

*Journal of Local Knowledge
on the Biodiversity of Charlotteville
by Charlotteville community members and civil society
organisations*



*Developed
October 2025*

*Cover photo :
Marro-War Bay
Charlotteville*

*Photo credit:
Akedo Muzla*

Journal authors/contributors of local knowledge:

- *Gail Caesar - Community Member*
- *John Carrington - Spiritual Baptist (Pastor)*
- *Ned Celestine - North East Sea Turtles*
- *Malika S. Cordner - Charlotteville Police Youth Club (CPYC)*
- *Ian Daly - Tobago Unified Fisherfolk Association (TUFA) and Bloody Bay Fisherfolk*
- *Vita Dillion-Jack - Charlotteville Heritage*
- *Desiree Francis - Community Member*
- *Martha Greenawalt - Rising Mindset Education*
- *Jaycel Joseph - Charlotteville Police Youth Club (CPYC)*
- *Ancil Kent - North East Sea Turtles*
- *Chelsea Manswell - Charlotteville Police Youth Club (CPYC)*
- *Christopher Moore - Charlotteville Village Council*
- *David Murray - Community Member*
- *Akedo Muzla - Rasta/Community Member*
- *Thomas Nicholson - Community Member*
- *Vanessa Perry - Community Member*
- *Junior Quashie - All Tobago Fisherfolk Association (ATFA)*
- *Fredrick Roberts - All Tobago Fisherfolk Association (ATFA)*
- *Nirala Sonder - Community Member*
- *Allison Thomas - Tobago Unified Fisherfolk Association (TUFA) and Trinidad and Tobago Association of Village and Community Councils (TBAVCC)*
- *Sheneka Warrick - Community Member*
- *Penelope Williams - Cholson Chalets Ltd.*



Fishing nets on the shoreline. Photo credit: CANARI

Photographs provided by community members: Akedo Muzla, Jaycel Joseph, Chelsea Manswell, and the Caribbean Natural Resources Institute (CANARI)

Journal collation, editing and formatting support provided by CANARI under the Trinidad and Tobago National Outlook on Indigenous and Local Knowledge (ILK) of Biodiversity Project executed in partnership with Environmental Policy and Planning Division of the Ministry of Planning, Economic Affairs and Development, Republic of Trinidad and Tobago, in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO) with funding from the Kunming Biodiversity Fund.



Government of the Republic of Trinidad and Tobago
Ministry of Planning, Economic Affairs and Development





Charlotteville is a village in the Republic of Trinidad and Tobago. It is located in North East Tobago, within the UNESCO Man and Biosphere Reserve. Communities like Charlotteville have significant local knowledge on that protected area's biodiversity.

*Photos credit:
CANARI*



Community members and CSOs shared their local knowledge about the biodiversity of Charlotteville during meetings and activities in September and October 2025.

Community led walks in the village showcased important plants and animals in Charlotteville and highlighted key environmental issues. Villagers also shared how the community depends on the area's biodiversity for their livelihoods as well as recreational, cultural and tourism related activities.



Photos credit: CANARI



Tools such as ecological calendars were used to gather information on how the community interacts with the natural environment during different periods of the year and how plant and animal populations change throughout the year

Photo credit: CANARI



Given that Charlotteville is a coastal community a lot of the local knowledge shared centred around fishes, fishing and coastal tourism activities.



Fishing boats in Man-o-War Bay. Photo credit Akedo Muzla



Jaycel Joseph shared this photo of the Charlotteville Pier noting that “boats are anchored here for close range access. The tower poles are what they use to hang the scales to weigh the marlins and other big fish for the fishing tournament that takes place in May. This area is also where bathing activities take place especially jumping and diving into the water. The previous DODS diving championship took place here where a platform was built on heights for freestyle diving purposes. This net shown here is what we call seine, it is used for seine pulling on the bay front where they would catch fish and all other sea creatures”.

