

Caves and archaeology in Guadeloupe : a new survey

Poster presented at the XXIst International Congress for Caribbean Archaeology. Port of Spain, Trinidad 2005

Christian Stouvenot¹, Gérard Richard², Dominique Bonnissent³ et Patrice Courtaud⁴

¹DRAC Guadeloupe. Ministère de la Culture, ²Conseil Régional de la Guadeloupe, ³Institut National de Recherches Archéologiques Préventives, ⁴Centre National de la Recherche Scientifique (LAPP-UMR 5199)

The project

In the Greater Antilles, many cavities with precolumbian occupations are known, but such sites are apparently very rare in the Lesser Antilles. Guadeloupe presents favorable geological contexts. Several caves have already supplied archaeological remains and the potential appeared now much more significant. Surveys (always in progress) make possible to identify approximately 150 cavities and tests pits were carried out in 4 of them, and others are planned for the next years.

History of researchs

The first time than was reported a cave with human remains was the case of the Morne Rita cave of Marie-Galante who display remarkable engraving rocks (Slozinski 1983).

In 1984, a survey is conducted by Joël Rodet (Centre National de la Recherche Scientifique) who carries out location and topography of about twenty caves in Grande-Terre and Marie-Galante.

In 1984 and 1985, Pierre Bodu (Ministère de la Culture) discover several caves on the Désirade Island. Some of them contain occupation remains : potteries, stones axes and various faunals items. He carries out a excavation in the Morne Rita cave.

In years 1990, several researchers : Alain Gilbert (Ministère de la Culture), Gérard Richard (Conseil Régional de la Guadeloupe) and Maaïke de Waal (University of Leiden) discover other cavities. M. de Waal carries out a test pit in the Voûte-à-Pin cave of Désirade and discover post- saladoïde artifacts accompanied by some rare human bones.

Geological contexts

Most of these cavities are karstic features localised in

the calcareous zones of Guadeloupe. On islands of Grande-Terre, Marie-Galante, Désirade and Saint-Martin, the Miocene and Pleistocene geological formations are chalky recifal limestones. Cavities were formed by various processes : dissolution lens developed at the free groundwater top (flank margin caves), karstic conduits, slope rock-shelters (formed by erosion of an hardened surface crust), collapse or dissolution pits, littoral marine caves. Generally, cavities are low-size and seldom exceed ten meters length (to be noted the exception of Grand-Trou-à-Diable cave of Marie-Galante which is a 500 m length gallery). In Saint-Barthélemy Island, Montbars Caves are formed in compact black limestones of Eocene age.

