



THE HISTORICAL GEM

LANDSCAPE AND HERITAGE OF ST. EUSTATIUS

COLOPHON

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FOREWORD



Raimie Richardson

Heritage Inspector of the Public Entity St. Eustatius

It is a great honor to have been selected as the island heritage inspector and to lead the documentation of our first-ever landscape biography for the public entity of St. Eustatius. St. Eustatius, also known as Statia, is our home from the Quill to Little Mountain, from Venus to White Wall. It is our task to ensure that what we inherit as a community is preserved for the next generations. To do this, we must understand the island on which we live and remain in constant dialogue with ourselves and with the community.

St. Eustatius is a small Caribbean island, but it makes up for its size with its history and heritage sites. Thousands years of history can be found on the island. Indigenous sites, plantations and fortifications on an island that changed hands 22 times. Plantations once dominated every corner of the island. We, the people of this island, have inherited a landscape filled with stories, memories, and histories.

May this landscape biography serve as a guide for the island and its people. A guide to protecting every ruin, every hill, and the Quill, and to recognizing the stories behind how we as a people have used this space, how it was used in the past, and how we continue to coexist with the heritage left behind, with nature, and with the ever-changing climate we inherited. During

the making of this landscape biography, we hiked to every corner of our beautiful island. As I led the team to the various parts of our island, we rediscovered old truths and uncovered many new ones. In my role as heritage inspector of the public entity, and in close collaboration with the Cultural Heritage Agency of the Netherlands, we agreed that I would lead this initiative for St. Eustatius with full community involvement from local fishermen to the custodians of our village remedies, from those who maintain our baking traditions to many others within the community. This broad participation remains my first priority and to the people of Statia I say: thank you.

In the preliminary stages of the process, I was thrilled by the prospect of truly studying Statia, studying our home as a guide for future policies. With this landscape biography, I hope we can view our island through a different lens. This is the only home we have, and we will not be given another. One of the most characteristic features of the island's heritage is its many ruins and historical sites. But also, its historical ruins scattered across the island. Plantations once dominated the economy and the island, and while some are visible to the human eye, much remains to be uncovered and get recognized.

The last two years of my work on the island have been intense. So much has been documented, yet we still know so little about our island and the lives of those who first called it home, the Arawak Amerindians who arrived thousands of years ago from South-America, and, the lives of those enslaved who came from Africa and brought with them a heritage that made this land habitable, and now lay in unmarked graves.

My wish is that by the year 2050 our heritage and archaeological sites are protected and well documented. This landscape biography is not just another book; it is a true aid to help our people understand our island and how we interact with the space we all call home. This isn't a study, it is the life of the island Statia, the knowledge we inherited, and the voice of our future. We are a small island facing major challenges, and this will be our guide for shaping the future of our island. Community knowledge is key, and we must remember that local knowledge is equally important for us, the people of St. Eustatius, that inhabit this island.



INTRODUCTION AND READER'S GUIDE

[1]

The way Statia's people have used the Lower Town over time shows how the meaning of heritage and landscape shifts. Each new generation makes decisions about what they consider valuable, and what they want to alter or preserve. Some places have been inhabited for thousands of years. Others are so inhospitable that people naturally move around them. But it is never quite the same.

Within the Caribbean, Statia is known as *The Historical Gem*. The island's past has been preserved in a uniquely visible way. This landscape biography describes the remnants of the past in the landscape. For the first time, these elements have been brought together in a single publication. Nature and intangible heritage are sometimes of greater significance to Statian residents than the physical heritage sites, which often have a colonial origin. Accordingly, considerable attention is given to the value of nature, celebrations, crafts, clothing, and food culture.

In the European Netherlands, few people are familiar with St. Eustatius. This needs to change, as the notion of "what is unknown is unloved" holds true for cultural heritage as well. The island itself lacks sufficient capacity to take this on. With just over 3,000 inhabitants, it is understandable that Statia turns to the European Netherlands

The ruins in the Lower Town of Oranjestad seem to come alive. These fragments of warehouses, inns, dwellings, shops, and brothels are remnants of the golden age of St. Eustatius, when the island was the center of Caribbean trade. Everything passed through here, including enslaved African people, who endured exploitation and racism. It is Easter 2025. Statian residents park their cars among the ruins. They breathe life back into the stones by placing chairs, speakers, and tents in between them. The dancing and celebrations continue well into the night.

for support in this matter. This landscape biography was therefore created at the request of the Public Entity St. Eustatius. It can assist policymakers, entrepreneurs, site and estate managers, spatial planners, and government officials in preserving the elements that give St. Eustatius its identity, ensuring that this unique character can be cherished and put to good use.

Like everywhere else, it is ultimately up to the residents themselves to determine what they consider worth preserving. This also applies to Statian people. With this landscape biography as a reference, they have to decide for themselves which remnants of the past they want to carry into the future. Are these the remains of the plantations? The forts with their dozens of cannons? Fort Amsterdam, where enslaved people first set foot on land? The sites of the mysterious Amerindian peoples who once inhabited the island? Or the shipwrecks surrounding the island?

The current identity of St. Eustatius is in jeopardy. Tourism is increasing. Infrastructure projects take up more and more space. New buildings arise on historical sites. Climate change has an increasing impact. If careful choices aren't made about what should be protected, the island is at risk of changing beyond recognition. It is therefore our hope that

this landscape biography will help navigate the many spatial challenges facing St. Eustatius and aid Statian residents in identifying what they value most.

Reader's Guide

This landscape biography explores the heritage and landscape of St. Eustatius. It was created through a collaboration between island residents and various specialists from St. Eustatius, as well as experts from the Caribbean region and the European Netherlands. Each chapter has its own author and with that comes a unique writing style.

The first five chapters are arranged chronologically. The first chapter discusses the formation of the island. It is followed by a chapter on its first inhabitants: the Amerindians. The next three chapters outline developments from the colonial period to the present, with emphasis on three themes. First, the landscape and how it has been used; next, the island's relationship with the sea; and finally, the development of Oranjestad as a settlement.

Three thematic chapters follow this chronological overview. These themes were selected based on conversations with Statian residents about what they consider valuable and what they believe deserves particular attention. On St. Eustatius, nature

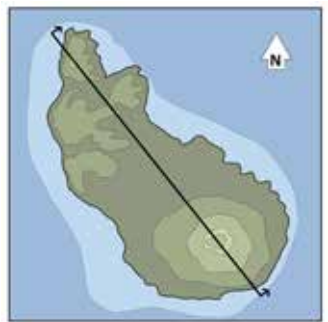
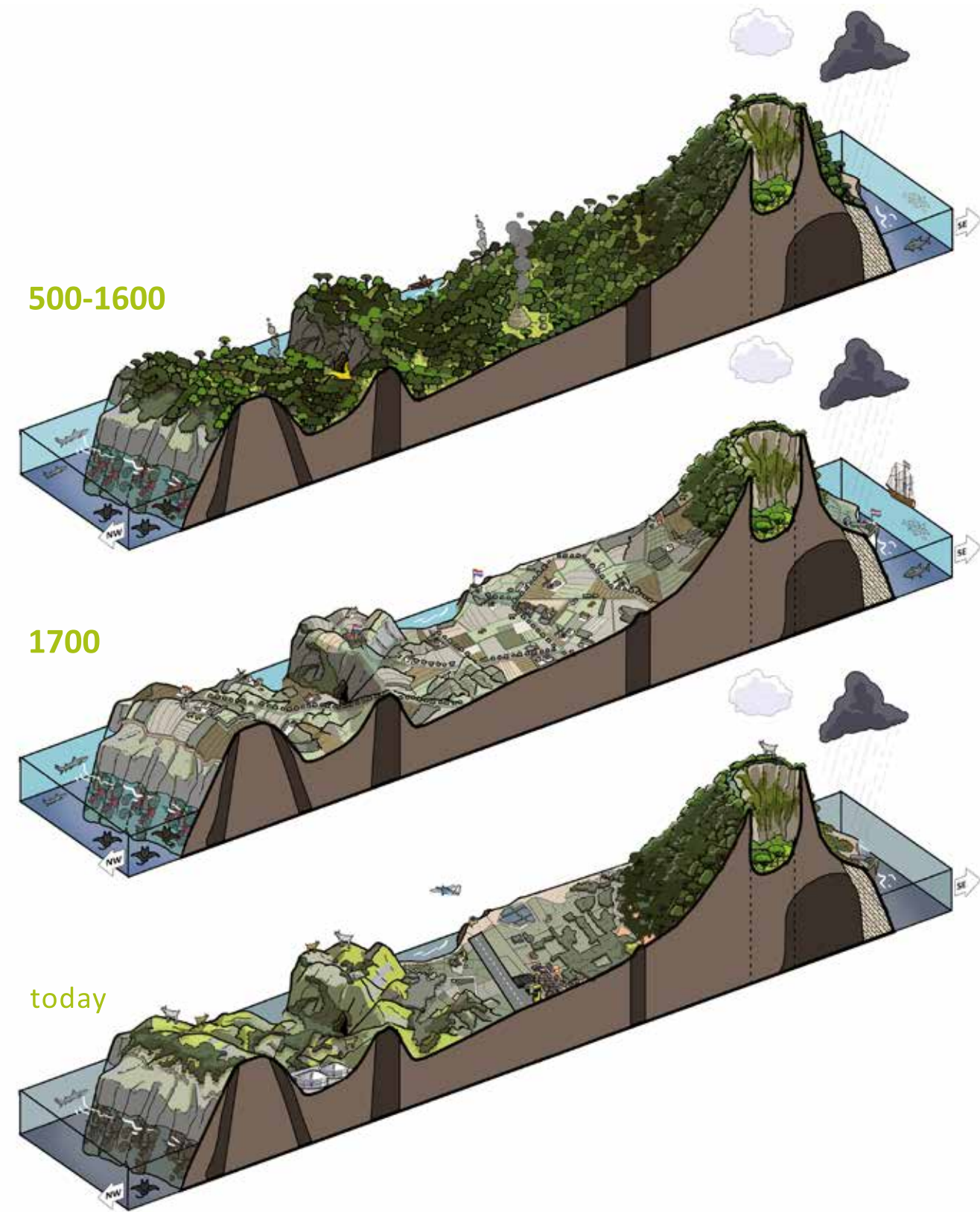
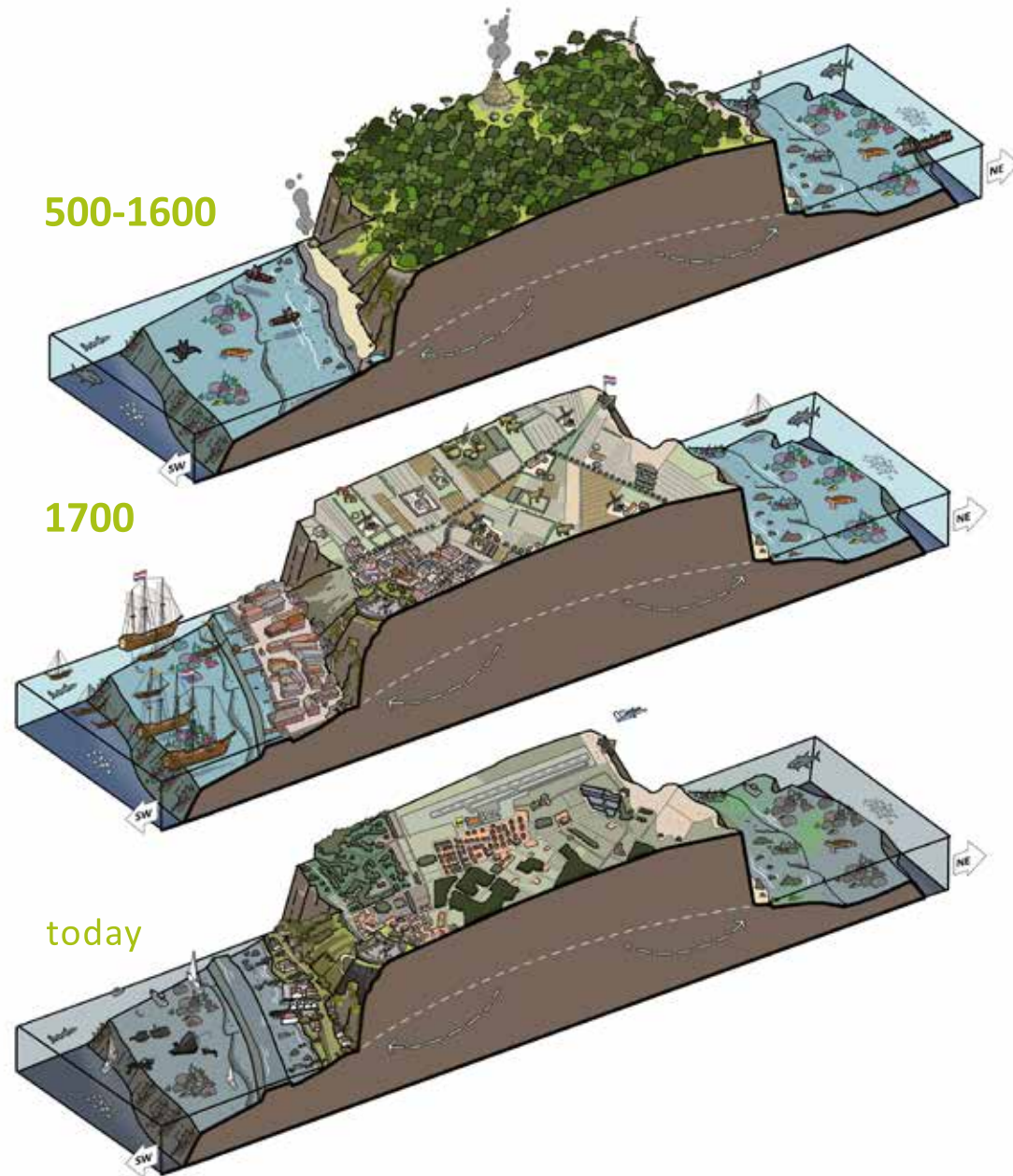
and heritage are inextricably linked. This is the topic of the first thematic chapter. The second looks at the management of freshwater through the centuries. The third thematic chapter addresses intangible heritage. The biography concludes with acknowledgments to all those involved in the creation of this book, and an extensive bibliography for each chapter.