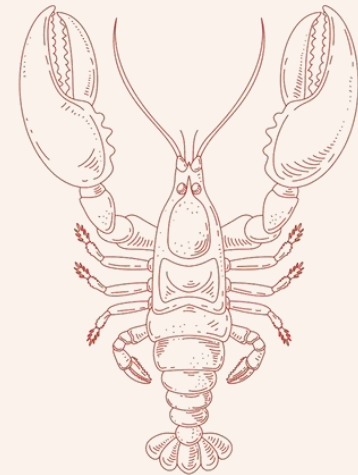
Local knowledge on Fish abundance/harvesting

- Redfish and Amber Cavali are harvested throughout the year
- Marlin is caught mainly between May to October
- There are two kinds of kingfish (Wahoo & Blackeye). Wahoo is most abundant October - March whereas Blackeye is harvested throughout the year
- Grouper abundance is linked to moon phases
- Albacore (Black Fin Tuna) and Jacks are caught mostly in the dry season
- While seasonal patterns exist, these patterns may be disrupted by the use of Fish Aggregating Devices

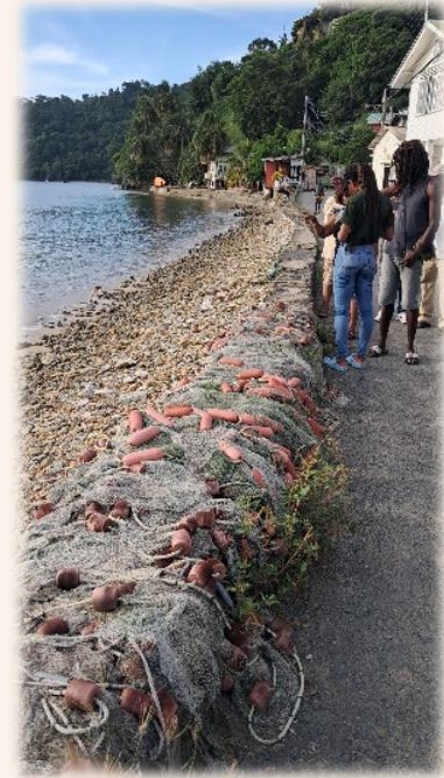


Local knowledge on shellfish abundance/harvesting

Whelks and Pacro are harvested throughout the year but abundance has been declining in recent times due in part to land based sources of pollution. Lobster is harvested year round. There is also a declining abundance of conch.



The community has noted declining abundance of fish harvested, which they link to species migration due to climate change, overfishing, and sedimentation of coastal waters and seismic testing. They speculate that given decline of traditionally harvested marine seafood species, in the future, farming of freshwater fish like Tilapia may become more common.



Top left photo- fisherman preparing his catch; Top right photo- Seine nets
Photos credit: CANARI



Declining coral reef health is a concern for the villagers which they believe is linked to climate change, land based sources of pollution e.g. septic tanks and detergents.



Jaycel Joseph shared this picture of Pirate's Bay in Charlotteville where she indicated that coral restoration is taking place led by the CSO Environmental Research Institute Charlotteville (ERIC)



Crops e.g. coconuts, plantain, bananas (picture below) and mangoes are planted throughout the year. Mangoes are harvested in June. "Short crops" are planted more in the dry season. Provisions [e.g. dasheen and cassava] are planted from around May. Pigeon peas (picture to the left) is also planted around May.



Photos Credit:
CANARI

Common medicinal plants used in Charlotteville include: turmeric, moringa, ginger, worm grass, St. Johns Wort, mint, rosemary, ginger, zebapique, bayleaf, fitweed (chadon beni), vervine, graterwood, limebud and stamp fern.

Medicinal plants are grown mostly in backyards but in the past they were more commonly found in the wild. In the future, villagers believe that there will be declining reliance on medicinal plants, transitioning to greater use of store-bought pharmaceuticals.

Chadon beni (fitweed) is used in a tea for babies to treat fits. Photo credit: CANARI





Jaycel Joseph shared these photos of an Almond tree including the fruit in the picture below noting that “When they [the fruits] get ripe, they fall and get dry. The dried fruit can now be pounded with a stone that will open to an almond nut.”



During the open hunting season [October to February] iguana, agouti, manicou, and tattoo are hunted in the forests surrounding Charlotteville. Villagers have noted a declining abundance of wildlife over the years. Forested areas have been increasing over time and agriculture is on the decline. In terms of weather, villagers also noted that the area has become drier (less rainfall) over the years and seasonality is less distinct.

View of Charlotteville and surrounding forests from the sea. Photo credit: Akedo Muzla.





Tourism is an important economic activity in Charlotteville

Jaycel Joseph contributed the photo above, noting that the picture showcases Man-o-War Bay where snorkeling takes place but that depending on where lifeguards place their flags, bathing and snorkeling may be restricted in some areas.