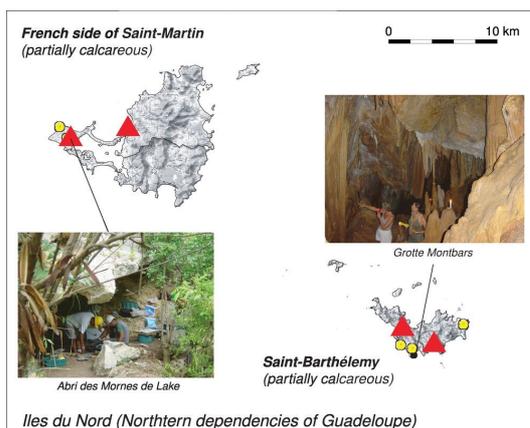
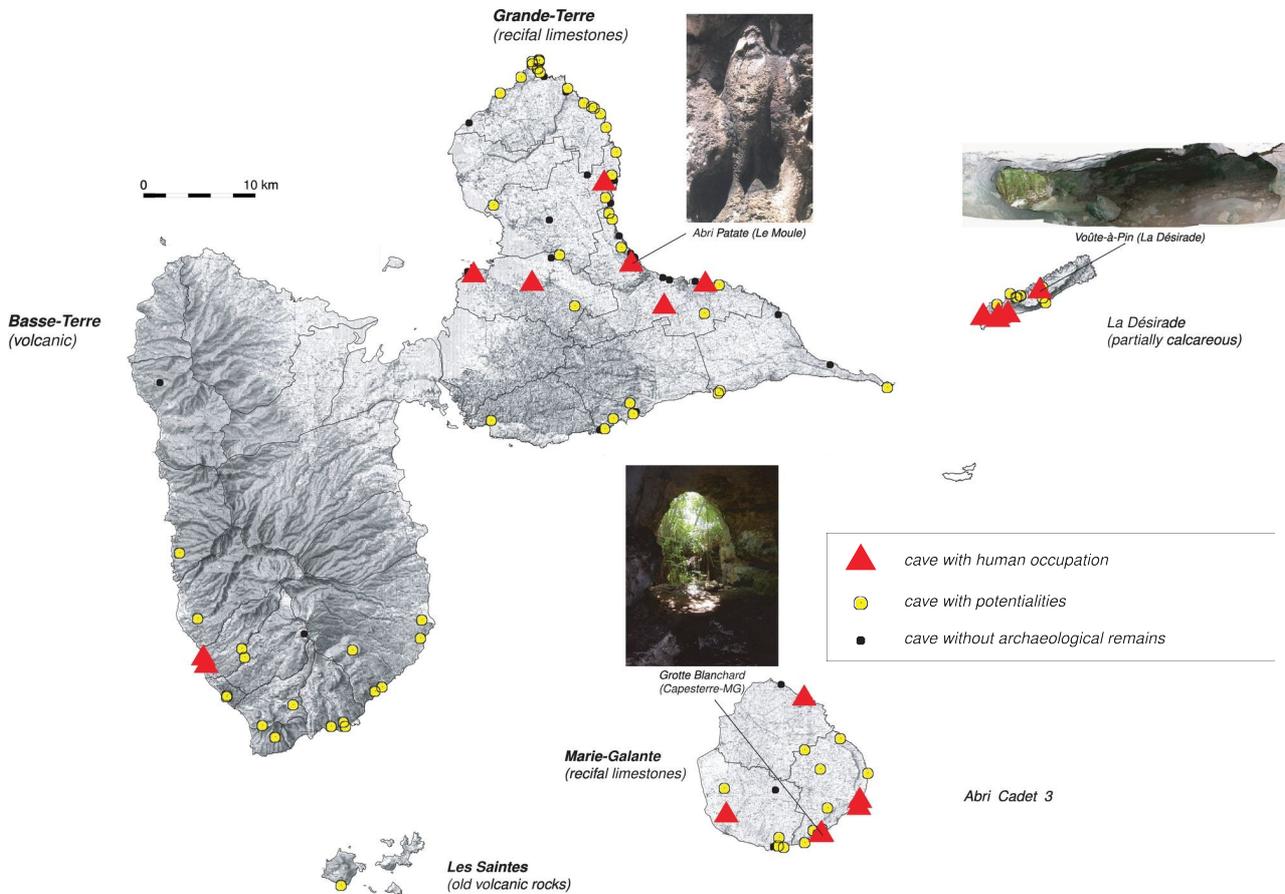
In the Basse-Terre Island, significant cavities are developed in breaking-faults of volcanic lava domes or else at the bottom of lava flow by erosion of subjacent ash layer.

Several rock-shelters were founded in blockfields located under cliffs.

On islands of Saint-Barthélemy and Les Saintes, aerial alteration of grained volcanic rocks produce large rock-shelters.

The survey : Preliminary results

Surveys are currently running and results are still partial. Except some exceptional caves, cavities are generally simple chambers or rock-shelters, often dry. More than 150 cavities were identified : 64 rock-shelters , 18 swallowholes or pits, 53 caves (voûtes), 4 karstic conduits and 11 others various cavities. Sedimentary fillings are present in at least 60 cavities. Remains of precolumbian occupation (generally pottery sherds, lithic artifacts and consumed shells) were found in 27 cavities and two of them are displaying engraved rocks of which a new decorated cave in the commune of Le Moule.



The test-pits : Preliminary results :

Archaeological test pits were carried out in 4 cavities :

- Caserne-des-Pompiers cave in Sainte-Anne provided only vestiges of colonial time.
- Mornes-de-Lake rock-shelter in Saint-Martin Island showed a small post-saladoid occupation (ceramics, stone axes, shells).
- Abri Patate engraved rock-shelter in Le Moule showed a filling of 70 cm containing a median layer with some consumed shells (Nerita, Polyplacophora, Codakia, Strombus). A surface survey revealed that the cavity is surmounted by a plateau where ceramics were found.