As this book was being written, it soon became clear that the story extended beyond what could be included in the main text alone. To make room for more in-depth subjects, we have added "featured" sections. These are printed in blue text. To assist the reader, a map highlighting key cultural and historical elements appears at the front and back of this biography.

Finally, by mid-2026, the information in this publication will also be available on digital maps, allowing users to explore all heritage sites and landscape types described in this book.

ST. EUSTATIUS AT A GLANCE

These six cross-sections visualize 1,500 years of landscape change on St. Eustatius. They show three time periods: from approximately 500 CE to 1600, around 1700, and the present-day situation. The oldest situation shows the precolonial period when various Indigenous Amerindian groups inhabited the island. The situation from around 1700 shows the heyday of the colonial period with dozens of plantations, agricultural plots, and economic prosperity. The last cross-section is recognizable to anyone who has been to St. Eustatius. It shows the present-day situation. On the next page, the interested reader can find an explanation and justification of the cross-sections.



Explanation en justification of Cross-Sections

The six cross-sections were created after a series of discussions between specialists from St. Eustatius and the European Netherlands. They can be read as a highly simplified visual summary of this landscape biography. However, some choices were made that require explanation.

The cross-sections contain many details. We will walk through some of them from one side to the other, starting with the northeast to southwest cross-sections. The first cross-section shows the habitation of the Indigenous Amerindian groups of St. Eustatius. Archaeological remains form the basis of these locations. The central part of St. Eustatius is flat and fertile. Habitation and (agricultural) activities have been concentrated here since the year 500 CE. During the colonial period, around 1700, the forest was cleared, and the landscape transformed by dozens of plantations where enslaved people were exploited. The island's wealth was protected by fortifications, which can also be seen in the 1700 and present-day cross-sections.

Statia's western side is sheltered from the wind. It was used for fishing since the precolonial period. During the colonial period Oranjestad flourished. Dozens of ships were anchored here. Between the

sea and the cliff, Europeans ordered the construction of hundreds of buildings for housing, trade, and entertainment. Some of them still stand today, but most have fallen into ruin. The lagoon's use is evident: in precolonial times mostly for food, around 1700 mostly for the trade in goods and people, and today mostly for recreation.

The northwest to southeast cross-sections offer a different picture. It's striking how densely forested the island once was. From the moment the Europeans took over the island, the vegetation diminished. With the decline of economic prosperity, some vegetation returned to the slopes of the Quill and in Boven National Park. In the landscape today, you can find all sorts of remnants of slavery as silent reminders. If you look closely, you'll see "slave walls" depicted on the cliff on the left of the present-day cross-section.

The Cultuurvlakte (the flat area in the middle of the island) has been continuously inhabited since the first Indigenous groups. Remnants of these first inhabitants can be found there today. During the colonial period, this area was relatively populated. The goat is only visible in the present-day cross-section because it was only introduced to the island in the 20th century. The (local and international) impact of humans on nature has caused depletion of both land

and sea. This is made visible in the number of animals presented, the discoloration of the coral, and the color of the sea.

But not everything has changed. The clouds around the Quill have always been there. And the substrate has also remained relatively unchanged. This blueprint determines how St. Eustatius can be used by humans. In the cross-sections, the volcanic shafts are shown in dark colors. The shafts consist of hard rocks of solidified magma. The lighter colors represent ash and loose blocks deposited during devastating eruptions. The upper curved line just above sea level represents the groundwater table. The curved arrows pointing outward below visualize groundwater flow paths.



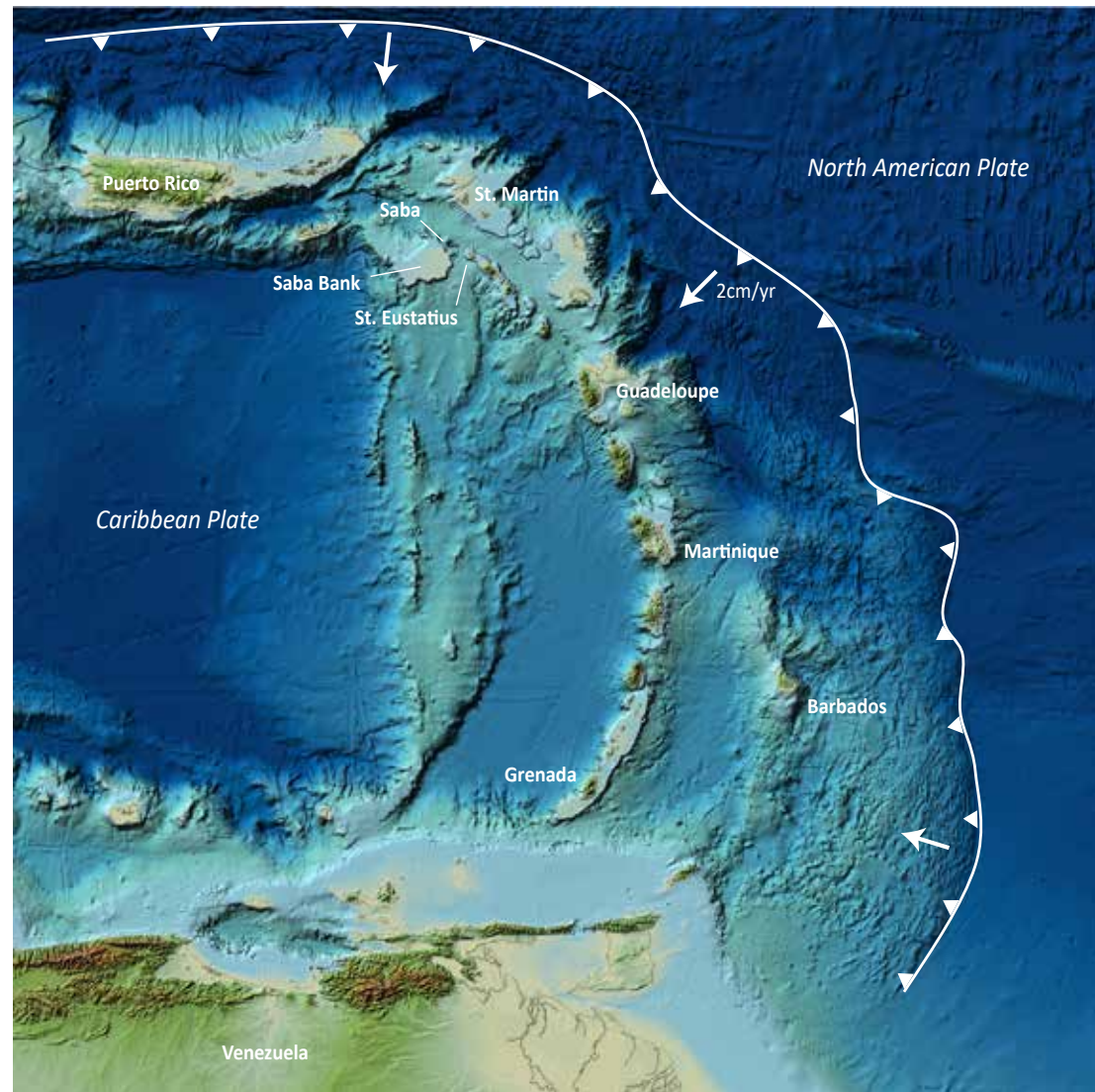


[2] HARM JAN PIERIK

THE FOUNDATIONS: GEOLOGY, SOILS, AND CLIMATE OF ST. EUSTATIUS

The volcanic origins of St. Eustatius remain evident in the striking Quill volcano, which towers 600 meters above sea level. In the past, the island has been shaped by powerful forces from deep within the earth, while in the near future erosion and extreme weather events will pose major challenges. This chapter discusses the geological evolution of St. Eustatius, along with its landforms and soils. It also considers the climate and the risks associated with weather phenomena and geology (the so-called geohazards). All of these factors are essential for understanding how the island was used in the past, the possibilities it offers today, and the future challenges Statia faces. Flora, fauna, and water systems also play a key role in the island's natural formation.

[Fig] Northern Hills (photo: Ruud Stelten)



[Fig] Location of Saba in the Caribbean. Saba is part of the Leeward Islands, a volcanic arc formed by the subduction of the North American plate below the Caribbean plate.

St. Eustatius is part of the Leeward Islands and, geologically speaking, it is part of the Lesser Antilles Arc. This is a chain of volcanic islands stretching 740 kilometers from Grenada in the south to Saba in the north. The arc lies along the edge of a tectonic plate known as the Caribbean Plate. The Quill is an active but quiet volcano. Its name is derived from a corruption of the Dutch word *de kuil* (“the pit”).

The adjacent *Cultuurvlakte* (Cultivation plain) forms the central portion of the island. Most of the population lives on this relatively flat area, which is also home to the town of Oranjestad. This plain lies between 10 and 80 meters above sea level and is bordered by eroding cliffs along both coasts. In the far southeast, against the flank of the Quill, lies a sequence of deposits with tilted limestone alternating with volcanic deposits (*White Wall – Sugar Loaf*). The Northern Hills form the northern part of the island, with Boven as the highest peak (289 meters above sea level). This landscape consists of the remnants of one or more volcanoes that are no longer active. Volcanic activity in this area ceased at least a million years ago.

Surrounding St. Eustatius lies a shallow underwater bank on which the nearby islands of St. Kitts and Nevis are positioned. This bank is shallower than 180 meters.

From the islands’ shoreline, the seabed slopes slowly downward, consisting mostly of sand and boulders. Coral reefs are located around the 15–20 meter depth contour line, especially surrounding the Quill.

Climate

St. Eustatius has a tropical climate with an average temperature that remains around 27 °C throughout the year. Annual rainfall varies greatly but averages around 1000 millimeters. July through September are the warmest months, with average minimum and maximum temperatures of 21 and 31 °C. January through April are only slightly cooler, with average minimum and maximum temperatures of 19 and 29 °C. Rainfall fluctuates quite significantly throughout the year. There is also strong variation between years, and very dry years are not uncommon. The wettest period runs from May through November, when monthly rainfall averages more than 100 millimeters. Rainfall also varies across the island. The summit of the Quill volcano receives more rainfall than other areas – an estimated 1500 to 2000 millimeters annually – and is often shrouded in clouds. There appears to be a modest rain-shadow effect, causing the western side of the volcano to receive somewhat less precipitation. Looking ahead, temperatures are expected to increase, and prolonged dry periods will likely occur more frequently.

By 2050, the annual average temperature is projected to increase by 0.8 to 1.3 °C (compared to the 1991–2020 baseline), and by up to 3 °C by 2100. As a result, sea levels will rise by 30–80 centimeters by 2050 and 60–130 centimeters by 2100. In the most extreme scenario, annual rainfall decreases sharply, by as much as 44 percent by 2100.

The trade winds create a predominantly easterly to northeasterly wind, exposing the east coast to the strongest wave action. Hurricanes occasionally pass near the island between June and November, on average every four to five years. Hurricanes, like the trade winds, almost always approach from the east. They may bring intense rainfall and often cause significant damage. Infamous hurricanes struck the island in 1772, 1780, and 1899. More recently, hurricane Irma caused considerable destruction in 2017. In the future, hurricanes of the highest category are expected to become more frequent. While such storms now pass the island roughly once every 39 years, by 2050 this interval may shorten to once every 30–34 years, and that interval will become even shorter toward 2100.

FEATURED Climate in the Future

To predict future climate conditions, scientists use a range of climate models

based on different greenhouse-gas emission scenarios. The models simulate how the earth’s climate responds. Globally, IPCC models are leading. Based on these models, the Royal Netherlands Meteorological Institute (KNMI, Koninklijk Nederlands Meteorologisch Instituut) has developed scenarios for both the European Netherlands and the Caribbean Netherlands. This biography uses the most recent KNMI scenarios from 2023.

The KNMI distinguishes four scenarios: a high- and low-emission scenario, each with a wet and a dry variant. All scenarios point to a warming climate. How earth systems respond to this warming is surrounded by a certain range. Most scenarios for the Caribbean Netherlands show a clear trend toward increasing drought and rising sea levels. The exact magnitude of these changes cannot be predicted with complete accuracy.

FEATURED Stratovolcanoes and Their Soils

The Quill is a stratovolcano, one of the most common types of volcanoes on Earth. *Stratovolcanoes* are characterized by their steep slopes and typically form near subduction zones, where one tectonic plate sinks beneath another. St. Eustatius and the rest of the Leeward Islands emerged because the North American Plate

subducted beneath the Caribbean Plate – a process that continues today at a rate of about 2 centimeters per year. Once deep beneath the earth’s crust, the subducting plate melts, generating magma that finds its way upward. This process creates chains of volcanoes along the plate boundary. This type of volcano produces viscous magma, consisting mainly of *andesite* – a specific mix of volcanic minerals. Because of its viscosity, pressure can build over time, leading to explosive eruptions. A high water content in the magma further increases the potential for violent explosions.

During an eruption, part of the volcano around the crater may be blown away, and large, destructive *pyroclastic flows* may occur. These hot mixtures of gas, ash, and rock move rapidly down the slopes. Pumice, a rock full of cavities that allow it to float on water, is typically formed in such eruptions; these cavities result from the high gas content in the solidifying magma. In addition, large quantities of ash and larger rocks are ejected into the air and fall back around the volcano. The largest boulders end up closest to the crater, while finer material is deposited farther away, influenced partly by wind direction at the time of the eruption.

Only part of the magma actually flows out of the volcano. Once magma reaches the

surface, it becomes lava. Due to its viscosity, lava flows on stratovolcanoes rarely reach far downslope. Some magma cools and solidifies just below the surface, forming dome-like swellings (domes).

