the island. Five to six meters in height, it has dense and glossy foliage, small

blue flowers, and seeds surrounded by a bright orange skin. In the past, over exploitation (it's one of the densest tropical woods) for its medicinal properties (expectorant, antiseptic and choleric) and other uses (dyes, perfumes), led to its near extinction in the Caribbean. Particular attention should be paid to its status in order to prevent its gradual disappearance in St Barth.

Solenopsis invicta

Solenopsis invicta, known as the large fire ant (in comparison with the little fire ant *Wasmannia auropunctata*), is also present



Head of a worker showing 3 teeth on the Clypeus: median tooth wears a silk (photo taken with a stereomicroscope, Paris Est - Créteil University, Ibios Laboratory)

is very dangerous because it is an omnivore that has the strong ability of mass mobilization and no aggression between the different nests. The Queen is also extremely fertile. There may be several queens, but there is no hierarchy. The adults tend to migrate over great distances. The ant has a stinger at the end of its abdomen, which allows it to inject venom consisting of highly corrosive formic acid, 40% concentrated.

The ant clings with its mandibles on the skin and sinks her sting repeatedly. It simultaneously releases a pheromone that attracts other ants: they all rush to the enemy! Its sting is very painful and can be compared to a cigarette burn. Unlike the bee, the ant keeps its stinger each time she bites and can sting seven to eight times consecutively. Ants bite only when they feel attacked (disturbance of their nest). Victims of serious bites may require a skin graft or even amputation. Stings kill about 80 people allergic to insect bites per year in the USA.



*Worker of *Solenopsis invicta* (photo taken with a stereomicroscope, Paris Est - Créteil University, Ibios Laboratory)*

in St Barth. This ant is native of Brazil and is now considered as the most dangerous ant worldwide. It is recognizable by certain scientific characteristics, including the presence on its clypeus of three teeth. It



*A worker *Azteca delpini antillana* (photo taken with a stereomicroscope)*



(PAY ATTENTION TO AZTECA DELPINI ANTILLANA ET SOLENOPSIS INVICTA !)

A danger for Biodiversity

In addition to health hazards, the large fire ant causes damage to plant and animal biodiversity. They kill many insects (pollinators), small invertebrates,



Sting of Solenopsis invicta workers

lizards, and nesting birds. They also decimate crops because their diet includes seeds, fruits, leaves, roots, bark, nectar, sap, and fungi.

Locally, this ant is present on different sites. Nests are soil borne and characterized by small mounds; sandy environments are not spared. According to the literature, the most serious damage occurs during hot and dry season when the

ants invade flowerbeds, seeking heat and humidity. They are also attracted by electric fields and can slip into air conditioning units or wiring of lights.

In many countries where this ant is present (Australia, USA, China), the fight against it was essentially chemical, with products as Mirex or Fipronil that are now forbidden. Attempts at biological control have not given conclusive results so far. In South America, region of origin for the ant, exists a variety of natural predators that control its population, including a phorid fly. It would be interesting to list the Phoridae of the island, and analyze their potential as specific regulator agents. Meanwhile, some precautions are necessary for the most sensitive of us: wear boots and gloves while gardening!"

By PhD. Leonide Celini,
Entomologist, Paris Est -
Créteil University - BIOEMCO
Laboratory (IBIOS team)

INVENTORY OF SPIDERS Second Mission

From October 1 to 19, we hosted (thank you Brigittell!) Ph.D Patrick Maréchal for the second campaign in the inventory of spiders. During his stay, this Doctor in Life Sciences also led a conference on the theme "The inventory of living: the case of St Barth's spiders." Marechal explained the growing interest in biodiversity and its study, including a renewed interest for inventories, the first step towards understanding our environment. "In this context, spiders appear increasingly as a key group in-



Hibana tennis L. Koch 1866

involved in the overall balance within ecosystems" he notes. The presentation projected during the conference, will be soon available on the website of the association.



A TV report made by local tv InTv about the mission of Patrick Maréchal can be seen from our Facebook page or on InTv.

No To Concrete Walls!