• Cadet cave in Capesterre-de-Marie-Galante (Stouvenot, Richard 2005) consists in two twin cavities. Grotte Cadet 2 provided great amount of human bones associated with ceramic artifacts of Troumassoid type. A radiocarbon measurement

provides a date around cal 1250 AD. A second excavation campaign is to be conducted by Patrice Courtaud in November 2005. Abri Cadet 3 supplied a thick stratigraphy (1,30 m) containing in the upper layer a post- saladoid occupation. In the lower layers,

some scarce artifacts (flint flakes) are associated with a lot of thousands of microvertebrate bones (probably natural deposits).

Other test pits are planned in 2005-2006 and should make it possible to provide a model to understand how and why precolumbian inhabitants of Guadeloupe had occupied the caves.



Histoplasmosis

Histoplasmosis is a pulmonary disease contracted by inhalation of dust containing mushroom spores (*Histoplasma capsulatum*). Guadeloupe cavities are infested by bats excrements which disseminate the spores. At the time of works our team had been strongly exposed at this risk. A protection protocol has been drawn up by a doctor of "Medecine du Travail". Protection is based on the use of masks with high filtering capacity, respect of strict hygienical rules (washing of clothings, etc ...), and severals medical examinations.

References :

Slozinski, G. 1983 - Notes sur la Grotte du Morne Rita à Capesterre de Marie Galante. 9th Congress, Santo Domingo 1981

Stouvenot C. & Richard G. 2005 - Un nouveau site à pétroglyphes en Guadeloupe : l'abri Patate en Grande-Terre. 20Th Congress, Santo Domingo 2003

Pour citer cet article :

Christian STOUVENOT, Gérard RICHARD, Dominique BONNISSENT et Patrice COURTAUD. *Caves and archaeology in Guadeloupe : a new survey*. Poster présenté au XXIst International Congress for Caribbean Archaeology. Port of Spain Trinidad 2005. Revue Ibini. Collection Ibini-Posters (2014) pp. 1-4. sur <http://www.zemi.fr/ibini>



Droits d'auteur, pas d'utilisation commerciale, pas de réutilisation ou produits dérivés, courte citation autorisée (texte et images)

Caves and archaeology in Guadeloupe : a new survey

Christian STOUVENOT*, Gérard RICHARD **, Dominique BONNISSENT***, Patrice COURTAUD****
XXI in International Congress of Caribbean Archaeology, Port of Spain 2005

The project

In the Greater Antilles, many cavities with precolumbian occupations are known, but such sites are apparently very rare in the Lesser Antilles. Guadeloupe presents favorable geological contexts. Several caves have already supplied archaeological remains and the potential appeared now much more significant. Surveys (always in progress) make possible to identify approximately 150 cavities and tests pits were carried out in 4 of them, and others are planned for the next years.

History of researchs

The first time that was reported a cave with human remains was the case of the Morne Rita cave of Marie-Galante who display remarkable engraving rocks.

In 1984, a survey is conducted by Joël Rodet (Centre National de la Recherche Scientifique) who carries out location and topography of about twenty caves in Grande-Terre and Marie-Galante.

In 1984 and 1985, Pierre Bodu (Ministère de la Culture) discover several caves on the Désirade Island. Some of them contain occupation remains : potteries, stones axes and various faunal items. He carries out an excavation in the Morne Rita cave.

In years 1990, several researchers : Alain Gilbert (Ministère de la Culture), Gérard Richard (Conseil Régional de la Guadeloupe) and Maaïke de Waal (University of Leiden) discover other cavities. M. de Waal carries out a test pit in the Voûte-à-Pin cave of Désirade and discover post-saladoïde artifacts accompanied by some rare human bones.

References :

Slozinski, G. 1983 - Notes sur la Grotte du Morne Rita à Capesterre de Marie Galante. 9th Congress, Santo Domingo 1981
Stouvenot C. & Richard G. 2005 - Un nouveau site à pétroglyphes en Guadeloupe : l'abri Patate en Grande-Terre. 20th Congress, Santo Domingo 2003

Geological contexts

Most of these cavities are karstic features localised in the calcareous zones of Guadeloupe. On islands of Grande-Terre, Marie-Galante, Désirade and Saint-Martin, the Miocene and Pleistocene geological formations are chalky recifal limestones. Cavities were formed by various processes : dissolution lens developed at the free groundwater top (flank margin caves), karstic conduits, slope rock-shelters (formed by erosion of an hardened surface crust), collapse or dissolution pits, littoral marine caves. Generally, cavities are low-size and seldom exceed ten meters length (to be noted the exception of Grand-Trou-à-Diable cave of Marie-Galante which is a 500 m length gallery). In Saint-Barthélemy Island, Montbars Caves are formed in compact black limestones of Eocene age.