Volcanic soils are mineral-rich and consist of loose material with many pores between the grains. This enables plant roots to grow readily and allows water to infiltrate easily. Waterlogging is therefore rare. Volcanic deposits only become fertile once sufficient soil formation has occurred under warm and humid conditions. During soil formation, volcanic minerals weather into fertile clay minerals. Where moisture is sufficient, dead plant material accumulates as organic matter. Together, clay minerals and organic matter create fertile soils that retain water well. On St. Eustatius, this is especially true on the higher parts of the Quill, which receive more rainfall. On the lower parts of the island, soil development only occurred in the upper few decimeters. Here, vegetation benefits far less from the volcanic soil.

An Island Formed by Eruptions and Erosion

The geology of St. Eustatius was first described in detail in 1886 by Dutch geologist Gustaaf Molengraaf. The soils of the island were mapped in the 1950s by Dutch soil scientist Veenenbos. He

distinguished five soil units based on texture or composition (such as loamy, sandy, or stones) and eight subunits (*phases*) mainly based on slope and stoniness. He also created a derived soil-suitability map, indicating which soils were suited for crop cultivation, grazing, or natural vegetation.

From the 1970s onward, geologists John Roobol and Alan Smith made important contributions to the geological study of the island, focusing primarily on volcanic aspects. Their research shows that St. Eustatius was formed by the interplay between volcanic eruptions and the subsequent erosion. This chapter draws largely on these studies, supplemented with insights from (landscape) archaeological research, reports, and theses. The geology of the island is presented here by area, alongside related landforms, soil types, and potential land uses.

Northern Hills

The Northern Hills make up the oldest part of St. Eustatius. This area consists of the heavily eroded remnants of an ancient volcano or of several smaller volcanoes. On the seabed, the contours of this system can likely still be seen as a round, shallow zone roughly 10 kilometers in diameter, with the Northern Hills at its center. Exact dating is unavailable, but it is assumed that this part of the island formed several million years

ago. After one million years ago, volcanic activity in this part of the island ceased, and most of the original volcano was worn away by erosion.

The subsurface of the Northern Hills consists of hard rock from solidified lava flows (*mainly andesites*). These are interbedded by pyroclastic deposits – loose accumulations of ash and stones (see text box Stratovolcanoes and Their Soils). The solidified lava is more resistant to erosion and therefore protrudes in the topography. This is visible, for example, in the irregular shape of the northeast coast, where the harder rocks form the sections that jut into the sea. The peaks of the Northern Hills also consist largely of these hard, solid rocks. These include Mary’s Glory (184 meters), Boven (289 meters), Gilboa Hill Center (175 meters), Bergje, and Signal Hill (234 meters). Bergje contains an old crater measuring 800 meters across, with a dome inside it. Signal Hill and Gilboa Hill Center both exhibit a horseshoe-shaped structure of hard, erosion-resistant volcanic rock. On the southern slope of Boven, orange colors formed by volcanic gases can be found. The soils of the Northern Hills are classified as “Stony rough land” on the soil maps by Veenenbos. They are mostly very stony (with clay and loam in between) and therefore hardly suitable for agriculture.

Between Bergje and Pilot Hill lies a plateau at around 150 meters above sea level, where the oil storage facility was constructed. The soil here consists of cemented, fine-grained white material locally known as “*terras*”. This is much younger volcanic ash from the Quill, deposited on top of the older Northern Hills formations. Clay-rich soils have developed in this ash that become hard when wet (Terras loam). Water infiltrates these soils less easily. The adjacent slopes toward Tumble Down Dick Bay and Zeelandia Bay are highly susceptible to erosion. Because the finer material is easily washed out, more stones remain in the soil. This soil type is classified as “*Terras loam, very steep stony phase*”.

Between the hilltops lie the valleys of Venus Bay, Zeelandia Bay, and Tumble Down Dick Bay. These valleys are dry for most of the year and only carry water during heavy rainfall. At the southeastern edge of the Northern Hills lies material that has washed down the slopes and accumulated as alluvial fans on the Cultuurvlakte. These fans are partly composed of eroded Terras loam from the adjacent plateau. They also contain washed-down, eroded material from the surrounding ancient volcanoes. The soils of these fans are classified as “*Zeelandia loam*”. They consist of fine material that becomes sticky when moisture levels are high. The valley that opens into Venus Bay

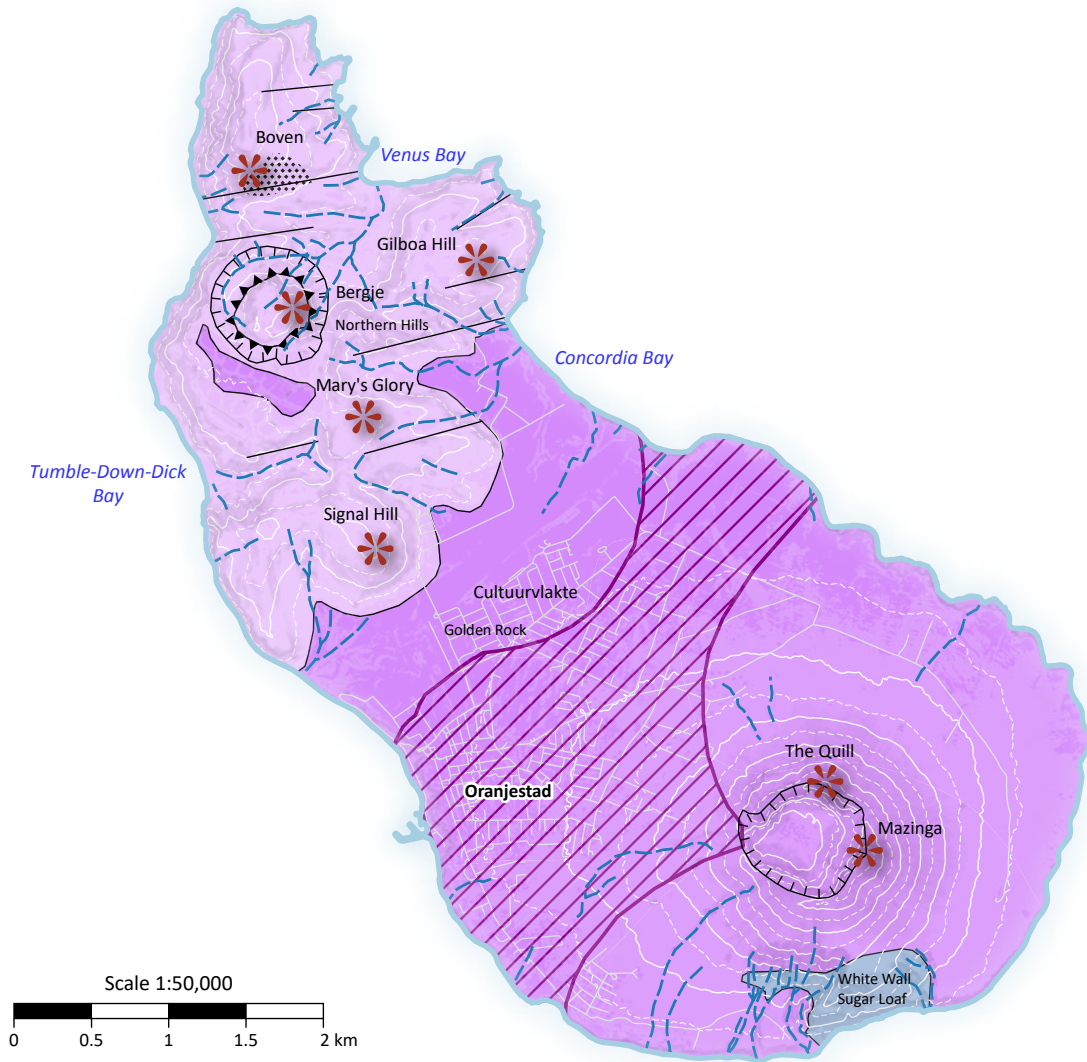
on the northern side shows a similar soil type (Zeelandia loam, alluvial fan phase). Compared to the stony soils on top of the old volcanoes, all these soils are somewhat more suitable for cultivation. However, measures are required on the slopes to counteract erosion. The clay from these soils was an important source material for Amerindian pottery.

The Quill and the Cultuurvlakte

The Quill is an active volcano, at least 22,000 years old. By the time the Quill began to form, volcanic activity in the Northern Hills had long since ceased. After many years of volcanic dormancy and erosion, the emerging Quill contributed to the island’s growth. The first eruptions of the Quill occurred underwater. As eruptions became more frequent, the volcano eventually rose above sea level. It also became connected, via the current Cultuurvlakte, to the remnants of its predecessor in the Northern Hills.

The volcano has a very characteristic conical shape with an 800 meters wide crater. The crater floor lies about 300 meters below the rim. The volcano is composed almost entirely of ash and rocks, deposited during pyroclastic flows. Hard, solidified lava or intrusive rocks, such as those found in the northern part of the island, are virtually absent here. The geological structure and

[Fig. 3.2] Simplified geological map of St. Eustatius. St. Eustatius is a volcanic island. The southern part consists of the active but quiet Quill volcano. The northern part of the island is the remnant of an extinct volcanic complex. To the south lie uplifted limestone deposits (White Wall – Sugar Loaf), originally formed in a shallow sea. (source: Roobol & Smith 2004)



Geology

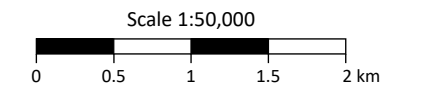
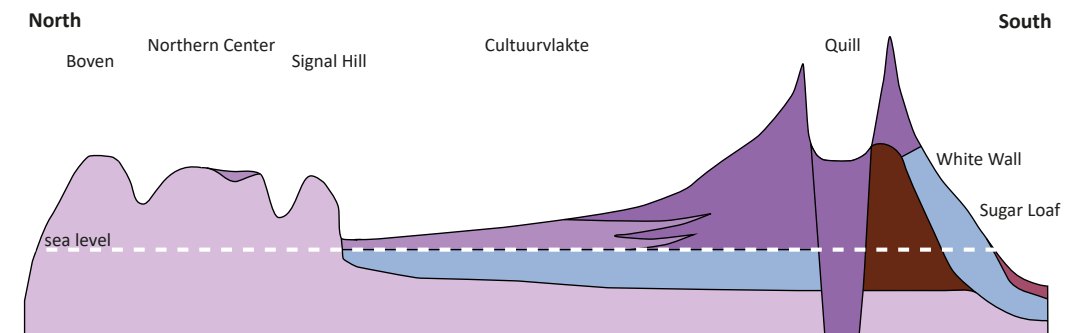
- Extinct Northern Hills (> 1,000,000 years old)
 - Pyroclastic deposits with lava
 - idem, with fumarolic alteration
- Quill (< 22,000 years old)
 - Pyroclastic block and ash flow deposits
 - Recent pyroclastic flow
- White Wall/Sugar Loaf (68,000 – 320,000 years old)
 - Limestones and volcanic deposits
- Crater rim
- (possible) Faults
- Gully (gut)
- Peaks

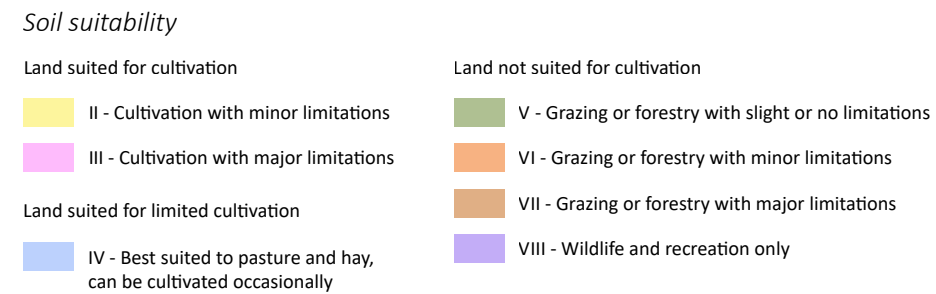
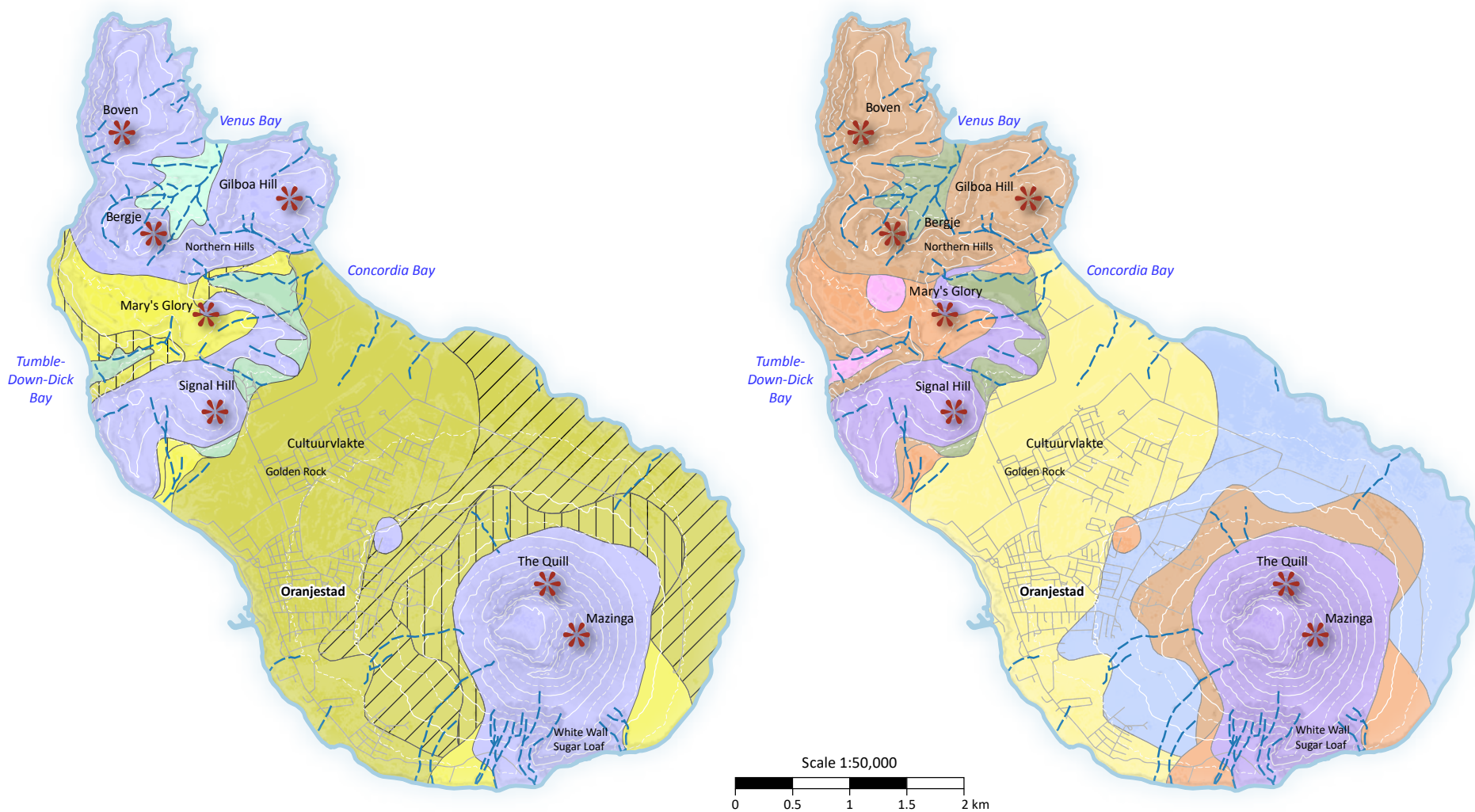
[Fig below] Schematic geological cross-section of St. Eustatius. The deposits of the Northern Hills form the oldest part of the island. In a shallow sea surrounding the island, coral reefs grew, and shallow lagoons developed. This created a set of limestones that possibly continues below the island. Most of the island took form only in the last tens of thousands of years, after the Quill became active. During this process, the limestone deposits to the south of the Quill were uplifted (White Wall – Sugar Loaf). (after Roobol & Smith 2004: fig. 33)