Chelsea Manswell took the picture on the left of Sand Bay or Lover's Bay and described it as "Sand Bay, Charlotteville where you can take a boat ride over there and do diving activities, bathe, etc. You can also view pretty pink sand at Sand Bay, Charlotteville Tobago".



*Man -o- War Bay
(above) used for
therapeutic bathing.
Photo credit:
CANARI*



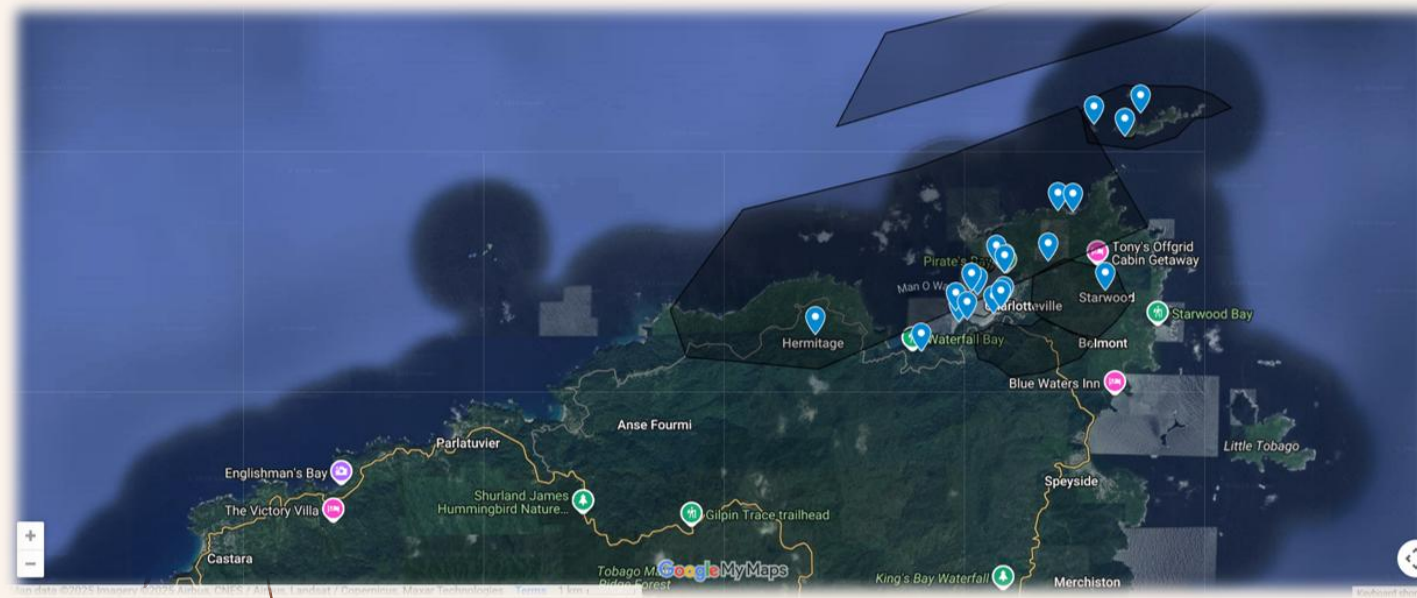
*Recreation at Sand
Bay. Photo credit:
Akedo Muzla*

In addition to touristic activities, the local community also relies heavily on the natural environment for recreational activities e.g. hiking to Pigeon Peak and Flagstaff Hill and therapeutic seaside bathing throughout the year.

A number of festivals held in Charlotteville are linked to the natural environment including the Fisherman Harvest Festival in June, Tobago Heritage Festival - Charlotteville's Natural Treasures Day in July, Methodist Harvest in September and Anglican Harvest in October.



Community members used participatory mapping (PGIS) on Google My maps to highlight some key features within the community. Villagers identified areas such as key fishing zones, coral restoration areas, coastal erosion sites and recreational beaches.



PGIS map showing key features highlighted by Charlotteville community members, using Google My Maps
Photo credit: CANARI
Map accessible at:

<https://www.google.com/maps/d/viewer?ll=11-325968883260359%2C60-55275914166947&z=17&mid=1blwN-Cg5ev36YB-gZi93KXt5smZrtrq>

Charlotteville thrives at the intersection of land, sea, and community. From its vibrant fishing traditions to seasonal food harvests, residents maintain a strong connection with their environment. Using this photo journal the community has showcased their valuable historical, seasonal and spatial local knowledge of the biodiversity of Charlotteville.

Thank You to all contributors!



Man O War Bay. Photo credit: CANARI