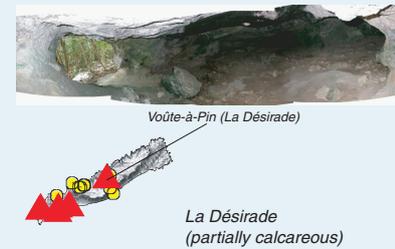
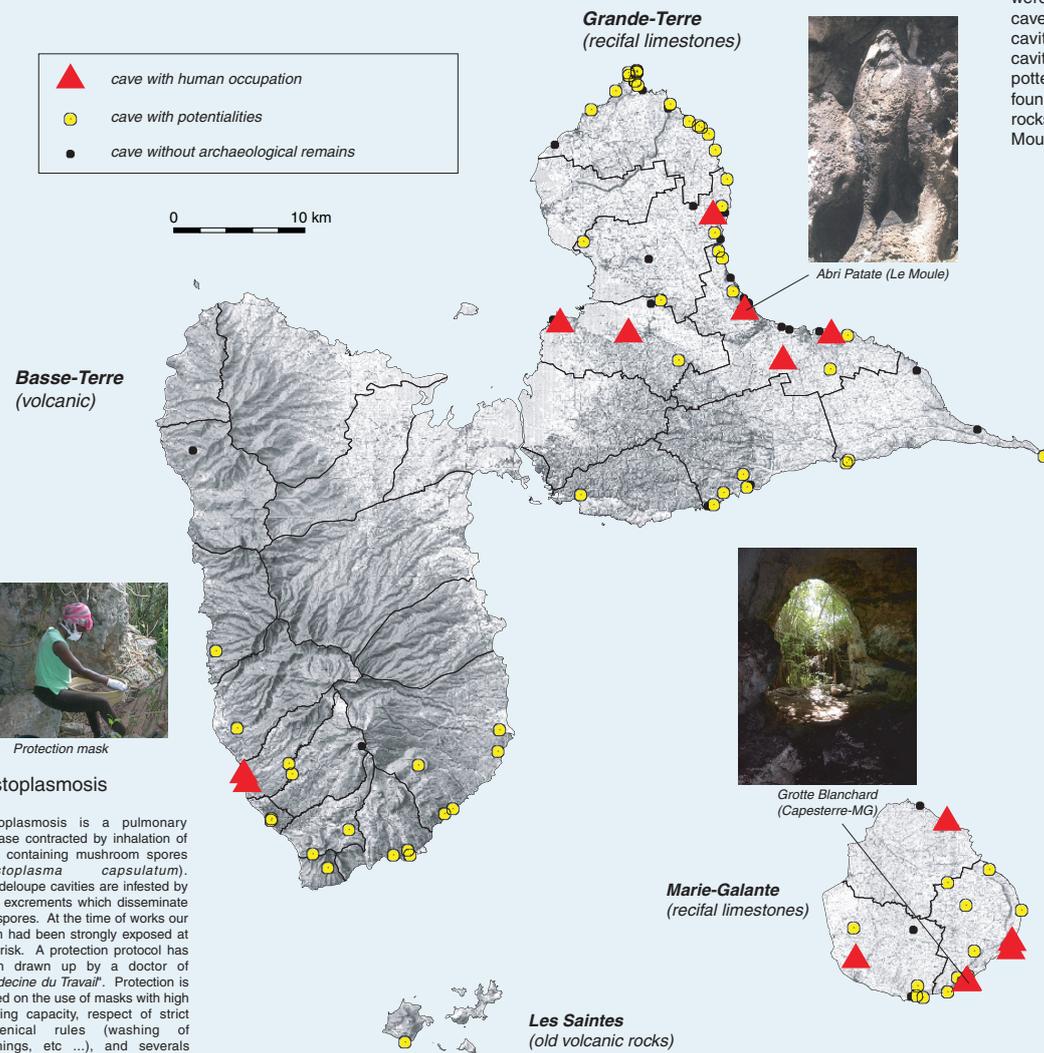
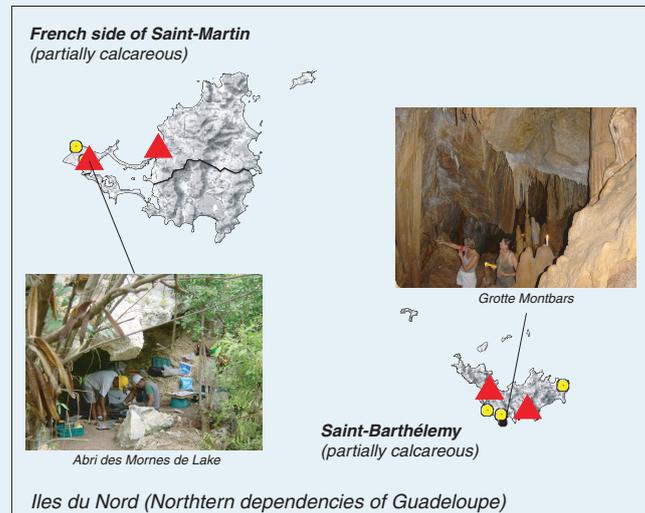
In the Basse-Terre Island, significant cavities are developed in breaking-faults of volcanic lava domes or else at the bottom of lava flow by erosion of subjacent ash layer.