[Fig top] The southeastern side of the island, showing the the White Wall - Sugar Loaf sections against the Quill. The whitecaps along the eastern cliffs (right) show that the trade winds generate stronger wave action here. (photo: Ruud Stelten)

- Quill, oldest deposits
- Quill, pyroclastic deposits close to crater (blocks, scoria and ash)
- Quill, pyroclastic deposits further from crater (predominantly ash)
- Oldest volcanic deposits (older than 500,000 years)
- Limestones and volcanic deposits
- Dome





[Fig] Soil map and soil suitability map. On the steeper slopes, the soils consist mainly of stony material; in the less steep areas, soils with (sandy) loam and clay are common. Depending on composition, relief, and degree of soil formation, four main units are distinguished. The stony and steeper areas are the least suitable for crop cultivation, horticulture, or grazing. Flatter areas, especially the Cultuurvlakte, are generally more suitable. (Source: Veenbos 1955)

history of this volcano have been studied in detail through soil profiles and exposures in the coastal cliffs, where the layers can be clearly traced. Based on this evidence, past eruptions have been dated. It was also possible to infer how explosive these eruptions must have been. The eruptions that built the volcano often had long intervals between them.

On average, an eruption occurred once every 1,400 years. The most recent eruption has not been precisely dated, but it certainly took place before 600 AD. Almost all of these eruptions were highly explosive, although the degree of explosiveness varied. The eruptions produced devastating pyroclastic flows and emitted large amounts of ash. The Cultuurvlakte forms the northwestern extension of the Quill. It consists of a several-meters-thick layer of fine, loose material, primarily volcanic ash and pumice. In the middle of the Cultuurvlakte lies Round Hill. This small elevation likely consists of solidified magma below the surface, forming a small dome.

Within the volcanic ash and pumice of the Cultuurvlakte, the island's most workable soils have developed (Statia sandy loam). These soils are, however, quite sensitive to drought. At the surface they have a dark gray-brown, organic-rich horizon. This grades, via a yellow weathering zone,

into the underlying gray material that has not been altered by soil formation. The adjacent, somewhat higher-lying areas on the western side of the volcano contain similar soils. These soils are richer in pumice (Statia sandy loam, steep and moderately steep phases). Due to the steeper slopes, these soils are also more prone to erosion. Toward the top of the volcano, more rainfall occurs and as a result, soils have developed more deeply. Above 150–200 meters the slope is so steep (nearly 45°) and the ground so stony and erosion-prone that it is virtually unsuitable for agriculture. These soils are classified as "Stony rough land". These soils consist of very stony material with sandy clay and loam in between. On some of the steeper, higher parts of the Quill, small-scale terrace agriculture did, however, occur continuing well into the twentieth century. The characteristic terrace construction helped counteract the high erosion sensitivity. Under small-scale use, the soils were fairly workable, especially because of their fertility and moisture levels at higher elevations. Today, these areas have largely reverted to forest.

Along the edges of the Cultuurvlakte, cliffs rise between 18 to 45 meters. Small, gravelly beaches can be found at the coastal sections of Concordia Bay and Billy's Gut. On the south and southwest sides of the Quill lie several deeply incised, narrow erosion



[Fig] View from Signal Hill (Northern Hills) across the Cultuurvlakte, with the Quill in the background.

valleys such as Big Gut and Soldiers' Gut. These valleys are dry most of the time. They only carry water when there has been substantial rainfall. Water infiltrates easily into the soils of the Cultuurvlakte, and at depths of several tens of meters a small freshwater lens is present. There are currently no natural springs or permanently flowing streams on the island. It is assumed that Amerindian inhabitants were able to access freshwater from this lens through springs along the coast.

White Wall - Sugar Loaf

On the southeastern side of the Quill, clearly different deposits from the other rocks on the island are present. Here, a thick sequence of tilted limestone layers can be found, interbedded with volcanic deposits (*White Wall – Sugar Loaf*). These layers were deposited between 320,000 and 68,000 years ago in a relatively shallow lagoon, sheltered from the open sea. The limestone was formed from lime mud deposited in a coral reef lagoon. Volcanic ash layers in the upper part of the *Sugar Loaf* section mark the oldest deposits of the Quill. The entire sequence was later tilted, probably due to the upward pressure of the Quill's dome. This area is too steep for intensive land use and is also extremely stony.

Geohazards and Climate Impact

Geohazards are geological processes that can pose a threat to people. Examples include earthquakes, volcanic eruptions, flooding, erosion, and landslides. Furthermore, a volcanic eruption on a nearby island may generate a tsunami. All of these *geohazards* have played and continue to play a role on St. Eustatius.

A Future Eruption?

From a geological perspective, the Quill remains an active volcano. Although there has been no volcanic activity for centuries, an eruption in the future is certainly

possible. On nearby Montserrat, which is geologically comparable, a series of eruptions took place between 1995 and 2010, during which the capital, Plymouth, was completely buried in ash. These eruptions followed a period of 450 years of dormancy. Earlier, in 1902, the eruption of Mont Pelée (Martinique) claimed about 30,000 lives, making it one of the deadliest volcanic eruptions in the recent history of the Caribbean.

Geological research has shown that the Quill has erupted in a highly explosive manner at average intervals of 1,400 years. Shallow warm groundwater beneath the Quill indicates that volcanic activity is probably not entirely over. Even a relatively minor eruption could be highly destructive. Because the densely populated Cultuurvlakte lies at the foot of the volcano, devastating pyroclastic flows and ashfall could cause extensive damage.

For this reason, the Royal Netherlands Meteorological Institute (KNMI) monitors signs of increased volcanic activity with a network of instruments. This monitoring network was started in 2006 and has been expanded several times since. The network detects possible increases in tremors or deformation of the earth's surface. Such signals may indicate that magma is rising. They can appear weeks or even years before



[Fig] Tilted limestones of the Sugar Loaf ridge on the southern side of the Quill, seen from Fort de Windt.

a possible eruption, making timely warnings quite feasible. The instruments transmit data around the clock to the KNMI, where it is automatically processed and manually checked. In urgent, potentially dangerous situations, a protocol is followed to notify the island authorities and the Departmental Coordination Center for Crisis Management of the Ministry of Infrastructure and Water Management. A warning system with four alert levels is used: normal (green); advisory (yellow); watch (orange); and warning (red).



[Fig] Deeply incised gully systems on the southern side of the Quill, seen from Fort de Windt. These gullies carry water only after heavy rainfall. A small section of the White Wall limestones are visible on the right.

[Fig right] View of the extinct Northern Hills from the east. The protruding sections along the coast show the presence of erosion-resistant volcanic rock. (photo: Ruud Stelten)

Water-related Hazards, Erosion and Landslides

Large amounts of rainfall are likely to occur more frequently in the future, especially if hurricanes of the highest category become more common. It is therefore plausible that, due to climate change, flooding and erosion will increase. Flooding currently occurs mainly locally and briefly as a result of intense showers. During such heavy downpours, the infiltration capacity of the volcanic soils is sometimes insufficient. Large quantities of water flow down the slopes, which can lead to waterlogging. In addition, soil material may erode and

wash downhill into lower-lying areas. On steep roads and between buildings, run-off can accelerate significantly, resulting in temporary inundation of lower areas.

Soil erosion mainly affects slopes where vegetation has been heavily degraded, particularly due to intensive grazing. Erosion also regularly occurs along (unpaved) roads and in the gullies (guts) on the southern side of the Quill during heavy rainfall. Sediment washed down from these areas is deposited on flatter areas and on roads, with some of it eventually reaching the sea. Landslides also occur from time to time,

during which large volumes of material suddenly slide downhill. These events often happen during intense rainfall. Some historically well-known landslides occurred at White Wall – Sugar Loaf, along the cliffs at the harbor, and along the east coast near Bargina Bay. As peak run-offs intensify, landslides and flooding are likely to become more frequent. Cultural heritage may be washed away or buried. More sediment-laden water flowing into the sea can also accelerate the degradation of coral reefs. Coral reefs are already under pressure due to rising seawater temperatures.

In addition, increasing drought will have a major impact on the island. In dry years, severe (drinking) water shortages may arise, along with problems for agriculture and an increased risk of wildfires. Drier soils are also more susceptible to erosion.

The coastal cliffs are constantly exposed to erosion. Since 1960, the greatest shoreline retreat along the Cultuurvlakte has occurred at Concordia Bay and, to a lesser extent, at the harbor on the west coast. In these areas, the cliffs have receded by several tens of meters. The east coast is exposed to relatively strong wave action driven by the trade winds. Nevertheless, erosion on the west coast also remains a serious problem. The loose material that makes up much of these cliffs crumbles easily. Areas where erosion gullies (guts) meet the coast are especially vulnerable as run-off further accelerates the process. At Fort Nassau, parts of the cliff have already collapsed into the sea. The cliffs below Fort Oranje have been reinforced with bolts and metal mesh.

Rising sea levels, combined with more frequent hurricanes and extreme rainfall events could accelerate cliff erosion. This would increase the risk to heritage sites that currently lie close to cliff edges or just below them. This includes the Lower Town, burial grounds of enslaved people, and Amerindian archaeological sites near the



[Fig top] Cliff near the harbor showing pyroclastic deposits of the Quill. The fence was constructed to reduce erosion. Light, fine ash layers (tuff) lie at the base; darker deposits with larger stones appear higher in the section.



[Fig below] Strong runoff following heavy rainfall flushes sediments onto the road near White Wall. (photo: Samuel Stapel)

cliffs. The lowest edges of the island will also be submerged as sea levels rise (below approximately the 1 meter contour).

Although the main effects are known in broad terms, the exact impact of climate change on accelerated erosion and flooding still requires further study. The extent of the impact will largely depend on the measures implemented to counter erosion, especially in the island's interior. This could involve vegetation management (to prevent overgrazing), as well as strategically placing check dams or culverts along roads to help divert run-offs from peak flows early.

The relation between land use and erosion is age-old. Archaeological research shows that past land use and deforestation have led to accelerated erosion on the Cultuurvlakte during the colonial period. At Smoke Valley and Golden Rock, for example, sediment layers, between 40 centimeters and 2 meters thick, were deposited

following erosion of the surrounding higher parts of the landscape. Additional cliff reinforcement at vulnerable locations together with vegetation management on top of the cliffs could help reduce both shoreline retreat and coastal erosion.



[Fig] Protective mesh around the cliff below Fort Oranje, designed to reduce erosion.