The day the island's public works service understands the importance of dry stone walls joined together without mortar, this kind of phenomenon will not happen again. Indeed, the dry stone walls allow water to flow between the stones, unlike concrete walls (here covered with a stone facing) that trap water (as seen in the photos), risking or causing flooding.

Listed Buildings Highlighted during European Heritage Days



Attentive listeners to the reading of "the Very humble report to His Majesty the King of Sweden" written by the Governor Haasum after the hurricane of 1837 in the courtyard of the Choisy House (Gustavia).

Based on the theme "1913-2013 : One Hundred Years of Protection," the 30th European Heritage Days held on September 13-15 September 2013 commemorate a fundamental law for the protection of historical monuments in France, adopted on December 31, 1913. Although this law has been applicable to Saint-Barthélemy only since November 1965 (the colonies were not part of the scope of the 1913 law), the association wished to participate in this commemoration and

decided to focus on the seven listed buildings of St. Barth: The Dinzey House, the Catholic Church of Gustavia, the Catholic rectory of Gustavia, the Swedish clock tower, the Governor's House, the steeple of the Catholic Church in Lorient as well as Fort Gustave, all built during the Swedish era of Saint Barth.

To make them known, we edited a booklet tracing their history and organized a conference on the theme "Why and how to preserve our heritage?" with actors of the theater troupe SB Artists reciting selected texts written during the Swedish era.

Through those events, we wanted to encourage the public to reflect on the island's heritage and the importance of preserving it. The association believes that its preservation is essential. Because it responds to deep human aspirations, and especially the desire to preserve tangible links to our historical roots that base our sense of membership.



La Maison Dinzey (Le Brigantin)

Journées européennes
du Patrimoine

14
15 Sept. 13

«Invitation à découvrir
les bâtiments protégés de Saint-Barthélemy»

Participation In Heritage Week



Photo 1: The Heritage Club presents its work on Heritage Skills.

Photo 2: guided tour of Fort Gustave hosted by our Secretary General.

From November 27 to December 1, in partnership with various associations, the Collectivité of St Barth organized a Heritage Week on the main theme of Architectural Heritage. Our association co-produced three events:

- A presentation, Nov. 27, of Heritage Skills and the trip to French Guyana by Heritage Club that we started in February in partnership with the Economic Chamber and Mireille Choisy Junior High.
- A visit, November 28, of Fort Gustave led by our Secretary General for two classes of the Sainte-Marie elementary school in Colombier
- And finally a guided tour of Gustavia in partnership with two other associations: ASBAS and St. Barth Heritage.



LOVE ST-BARTH Our New Partner



Our president Hélène Bernier and Charline Bouquet, representing the shop LOVE ST BARTH located rue King Oscar II in Gustavia, signed 24 a partnership agreement on Saturday, Aug. 24, to support the inventory program of Saint Barth fauna and flora which the association has been working on since 2011. This partnership, including the donation of 7% from the sale of its t-shirts, forms part of LOVE ST BARTH's strategy to support the action of eco-friendly and

fair trade organizations. The money donated will be used to finance the inventory of spiders led by Ph.D Patrick Maréchal. "It has been quite some time that we wanted to give our support to the association", says Charline Bouquet, "but we were looking for a way to give more value to our actions." This is the case today. In addition to financial aid, LOVE ST BARTH also plans to create a line of t-shirts highlighting some of the endangered species of St Barth that

the association is identifying under its inventory of fauna and flora. "We never thought of this kind of partnership and were surprised and delighted when LOVE ST BARTH came up with this proposal," explains our president. "Not only because we need the financial support of the community to carry out our actions, but also because it is one more example that economic development and sustainable development can go hand in hand!"

WIMCO Supports us

N°1 of the St Barth's rental vacation agencies, WIMCO exhibited its interest in the actions of our association and its willingness to support us a few month's ago. On November 18, while launching the new edition of the Vendome Guide (WIMCO's comprehensive guide to villas and vacationing in St Barthélemy) WIMCO held a raffle and a silent auction to benefit the association. Nearly 1,000 euros were collected on this occasion. WIMCO support does not stop there : our activities were highlighted in the Vendome Guide as well as on the SBHOnline website where an entire page was devoted to the association (<http://www.sbhonline.com/St-Barts-Information/st-barth-essential>).