Several rock-shelters were founded in blockfields located under cliffs.

On islands of Saint-Barthélemy and Les Saintes, aerial alteration of grained volcanic rocks produce large rock-shelters.

The survey : Preliminary results

Surveys are currently running and results are still partial. Except some exceptional caves, cavities are generally simple chambers or rock-shelters, often dry. More than 150 cavities were identified : 64 rock-shelters , 18 swallowholes or pits, 53 caves (*voûtes*), 4 karstic conduits and 11 others various cavities. Sedimentary fillings are present in at least 60 cavities. Remains of precolumbian occupation (generally pottery sherds, lithic artifacts and consumed shells) were found in 27 cavities and two of them are displaying engraved rocks of which a new decorated cave in the commune of Le Moule.



The test-pits : Preliminary results

Archaeological test pits were carried out in 4 cavities :

- Caserne-des-Pompiers cave in Sainte-Anne provided only vestiges of colonial time.
- Mornes-de-Lake rock-shelter in Saint-Martin Island showed a small post-saladoïde occupation (ceramics, stone axes, shells).
- Abri Patate engraved rock-shelter in Le Moule showed a filling of 70 cm containing a median layer with some consumed shells (*Nerita*, *Polyplacophora*, *Codakia*, *Strombus*). A surface survey revealed that the cavity is surmounted by a plateau where ceramics were found.
- Cadet cave in Capesterre-de-Marie-Galante consists in two twin cavities. *Grotte Cadet 2* provided great amount of human bones associated with ceramic artifacts of Troumassoïde type. A radiocarbon measurement provides a date around cal 1250 AD. A second excavation campaign is to be conducted by Patrice Courtaud in November 2005. *Abri Cadet 3* supplied a thick stratigraphy (1,30 m) containing in the upper layer a post-saladoïde occupation. In the lower layers, some scarce artifacts (flint flakes) are associated with a lot of thousands of microvertebrate bones (probably natural deposits).

Other test pits are planned in 2005-2006 and should make it possible to provide a model to understand how and why precolumbian inhabitants of Guadeloupe had occupied the caves.

Histoplasmosis

Histoplasmosis is a pulmonary disease contracted by inhalation of dust containing mushroom spores (*Histoplasma capsulatum*). Guadeloupe cavities are infested by bats excrements which disseminate the spores. At the time of works our team had been strongly exposed at this risk. A protection protocol has been drawn up by a doctor of "Medecine du Travail". Protection is based on the use of masks with high filtering capacity, respect of strict hygienical rules (washing of clothings, etc ...), and severals medical examinations.

* DRAC Guadeloupe, Ministère de la Culture
 ** Conseil Régional de la Guadeloupe
 *** Institut National de Recherches Archéologiques Préventives
 **** Centre National de la Recherche Scientifique (LAPP-UMR 5199)