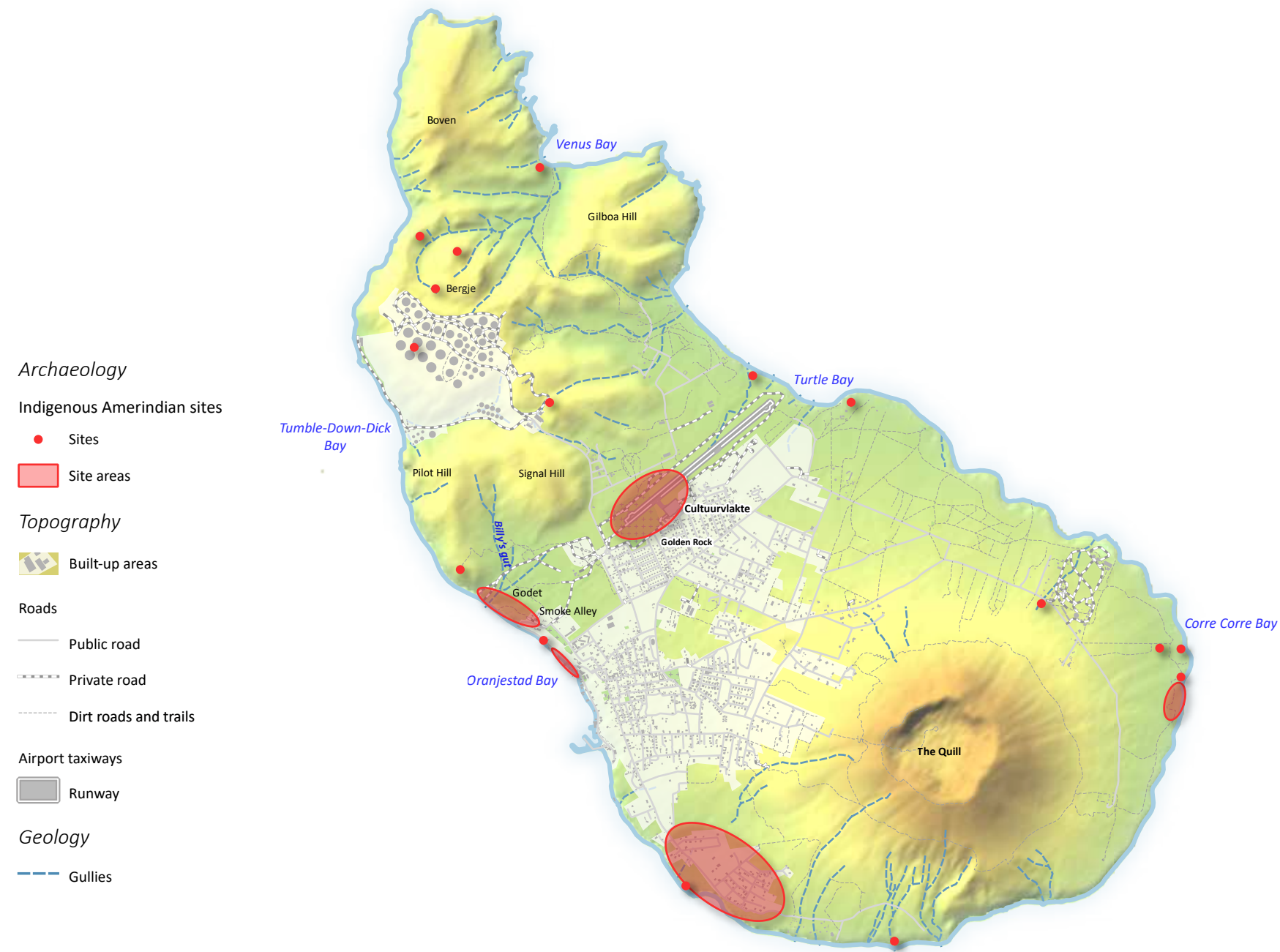
[3] MAAIKE DE WAAL

LAND USE IN THE PRECOLONIAL PERIOD

The first inhabitants of St. Eustatius were Indigenous Amerindian groups who originally came from the South- and Meso-American mainland. They called the island “Aloi”, which means “Land of the Cashew”. Although this name is found in local organizations and in a newly discovered local plant species, little reminds us of the first people who lived here, and who used and inhabited Statia. However, the testimonies of their presence can still be found in the present-day landscapes. This chapter deals with these Amerindian inhabitants.

[Fig] The Cultuurvlakte. (photo: Maaike de Waal)

LANDSCAPE BIOGRAPHY ST. EUSTATIUS



Archaeology

Indigenous Amerindian sites

- Sites
- Site areas

Topography

- Built-up areas

Roads

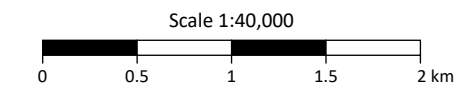
- Public road
- - - Private road
- ⋯ Dirt roads and trails

Airport taxiways

- Runway

Geology

- - - Gullies



[Fig] Map of Statia with approximate locations of Indigenous Amerindian sites and reported distributions of archaeological materials.

There are no dates for the earliest human presence in Statia. The oldest archaeological site in nearby Saba, however, has been dated to c. 3484 BCE. This shows that Amerindian groups were already frequenting the region c. 5500 years ago. These small nomadic groups travelled through the Caribbean islands, seasonally camping and using particular natural resources. They left small rock and shell scatters, that are hard to recognize for the untrained eye.

From c. 230 CE onwards, Amerindian groups settled Statia permanently. Their larger sites contain artefacts such as pottery, and are easier to find. Stylistic pottery characteristics and radiocarbon analyses date this permanent habitation until c. 900 CE. Based on comparisons with neighboring islands, Indigenous people are thought to have lived in Statia through later periods as well, possibly until c. 1200/1300 CE. These dates are not set in stone. There are no concrete late dates for Statia, yet new discoveries continue to be made, and insights may change.

From 1493 onwards, early colonizers first neglected Statia, which was called “a useless island”. They only started writing about it in the 1620s, not mentioning Indigenous people. Amerindian people either had already abandoned the island

or went hiding in impassable locations. Early European chroniclers can also have purposefully ignored them.

Indigenous Landscape and Site Location Factors

When we investigate the areas that were attractive for Amerindian settlement, we may find artifacts informing us about past Indigenous presence and activities. Indigenous people used a lot of perishable materials, for example to build their houses, which have not been preserved. Other materials are difficult to identify at the surface and may go unnoticed. But there are many Amerindian objects ready to find on and under the surface of Statia, and they have a story to tell.

The best-known permanent settlements are in the Cultuurvlakte: Golden Rock, under the airport in the central part of the plain, and Godet and Smoke Alley, at the west coast, south of Pilot Hill. Several generations of people lived here, succeeding each other in time. This resulted in large, dense and thick deposits of archaeological materials. Originally there were probably more Indigenous settlements, for example on the western shore. Amerindian objects that are being found in Oranjestad Baai can be a remainder of these. Centuries of use and building in this part of the island have destroyed original site contexts. However,



the finds show that this low-lying coastal fringe was intensively used by the original inhabitants as well.

Most information is available for Golden Rock, a settlement that was inhabited for centuries. This created large garbage heaps, with discarded pottery sherds, even complete pots, shell, stone, coral and flint tools, remains of the fish, shellfish, turtle, crab, iguana, birds, and the now extinct rice rat and Caribbean monk seal, that people at Golden Rock ate. They collected wild plant resources such as fruits, nuts and wild grains. They also had small horticultural plots, where they grew crops such as manioc, sweet potato, maize, arrowroot, and common bean. Manioc was processed during a lengthy process. The roots were peeled and then cut on grater boards

[Fig top] Looking down on the Amerindian sites of Godet, Billy's Gut, and Smoke Alley, from the elevated ridge between Pilot Hill (at right) and Signal Hill. One can see the construction on the original foundations of the Godet Plantation Great House, and the tree near the beach that borders Billy's Gut. (photo: Maaïke de Waal)



with flint inserts, and the grated pulp was rinsed thoroughly to remove all poisonous substances. The washed pulp was pressed in a woven sling to remove all liquid and baked on ceramic plates. Other food was prepared in earthenware pots or in calabash.

The ground to cultivate these crops was cleared using stone and conch shell axes and adzes and digging sticks to loosen the soil. Conch shell was important, not only being a high-protein and valued food source, but also a solid material to make durable tools. An advantage of shell axes and adzes, which are solid enough to cut trees and work wood, is that chipped edges are easily re-shaped and sharpened again, using water, sand, and coral or grinding stones. The shiny surfaces and the easy workability of conch shell also led to the production of ornaments, such as beads and pendants. Indigenous people made clever use of all materials offered in their direct environment. Bivalve shells with sharp edges, such as lucines, were used as ready-to-use cutting and scraping tools. The naturally sharp surfaces of staghorn coral branches and elkhorn coral slabs were used for grinding and drilling.

In addition to these locally and widely

[Fig left] Complete earthenware vessels from Golden Rock, on display in the museum in Oranjestad (photo: Maaïke de Waal).

available materials, people at Golden Rock also used many non-local materials. Examples are jadeite axes from the Greater Antilles, flint from Antigua, to make cutting, drilling and scraping instruments, and greenstone pottery-polishing pebbles and axes from St. Martin.

Amerindian people at Golden Rock lived in large communal houses, with diameters ranging between 7 and 19 meters. In archaeological excavations, discolorations in the ground, caused by the disintegration of wooden house posts, showed the layout of the structures. The house posts were huge, some being dug more than two meters in subsoil, with stone and coral slabs being used to secure the wooden posts in position. Building these houses was a true masterpiece and group enterprise. Imagine the efforts needed for cutting enormous trees with shell axes, transporting the trunks to the village, digging deep postholes and lifting the trunks, and collecting large amounts of smaller trees, branches, leaves and grasses to provide walls and roof cover. Huge trees could be found on and in The Quill. A location on the northeast part of the lower volcano slope, where eight heavily used conch shell axes were found, probably served as one wood harvesting area.



[Fig] Tools made from conch shell, from Golden Rock, in storage in the Heritage Centre in Oranjestad: an adze, and puncturing/chisel tools. The fishhook (c. 2.5 cm), at right, was made from West Indian top shell. (photo: Maaïke de Waal)



[fig] St. Martin greenstone axe (7.5 cm) at the surface of Billy's Gut. For some raw materials, Amerindian people travelled to other islands to collect specific rocks for stone tools. St. Martin greenstone has a typical weathering as it ages, hiding the green-layered rock and turning tools to objects that are hard to identify at the surface. (photo: Maaïke de Waal)

A lot of attention was also paid to the design of the houses. They are quite like those still being used by certain Indigenous groups in the South-American mainland today. We know from these groups that the layout, orientation, spatial divisions, and use of materials are all embedded with social, political and ceremonial significance. At Golden Rock, archaeologists reconstructed turtle-shaped house plans. Turtles were not only an important and widely available food source, but also a symbol for wisdom and mother earth, being linked to Indigenous origin myths. The importance of this animal can also be deduced from ritual burials of complete turtles at Golden Rock. Adornos, pottery embellishments in the form of human, animal, or hybrid beings, also celebrated the natural spiritual world. Other objects, such as animal figurines made from shell or stone, focus on the physical natural environment. Small three-pointer idols, zemis, described in historical documents, played a role in ancestor veneration. But the most direct evidence for ancestor veneration can be seen in the careful burials of deceased group members in the settlement, where they continued to be part of the living community.

Settlements such as Golden Rock, were surrounded by strategic lookouts that show traces of Amerindian use. One of these, at the southernmost tip of Pilot Hill, towering

over Godet, Billy's Gut, and Smoke Alley, yielded an Indigenous stone axe. Also, some shallow rock shelters north of Signal Hill, overlooking Golden Rock and the plain towards Godet, had Indigenous pottery sherds. Two other look-out locations, overseeing sea routes to and from St. Kitts, have been reported for the southwestern coast of the island.

The inhabitants of Golden Rock, Smoke Alley, Billy's Gut, and Godet probably also used caves in the northwestern hills. Bergje alone has several rock shelters in which relatively large groups of people can find shelter, for example during hurricanes. As the cave floor is covered in goat excrements, it is difficult to find artefacts. However, one cave did provide a worked conch shell fragment, while another yielded a flint tool, unambiguously indicating Amerindian use of these sheltered locations.

It is also possible that some Amerindian people lived in small other settlements, but these have not yet been registered for St. Eustatius. One potential location is at Venus Bay. The presence of attractive natural factors for human settlement, including freshwater, and pottery sherds and worked shell fragments, hint at Amerindian use of this area. This deserves further investigation in the near future.



[Fig right] Adornos (c. 6 cm and 8.5 cm respectively) that embellished rims of ceramic vessels from Golden Rock on display in the museum in Oranjestad. (photo: Maaïke de Waal)



[Fig] Basalt fish idol (c. 6 cm) from Golden Rock, on display in the museum in Oranjestad. (photo: Maaïke de Waal)



[Fig below] Zemís (left: c. 5.5 cm), from Golden Rock, made of conch shell, on display in the museum in Oranjestad. (photo: Maaïke de Waal)



[Fig top] Zemí (c. 4 cm) from Golden Rock, on display in the museum in Oranjestad. This three-pointer stone, used in ancestor veneration rituals, is made from calcirudite rock from St. Martin. The top has been decorated by subtle incised notches. Indigenous Amerindians made similar objects from conch shell and coral. (photo: Maaïke de Waal)



of pottery, these sites were suggested to have been used by the earliest inhabitants of Statia, but they can also be lithic workshops dating to later periods.

Amerindian people in Statia were thus intensively and successfully using the whole island. The use of non-local rocks indicates that people also travelled to other islands and sustained close contacts with other groups. Both long-distance and short-distance contacts were important to ensure socio-political ties between the groups. We also see this in regionally shared stylistic elements in their pottery, and in the stable isotopes in skeletal remains of some Amerindian people buried in Statia indicating that they had not been born in this island.

Landscape Impact and Cultural Continuity up to Today

Amerindian settlement must have impacted the Statia landscape. Indigenous groups cleared areas in the landscape to build settlements and horticultural plots. They cut down large trees to build houses and canoes, and they impacted local land and sea animal populations, by hunting, fishing and shellfish collecting. They also introduced new plants (manioc, sweet potato, maize, arrowroot, and common bean) and animals (agouti, common opossum, dog, guinea pig, and armadillo)

Another Indigenous settlement was discovered close to Corre Corre Bay. The coastal stretches and lowest slopes of The Quill are easily overlooked when studying Indigenous landscape use, but this area was suitable for habitation as well. A large concentration of pottery sherds, shell and coral tools, and worked non-local flint, pinpoints the area where people were living roughly 800 - 1000 years ago.

Two other locations at Corre Corre Bay are either small settlements or stone tool workshops, where flint from Antigua was transformed to tools. Based on the absence

to the island, bringing these from their homelands in South-America. The first inhabitants felt strongly connected with the land and its resources, even naming their island after a fruit-bearing tree: the cashew.

Natural factors, in turn, also influenced Indigenous communities in Statia. They did, however, adapt to changing climatic local conditions, also when it became drier and hotter, for example between c. 2000 and c. 500 BCE, c. 700 and c. 900 CE, and from c. 1300 CE onwards. These gradually occurring changes probably allowed Indigenous Amerindians to adapt to changing natural conditions. It is noteworthy that the peak of the island's habitation, taking place at Golden Rock, Smoke Alley and Godet, largely took place in a relatively dry period. Inhabitants could clearly thrive in these less favorable climatic conditions.