STAY TUNED ON ANTITHESIS

The University of Antilles-Guyane in partnership with Ifremer (French Research Institute for Exploitation of the Sea), the Joint research Unit of Géoazur, the Paris Institute of Earth Physics, the Région Guadeloupe and others universities, just deploy the N°1 component of a large scientific campaign called « ANTITHESIS » (for Caribbean thermicity SISmogénèse). Its purpose is « to study the seismogenic potential of tectonic deformation and migration of whales along the northern segment of the Lesser Antilles (Guadeloupe - Virgin Islands). Four campaigns are planned aboard two ships of IFREMER (L'Atalante and Why not?).

- *The first currently runs until 23 December 2013 on board of L'Atalante is based on «Seismic force».*

- *The second, from 25 December 2013 to 8 January 2014 aboard the Why not? will focus on heat flow.*

- *The campaigns three and four, scheduled in November 2014 and May 2015, should focus on seismology and cetology.*

LINK TO THE LOGBOOK:
<https://antithesis.oce.eu/spip.php?rubrique107>



Heritage Club In French Guyana

From October 26 to November 3, several students from Mireille Choisy Junior High, members of the Heritage Club, participated in the 3rd "Junior and Overseas Heritage Meeting" organized by the Antilles-Guyane branch of the Heritage Foundation. They were accompanied by the principal of the school, Annick Solvar, teacher Cécile Klein,

and our president Hélène Bernier, distinguished leaders of the Heritage Club founded in February 2013 to educate younger generations to the importance of preserving our heritage. This third meeting was held in French Guyana on the theme "Heritage Skills." During their stay, in addition to multiple events designed to discover the heritage of French

Guyana, each delegation (Guadeloupe, Martinique, French Guyana, Saint Martin, and Saint Barthélemy) presented the results of their year's reflection on the 2013 theme. Several images below.

(More photos on the Facebook page of the association as well as on the blog www.rijpom.blogspot.com Foundation)



On the Maroni River, toward the inn Mabury



Presentation of the delegations to the Regional Council of French Guyana



H'mong dance training at Cacao village.



Heritage tour of Cayenne



Rock cutting workshop at the prison on the Iles du Salut



H'mong are the main producers of vegetables.



Hammock time!



LIFE OF THE ASSOCIATION

New Board, New By-Laws, New Energy

Following the general meeting of the association on November 22, new by-laws and internal rules have been adopted. The previous by-laws, modified in 2010, had certain articles that made the operation of the association difficult. Therefore, the proposals adopted are intended to simplify the life of the association and focus primarily on the organization of the general meeting, and especially on the quorum required to adopt resolutions, which was quasi impossible to respect. The quorum is now set at 10% of the membership, present or represented. We also have limited to two the number of



The new board association (left to right): Hélène Bernier, Nathalie Chenot, Brigitte Feillet, Clemence Jarry. Christine Schiltz missing from the photo.

powers one member can hold, and will now accept votes by correspondence.

The other big change affects the executive part of the association: a board of five mem-

bers has replaced the previous organization, based on an administration council of seven members. We also took the opportunity to clarify the purpose of the association and its geographical jurisdiction. The internal rules specify the relationship between the association and its members, as well as the functioning of the board, which was elected at the end of the meeting for a two-year term. This new board comprises:

PRESIDENT: **Hélène Bernier**
 VICE-PRESIDENT: **Clémence Jarry**
 SECRETARY: **Brigitte Feillet**
 TREASURER: **Nathalie Chenot**
 VICE-TREASURER: **Christine Schiltz**



Waiting For Restoration

False good news in mid-December when the Collectivité began to uncover the stones of the wall of the old Catholic Church built in Lorient in 1820 and today housing the library of Lorient. Indeed, the aim of the work done was not to restore this

historic building, but to coat the walls with a lightweight concrete to avoid regular flooding. Such seals were certainly needed, but we can only note that once again, the work was done in a hurry, without taking into account issues of historic preservation.

The good news however is that this work does not seem irreversible; the concrete layer can indeed be removed. Nevertheless and unfortunately, no additional restoration work has been planned for as of today.

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