Amerindian island inhabitants also had to deal with impactful natural events, such as hurricanes, storm surges, tsunamis, earthquakes, and volcanic eruptions. The Quill has erupted well before 600 CE, but we do not know how long before this date. The eruption probably went with explosive ash eruptions and pyroclastic flows. This event must have had an incredible impact on local Amerindian groups if any were living in the island at that time. These types of eruptions destroy and cover habitation areas and

they also come with life-threatening gases. Hurricanes and related storm surges will have happened more frequently, in addition to sporadic tsunamis. The earliest inhabitants could find shelter in caves in the Northern Hills, or in cavities in the southern side of The Quill, to seek protection from devastating wind and water.

The Indigenous Amerindian Past Today

While this Indigenous past of Statia seems remote, and today's society may feel a disconnect, it is interesting to emphasize cultural continuity. Indigenous inhabitants were living in the same island landscape, and depended on the same natural resources, such as freshwater, fertile soils and fishing and shellfish collecting grounds, as people are today. We can even recognize some of their words in our modern languages today, such as canoe (kanaoua), barbeque (barbacoa), and hammock (hamaca). While this all is true for other islands in the Caribbean as well, Statia also has a continued use of some burial locations. Amerindian people buried community members in locations where in later periods enslaved people were interred as well.



[Fig] Erosion taking place at Corre Corre Bay, threatening the survival of the Amerindian sites that are located here. (photo: Maaïke de Waal)

Cultural and natural threats

Today, tangible remains from the Amerindian past are threatened in their existence. The archaeological record, embedded in Statia's landscape, is very fragile and an irreplaceable source of information. Once lost is lost forever. Indigenous sites are threatened both by natural and cultural factors.

The most impactful natural factors are erosion and gullyng, which take place almost everywhere in Statia. A large part

of the northwestern hills is eroding. This endangers site survival, and displaces Indigenous materials from their original locations to the lower parts between the hills. The same happened in Oranje Bay and Gallows Bay. Erosion is reinforced by degrading vegetation and soils, and reforestation helps slow down this process. Also impactful is coastal erosion through wave action, taking place at all sides of the island, particularly during storms and hurricanes.

Climate change reinforces coastal erosion, as storms and hurricanes will happen more often and more impactful. Reefs are lost and hence their protection of coastal areas, and sea-levels are rising. Human action can make this worse. For example, the construction of the port in Oranjestad has resulted in changes in currents and beach loss at the west coast.

The most obvious human impact is caused by construction works. This happened in the terminal area, where sediments, including an Amerindian artefact scatter, were removed before building the tanks. The same happened during construction of historical and other recent buildings. Agricultural activities also cause perturbation of archaeological layers. Other human impact includes sand removal (e.g., sand pillage, but also accidental



sand removal during Sargassum seaweed cleaning actions), human induced erosion (e.g., vegetation removal, and free roaming livestock and goats), and levelling of terrains.

One important and often underestimated cultural threat is neglect and disinterest. Without investigating and monitoring natural and cultural effects on archaeological heritage, information about the first people living in Statia can be lost without being noticed. Focusing only on particular aspects or periods of the past through polarized heritage interest and governance have the same effect.

The most vulnerable areas are eroding areas in Boven National Park, all coastal fringes of the island, and all areas that are awaiting development for housing, infrastructure, and tourism facilities.



[Fig] Part of a midden at Billy's Gut being exposed and eroding away under influence of rain, wind and wave action.

FEATURED

Local Organizations, Outreach, and Community Archaeology

Several institutions on Statia are dedicated to protecting Indigenous archaeological heritage. The Public Entity is responsible for heritage policies, monitoring and reinforcement. The Public Entity has a heritage inspector, who is charged with these responsibilities. The heritage inspector has created a heritage center with informational displays and research and storage facilities.

Other materials are curated by the St. Eustatius Center for Archaeological Research (SECAR). This is a non-governmental organization established in 2004 and very active in many years of education, community participation, research and protection of archaeological sites. SECAR has worked together with the St. Eustatius Historical Foundation Museum. The Amerindian department in the basement of this museum has a lovely exhibit, presenting some of the finest objects excavated at Golden Rock. It is not clear how many Stadians and tourists visit this exhibit, but it deserves to be widely recognized.

The tourist office and the Gertrude Judson Bicentennial Public Library in Oranjestad are also worth a visit for people who wish to know more about the first people in Statia. The library has several publications

about Indigenous archaeology in Statia and other Caribbean islands. Local interest for Indigenous archaeology seems limited. This may have to do with unfamiliarity, it is not being taught in schools until recently. Also, a distance might be felt towards people who were not living on Statia anymore when the ancestors of present-day inhabitants arrived, and the remains are invisible in the landscape. It is also possible that developers fear that archaeology hinders planned projects. Education and participation can increase local interest and responsibility for survival of Indigenous heritage in Statia.

One of the culture coaches started teaching archaeology to primary school children, discussing Amerindian use of the natural environment, artefacts and the organization of society. The local community can also be invited to participate in designing research agendas and in archaeological fieldwork, and to establish, with heritage experts, how the Amerindian past can be presented in local museums, heritage centers, publications, and heritage trails.

The Future of the Indigenous Past

The Public Entity St. Eustatius is responsible for managing and protecting archaeology by formulating and enforcing regulations and establishing requirements for archaeological research. Archaeologists can advise, but the Public Entity decides. Archaeological



[Fig] The promontory south of Kay Bay, on the west coast of Statia, had an Amerindian look-out station overseeing sea routes to and from St. Kitts and Saba. (photo: Maaïke de Waal)

predictive maps can help pinpoint areas in the landscape which (are likely to) have Indigenous remains.

Between 2004 and 2021, SECAR was active in doing Archaeological Impact Assessments (AIA) for plots that await development, often in collaboration with Leiden University teams. Such assessments are not commissioned anymore. Yet, private parties do regularly contact the Heritage Inspector when they encounter Amerindian artefacts during groundworks. This is important and it shows community care and commitment to safeguarding Amerindian heritage in Statia. But without research prior to developments, the Heritage Inspector can only map archaeological sites destroyed by groundworks, instead of intact ones.

STENAPA is also interested in knowing where Amerindian sites are, so they can take measures to protect sites in the parks. They need information on site locations, how to recognize sites, vulnerabilities, and suggestions on what STENAPA can do to naturally maintain archaeological sites. Their knowledge about known Indigenous locations in the parks is yet limited, but they are willing to contribute to the conservation of sites. Putting up signage for park visitors, explaining and visualizing Amerindian sites in the landscape, may also contribute to the sites becoming more visible in today's

environment. This can emphasize the connection between past and current societies, and show how vulnerable these sites are, how little is left, and how much information about past lifeways and landscape use they can still provide. Policy makers can set the basis for solid heritage management in Statia. They can develop regulations and policies, commissioning AIAs prior to development, seek archaeology advice to steer development decisions, and make AIA reports available open access. Heritage specialists or archaeologists can map and monitor site locations, also including understudied areas such as the lower stretches of the Quill and the caves, hilltops and valleys in Boven National Park, and contribute to a central archaeology database.

If you happen to find artefacts, admire and enjoy them, but please leave them in place. Photograph the finds and their environment (you can add a scale in the picture, by depicting your shoe, sunglasses, or a coin), pinpoint the coordinates, for example by adding a placement in Google Maps, or by using another GPS app, and inform the Heritage Inspector (Public Entity St. Eustatius). Together we can help protect Amerindian traces in Statia's landscape and to maintain the testimony of the first people who lived here!

FEATURED Research History

This text is largely based on all efforts and publications by earlier archaeologists working in Statia. Indigenous Amerindian archaeology started in the 1920's with anthropologist Jan de Josselin de Jong. He registered several find locations in the Cultuurvlakte, mapping what we now know as the Golden Rock and Godet sites. Alfredo Figueredo, then director of the British Virgin Islands Archaeological Survey, did a small-scale excavation at Godet/Billy's Gut in 1975. In the 1980s, Aad Versteeg, archaeologist at Leiden University, introduced large-scale mechanical excavation to Statia. This allowed the investigation of large areas at Golden Rock, Godet and Smoke Alley, and the discovery of unparalleled insights in the lay-out of Indigenous villages.

Jay Havisier, then archaeologist at the AAINA Archaeological-Anthropological Institute in Curaçao, surveyed several Indigenous sites. Also in the 1980's, teams from the College of William and Mary, headed by archaeologist Norman Barka, started two decades of research focusing on historical heritage, including some Indigenous sites. When they ended their project in 2004, the St. Eustatius Center for Archaeological Research (SECAR) started conducting research in Statia, with directors such as

Grant Gilmore, Ruud Stelten, and Fred van Keulen. For several mitigation projects, they worked in close collaboration with Leiden University teams, headed by Corinne Hofman and Menno Hoogland.

Managing archaeological sites falls under the Public Entity, that recently installed a designated heritage inspector. For the past few years, no archaeologists specializing in Indigenous archaeology have been active in Statia.

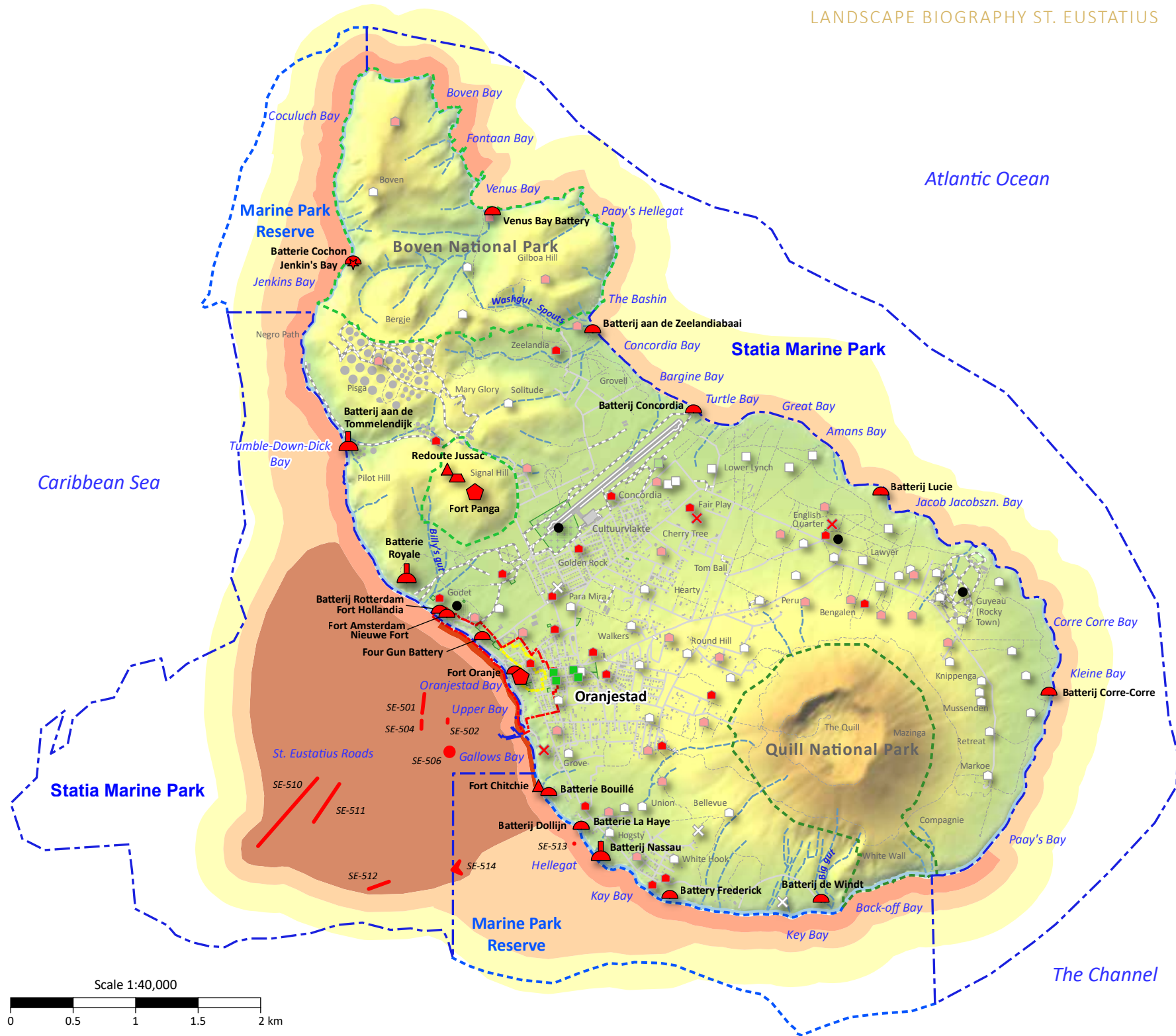


[4] DAVID KOREN

THE CHANGING CULTURAL LANDSCAPE SINCE THE ARRIVAL OF THE EUROPEANS

The license plates of St. Eustatius bear the words “The Historic Gem”. That is no exaggeration. For visitors interested in culture and history, the island is a treasure trove: it is almost drowning in history. In the eighteenth century the island was nicknamed “The Golden Rock” because it was the marketplace of the New World. Everything was traded here, generating great wealth for the island. At the height of this prosperity, around 8,500 people lived on the island, almost three times as many as today. Ruins from this golden age can still be found everywhere: the warehouses of the Lower Town, but also churches, the synagogue, forts, plantation houses, and ordinary homes. These remains tell the story of the island’s unique history.

[Fig] Remnants of a former sugar plantation on the site of the old Sisal factory at White Wall.



[Fig] A map of St. Eustatius showing cultural-historical elements in the landscape. (Underwater predictive model courtesy of SECAR)

At the end of the eighteenth century, St. Eustatius was the economic hub of the Caribbean and experienced a brief and tempestuous period of prosperity. This coincided with the conflict between Britain and its North American colonies, which declared independence in 1776. That independence was *de facto* recognized that same year by a salute from St. Eustatius. The island's role in supplying American ships – including weapons and gunpowder – led to a conflict with Britain. It resulted in the invasion and plundering of the island in 1781. Although the island did recover from this, a long period of decline began after 1795.



[Fig] The island's car license plate. (photo: David Koren)

This decline means that remains from all periods of Statia's history remain embedded in the landscape. As a result, the landscape can be read like a book of stacked layers of time. All these remnants from the past give the island color and meaning, together forming the memory and historical character of Statia. Fortunately, the unique cultural and natural values are increasingly being (re)discovered. At the same time, new developments pose threats. All the more reason to cherish the landscape, so that residents can continue to feel at home and visitors can keep discovering the island's extraordinary historical richness.

The First Europeans

St. Eustatius was "discovered" by Columbus in 1493 and named after a saint who was popular at the time. However, it was the French who were the first Europeans to set foot on the island in 1629 and stayed for a short period of time. Whether the Europeans encountered any original Amerindian inhabitants upon their arrival is uncertain. Such encounters are not mentioned in letters, but there is also no evidence that the original population had already disappeared.

In 1636 a group of colonists from Zeeland arrived on what was, at the time, a deserted island. They had received permission from the Zeeland Chamber of the Dutch West

India Company (WIC) to establish a colony there. Their aim was to create a provisioning station between the Dutch colony of Nieuw-Nederland in North America and Nieuw-Holland in Brazil. Agriculture therefore became the main source of income for the new colony. It was primarily focused on providing food for the population and for the crews of passing ships. The rich fishing grounds were also important for this purpose. But agriculture also played a key role in the economy, with tobacco, indigo, cotton, and coffee as the most important crops. The first tobacco from Statia reached the market in Vlissingen as early as 1636.

Arable farming was a challenge due to the lack of freshwater. The island has no rivers and only a few freshwater springs. For this reason, residents began collecting rainwater in stone reservoirs known as cisterns. There must have been several hundred of them. A Walloon minister, who visited the island in 1658 on behalf of a merchant from Zeeland, Cornelis Lampsins, noted: *"There are no wells on this island, but these days there are few houses without a good rainwater cistern to make up for this lack."*

It is reasonable to assume, with due caution, that St. Eustatius was considerably



[Fig right] Ruins of Crook's Castle in Lower Town. A trading post for large amounts of smuggled goods.

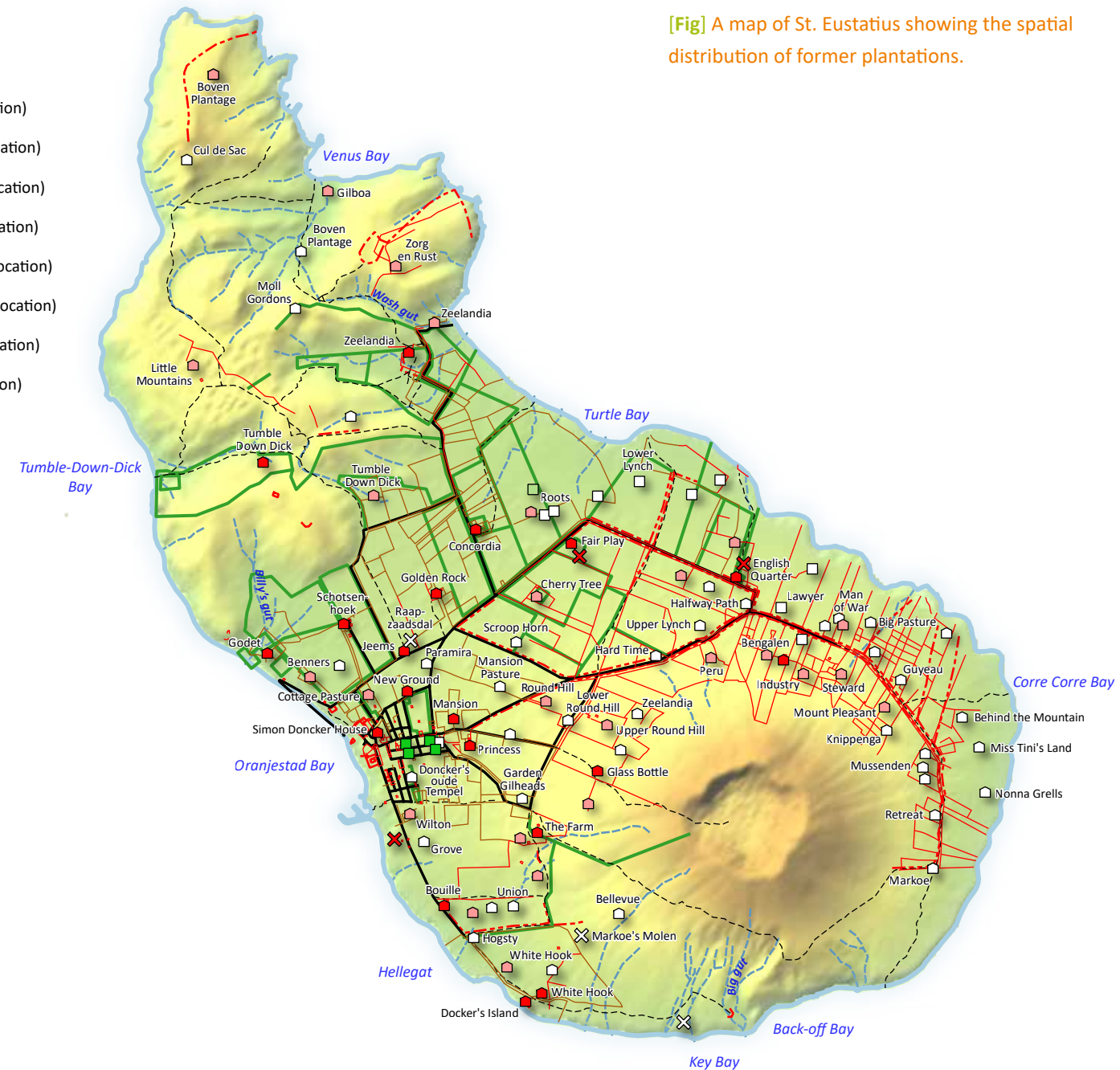
Historical maps

Plantations

- Plantation field (certain location)
- Plantation field (probable location)
- Plantation field (uncertain location)
- Plantation house (certain location)
- Plantation house (probable location)
- Plantation house (uncertain location)
- ⊗ Plantation mill (uncertain location)
- ⊗ Plantation mill (certain location)

Walls and fences

- Wall
 - Fence
 - Gullies
- Roads
- Road
 - Foot path
- Walls and hedges
- Stone wall
 - Stone barrier
 - Hedge or barbed wire fence



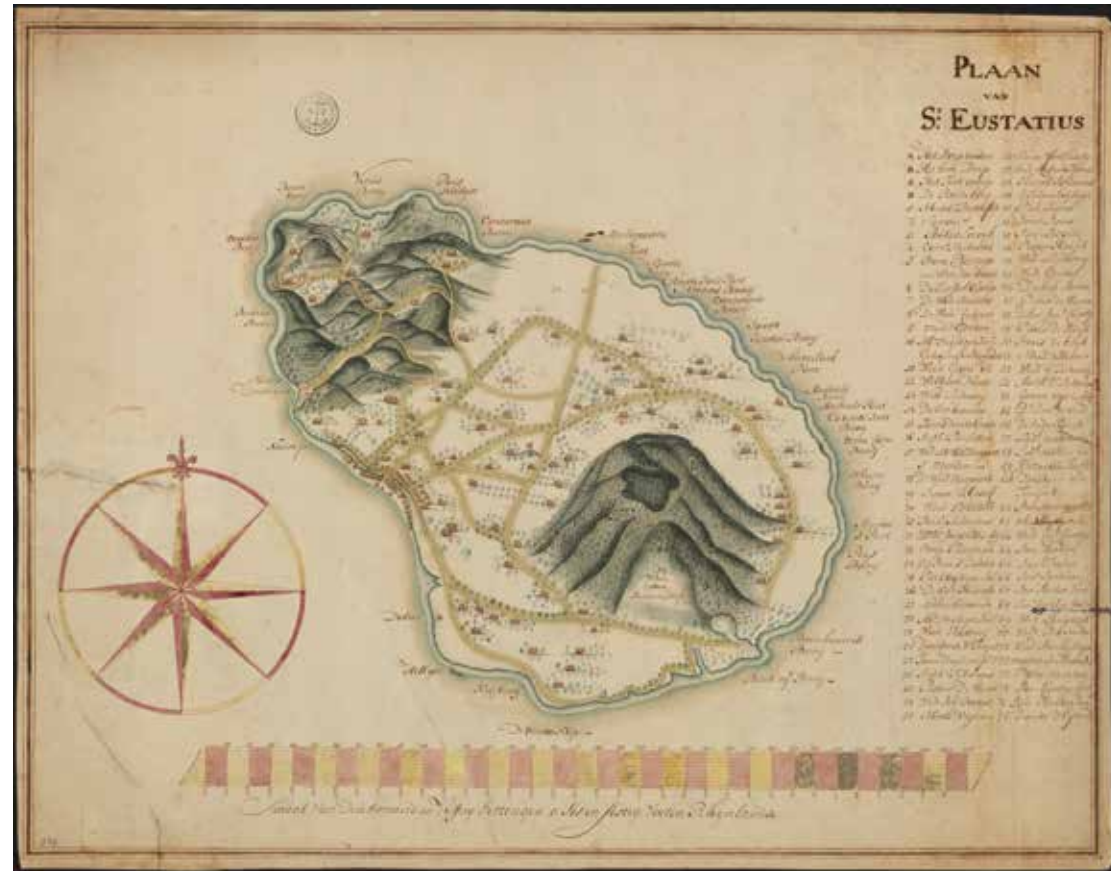
[Fig] A map of St. Eustatius showing the spatial distribution of former plantations.

greener before colonization. Forests quickly made way for farmland, except on the steepest parts of The Quill and Boven. Settlement had been limited to migrating Amerindians, who could sustain themselves on native species such as birds and turtles and through limited (slash-and-burn) agriculture. The colonists introduced non-native species, including cattle, donkeys, and goats, and carried out large-scale deforestation for the construction of houses and the establishment of plantations.

Although agriculture initially developed favorably, the seventeenth century was not yet a period of great prosperity. Ownership of the island changed hands too frequently to establish such wealth: no fewer than eight times. In 1682 the Zeeland merchant Van Pere decided to sell the island permanently to the WIC, making all of the Leeward Islands the direct property of the company. St. Eustatius then became the seat of the commander, who governed not only Statia from Oranjestad, but St. Maarten and Saba as well.



[Fig] A massive cistern located on the grounds of the former Knippenga plantation.



[Fig] Map of St. Eustatius drawn by Alexander de Lavaux, 1741. (photo: National Archives)

Great Prosperity and Wealth (1700–1781)

St. Eustatius benefited from its location between Europe, Africa, and the Americas. It developed into a major transshipment hub for agricultural products, weapons, and enslaved people in the Caribbean. Luxury goods were also traded there, such as sugar, tobacco, silk, French wines and porcelain, and even Roman coins. The hundreds of warehouses in the Lower Town were filled with these commodities. Ships arrived from

every direction and docked easily, while the natural bay could accommodate hundreds of ships at once.

The wars in Europe contributed to Statia's prosperity, turning the island into a center for smuggling and illegal trade. Especially after 1713, trade took off in the form of the so-called *kleine vaart*, or "small shipping". This was trade between the islands themselves, which circumvented the monopolies of the European colonizers. Merchants on the English, French, and Spanish islands were officially required to trade exclusively with their respective mother countries. However, greater profits could be made if they sold their products on the international market. This illegal trade soon proved to be more lucrative than income from agriculture. Many plantations were subsequently used as a cover for this illegal trade. This is evident, among other things, from the export of sugar from St. Eustatius in the eighteenth century, which was many times greater than what could actually be produced on the island.

The island's location and the (illegal) trading opportunities were not the only factors behind its economic prosperity. It is worth mentioning that the arrival of the Jewish community provided a significant economic impulse as well. In 1739 they built a synagogue in Oranjestad. The Jewish

community would play an important role in the slave trade. In addition to this, ships from other countries were allowed to trade with St. Eustatius for very small fees. In 1757, after import duties were completely abolished, the island even became a free port. The truly explosive growth, however, came in the years after 1775, during the American Revolution.

The opportunities offered by St. Eustatius attracted many new residents. In less than a century, the population increased sixfold: between 1715 and 1789 the number of inhabitants rose from 1,200 to 7,900. Around 1800 this number had reached roughly 8,000. It should be noted that more than half of these inhabitants – about 5,000 people – were enslaved. In reality the island was probably even more crowded, partly because of the many crew members who temporarily stayed there. The eighteenth century quite literally put the island on the map.

FEATURED Plantation Landscape

On St. Eustatius, slavery was never far away. A map from 1741 reveals no fewer than 76 plantations, each only a few hectares in size. While the map does not indicate their exact dimensions, it is likely that most were roughly similar in size. The majority – and the most prominent – belonged to well-

known figures such as Governor Johannes de Graaff and families like Cuvillier, Heijliger, Pandt, Salomons, and De Windt.

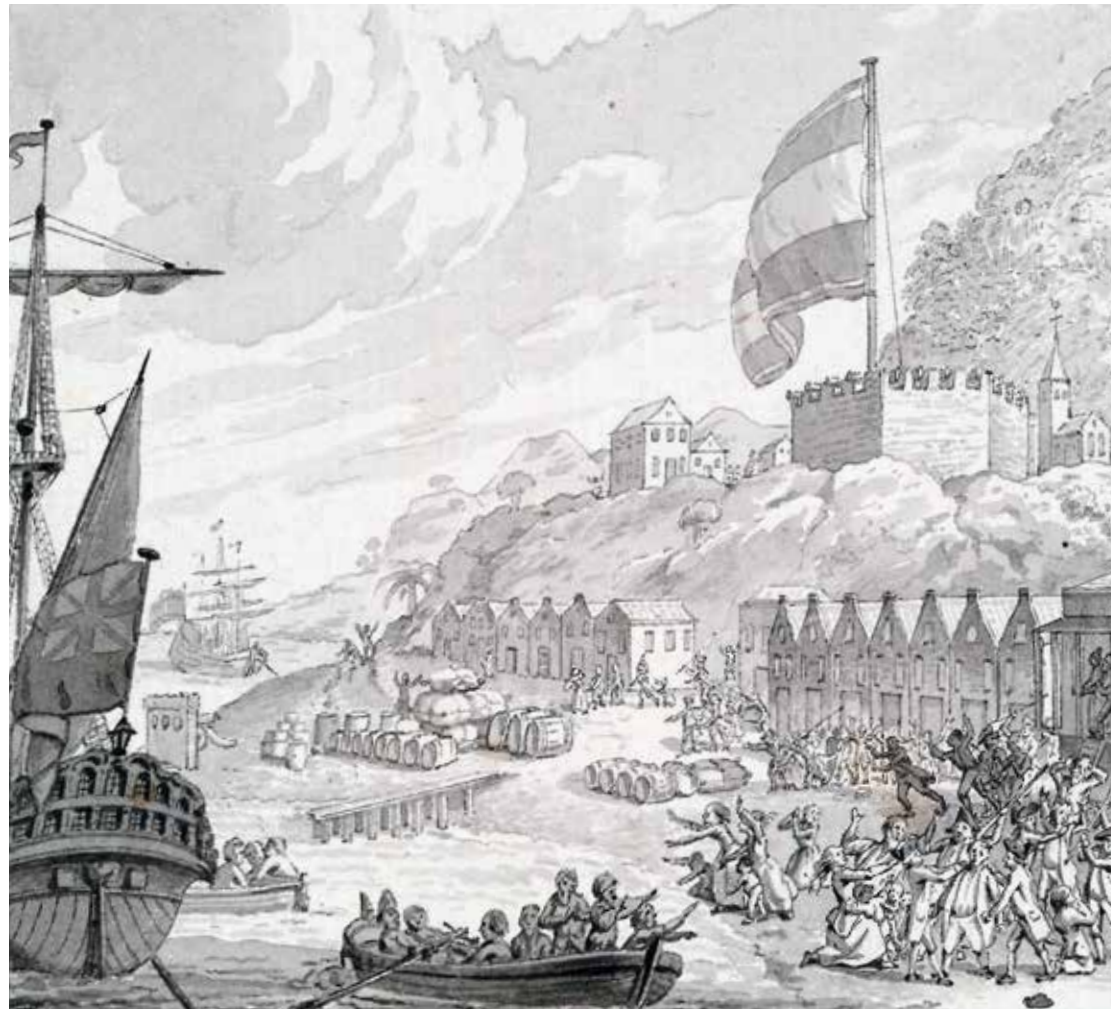
Many merchants owned at least one plantation, and nearly all plantation owners were themselves merchants. Out of the 76 plantations on the island, around 50 actually functioned as sugar estates. The remaining 25 were used mainly for provisions, pasture, or other crops, while some had a more "industrial" character, producing goods such as indigo or rum. In practice, the island was controlled by a small circle of merchants, while the enslaved people carried out the labor. Too little has been written about their daily lives, but what we do know indicates that their existence was bleak and their work dehumanizing hard.

Shifts in Power and Decline (1781–1950)

The (illegal) trade with England's rebellious North American colonies provoked British anger. In 1781, the British navy invaded St. Eustatius. Statia was plundered, and most members of the Jewish community were deported to other islands. Writing to a colleague in Jamaica that April, Rodney declared: "Within a week we will have finished selling the stocks in the immense warehouses. After that, I will ensure this den of thieves is razed to the ground, as a warning to disloyal states." In the end, the



[Fig] Window of the Honen Dalim Synagogue. The arrival and growth of the Jewish community in the 18th century positively influenced the development of trade and plantation agriculture. (photo: David Koren)



[Fig] Dutch print depicting the English plundering the island. (photo: the Atlas of Stolk, Rotterdam)

Lower Town was not completely destroyed, but the financial damage was considerable.

Due to its status as a neutral free port, St. Eustatius thrived by exploiting North America's independence struggle and the war with England. When the conflict ended, this revenue stream abruptly ceased. The population dropped from 8,476 to 1,463 in

1843 and eventually to just 921 inhabitants in 1948.

The trade in enslaved people came to an end after Rodney's plundering, but slavery itself did not disappear. Enslaved individuals continued to work on the plantations that were still in operation. Conditions there were harsh; mistreatment was commonplace. After the formal abolition of slavery in 1863, most people moved to town. By 1903, only about 50 of the roughly 1,450 inhabitants of St. Eustatius still lived outside Oranjestad. The countryside was no longer a place where people wanted to live. For those who still had a small plot of land or managed to obtain one, each day began with a walk or donkey ride out to the field. During this economic decline, many residents left the island. Stadians sought their fortune in the oil industry on Aruba and Curaçao, but also in the United States. In New York, a "Statian Club" can still be found to this day. The abandoned plantations reverted to wilderness, in which small plots were later cleared again in order to grow food crops such as yams and sweet potatoes.

At the beginning of the twentieth century a modest industrialization began with the establishment of a sisal factory on the site of an old sugar plantation in 1905. Sisal, a tropical fiber derived from an agave-like



[Fig] A street sign in San Nicolas, Aruba's 'oil town', referencing migrants from St. Eustatius. (photo: David Koren)

plant, was used to make rope and similar products. Nearly all of the production was exported to the United States, where it was used, among other things, for binding sheaves of grain and straw bales. After the First World War, U.S. import regulations became stricter. At the same time, more and more young men left the island to work in the emerging oil industry on Aruba and Curaçao. As a result, sisal production

already came to an end in 1928. The ruins of the factory now form a striking relic on the cliffs of the island's south coast.

After decades of economic decline, the government launched a plan in 1938 to revive agriculture on the island. The idea was that agriculture would develop better if landowners actually lived on their land. The first "village" established on the Cultuurvlakte for this purpose was Concordia; Golden Rock followed shortly after. The plan appeared successful at first, but it soon became evident that few



[Fig] Ruins of the sisal factory at White Wall.

people wished to live in the area. The area was considered “too far” from town, and connections were still too poor at the time. Ultimately, however, these villages did grow into residential areas and contributed to the relatively unplanned layout of today’s settlements on the Cultuurvlakte.

The Second World War passed relatively quietly on St. Eustatius. In 1941, the island’s residents came to the aid of the crew of an Allied aircraft that had crashed into the sea, rescuing ten survivors. When Princess Juliana visited the Netherlands Antilles in 1944, she did not set foot on St. Eustatius or Saba, but her plane did circle above the islands. Schoolchildren formed a large V for Victory and an O for Oranje, visible from the aircraft. Leaflets with the princess’s cordial greetings were dropped from the plane. After the war, a plaque was installed at Fort Oranje in memory of the Antillean victims who lost their lives during the war.

Increasing Accessibility and Modern Developments (1950–Present)

“Today, 1,000 people live in poverty. The English plundered Statius and seized £20,000,000 in war booty. The island has never recovered from that blow. The once formidable fort has become an eerie memory of former greatness. Lizards live in the barrels of the cannons. The jetty has

been smashed to pieces by the waves and never repaired, severely hampering the export possibilities of this small yet not infertile island.” These were the words that Piet Bakker used to describe the island shortly after the Second World War. He portrayed St. Eustatius as if it were doomed to remain trapped in poverty, living with its past but without a future.

However, change was already underway by then. In fact, it began with the construction of the airport in 1946, which significantly improved the accessibility of the island and – after 1960 – brought the first tourists to St. Eustatius. A paved road was built between the airport and Oranjestad. Around 1880, news of Queen Wilhelmina’s birth took three months to reach the island’s residents by ship; by 1909, thanks to the telegraph cable connection with St. Kitts, news of Queen Juliana’s birth arrived within three days.

Until the 1950s St. Eustatius was still primarily an agricultural island. It was mostly self-sufficient, producing a small surplus that was shipped to nearby islands annually. But general modernization steadily reduced the number of people willing to work in agriculture. The agricultural sector was also in some ways “tainted” by the legacy of slavery, whereas imported products came to symbolize progress.

Alongside the growth of the transportation and tourism industry, government employment expanded rapidly. Although modest in terms of jobs, the industrial activity and the oil terminal at Tumble Down Dick Bay also deserve to be mentioned.

Another key development has been climate change, which at times brings prolonged droughts. These likely accelerated the decline of small-scale agriculture. During drought years there was little vegetation, and animals starved. It was often better to release livestock so they could search for food themselves. Some animals were tied to trees because they were too weak to stand. Donkeys – important pack animals on the island, used for the transportation of food and other goods – eventually died as well. Eventually, many people gave up keeping livestock altogether.

A striking change in the landscape has been the rapid spread of the Mexican ornamental plant Coralita, which appears to decorate the island with its pretty pink blossoms. In reality, however, it is a highly invasive species that now covers roughly one-third of the island. Introduced in the early twentieth century, it overgrows and smothers native vegetation. In the past, children would pull its tubers from the soil when visiting family land, but that practice has long since disappeared. In recent decades hurricanes have

intensified as a result of climate change. Newly planted (fruit) trees are uprooted, and the number of trees on the island continues to decline. Trees once arched over the roads, providing welcome shelter from wind and rain. Fruit trees were especially abundant –acerola, avocado, genip, mango, pomegranate, sugar apple, and tamarind. Until the late 1970s the island had a landscaping service responsible for tree maintenance, managing a government garden, and even planting strawberry beds. On Sundays, fruit was collected, and the harvest was shared fairly among residents. Due to budget cuts the landscaping service was dissolved, and trees gradually disappeared from the streetscape. Remarkably, many indigenous species – such as mamey sapote, tamarind, and Surinam cherry – suffer less from tree



[Fig] Coralita growing rampant.

diseases and thrive far better than later-introduced species such as banana, mango, papaya, and plantain.

Historical Layers in Today’s Landscape

At first glance, the landscape of St. Eustatius appears almost unchanged: a single settlement surrounded by a blue sea and hills full of natural beauty. Beneath this stereotypical image lies a rich and dynamic landscape history. Since Europeans and enslaved Africans settled on Statia in the mid-seventeenth century, the landscape has been transformed dramatically. Warehouses, luxurious homes, and plantation residences rose from the ground, and the landscape was cultivated through the exploitation of enslaved people.

Only late in the twentieth century did agriculture largely disappear from the landscape, giving way to nature and tourism as dominant visual elements. In recent years, the island has continued to evolve, prompting the question of how much change St. Eustatius can sustain without losing its distinctive character and heritage. A landscape is always dynamic, and Statia is no exception.

Nearly 400 years of Dutch presence have left their mark. On St. Eustatius, these traces are visible as layered imprints in the

landscape. To keep telling Statia’s story, it is essential that these layers remain visible.

Plantation Landscape

The Cultuurvlakte was quickly put to agricultural use. This area of the island was transformed most dramatically due to the establishment of the plantations. At the height of economic prosperity around 1780, the island counted 75 plantations. Almost the entire island was allotted, including the slopes of the Quill up to about 200 meters and the hills of Boven. Yet St. Eustatius never became a truly agriculture-dominated island. From around 1700 onwards, trade prevailed. Plantations served mainly as investment properties and as fronts for illegal trade.

Initially, shortly after the arrival of the Zeeland colonists, tobacco cultivation was dominant. Cotton was grown until around 1740, after which production declined. It required large amounts of water – unsuitable for a relatively dry island. Coffee was also introduced but disappeared after the devastating hurricane of 1780. Statia never developed a fully-fledged plantation economy like Barbados, Jamaica, or Suriname. The ratio of free people to enslaved people was therefore less extreme on St. Eustatius (1:1.43) compared to Jamaica, where there were eleven enslaved individuals for every free person. This was



[Fig] View of the Island of St. Eustatius. Samuel Fahlberg, ca. 1820. (photo: Wereldmuseum)

primarily due to the scale, but also to the relatively low annual precipitation and the drought periods, which regularly led to failed harvest. This made it risky to rely solely on the so-called cash crops. Most plantations therefore grew food crops for their own consumption.

The spatial layout of a plantation was largely similar everywhere. Naturally, there was a plantation house, the Great House. In addition, there were usually various (industrial) outbuildings for production purposes, such as a sugar mill. At some distance from the house were the slave huts where the enslaved laborers lived. These were usually positioned in the lowest

areas, out of sight of the plantation owner. This spatial separation was an explicit expression of the power relationship that existed between the owner and the enslaved people. There was, of course, also a well or cistern. The layout of the relatively well-preserved plantation English Quarter has been broadly reconstructed based on archaeological research.

The most important crop was sugar. In Europe, sugar was considered a luxury product. It was used as a sweetener, a medicine, a preservative, and a decorative material for banquets. Roughly 80 to 90 percent of the sugar consumed in Western Europe came from Caribbean islands such as Antigua, Barbados, Cuba, Hispaniola, and Jamaica. A combination of economic, climatic, and geopolitical factors made this crop so significant. But above all, it was an immensely profitable product. It was regarded as the “white gold” of the Caribbean, yielding enormous profits for plantation owners and the colonial powers involved.

The tropical climate and fertile coastal soils of the Caribbean proved ideal for sugarcane. It grew best on flat lands near the coast, where harbors allowed for rapid export. The Cultuurvlakte of St. Eustatius was therefore very suitable for this crop, but it also grew on the slopes of the Quill. From 1715



[Fig left] The ornamental gate at the English Quarter plantation.



[Fig right] A sugar plantation on St. Eustatius. A drawing from the 1761 diary of Joannes Veldkamp. (photo: National Maritime Museum)

onward there were 11 sugar plantations in operation, a number that grew to 41 by 1781. A drawing in the journal of ship’s surgeon Joannes Veltkamp, who visited St. Eustatius in 1761, provides a rare glimpse of what a sugar plantation on the island looked like. Enslaved people harvested the cane and brought it to the sugar mill, where the stalks were pressed in usually vertical rollers. The juice was then boiled down into sugar. The drawing also includes a distillery where rum was made from molasses, the by-product of sugar production, as well as fruit trees on provisioning grounds (pineapple, coconut, and banana).

Sugar came at a steep cost. It was a crop that shaped entire societies and landscapes, yet also left deep scars. The sugar economy was built on the forced labor of enslaved

[Table] Ratio of Free People to Enslaved People at the Beginning of the Eighteenth Century. (Source: Knappert, 1932, pp. 92–93.)

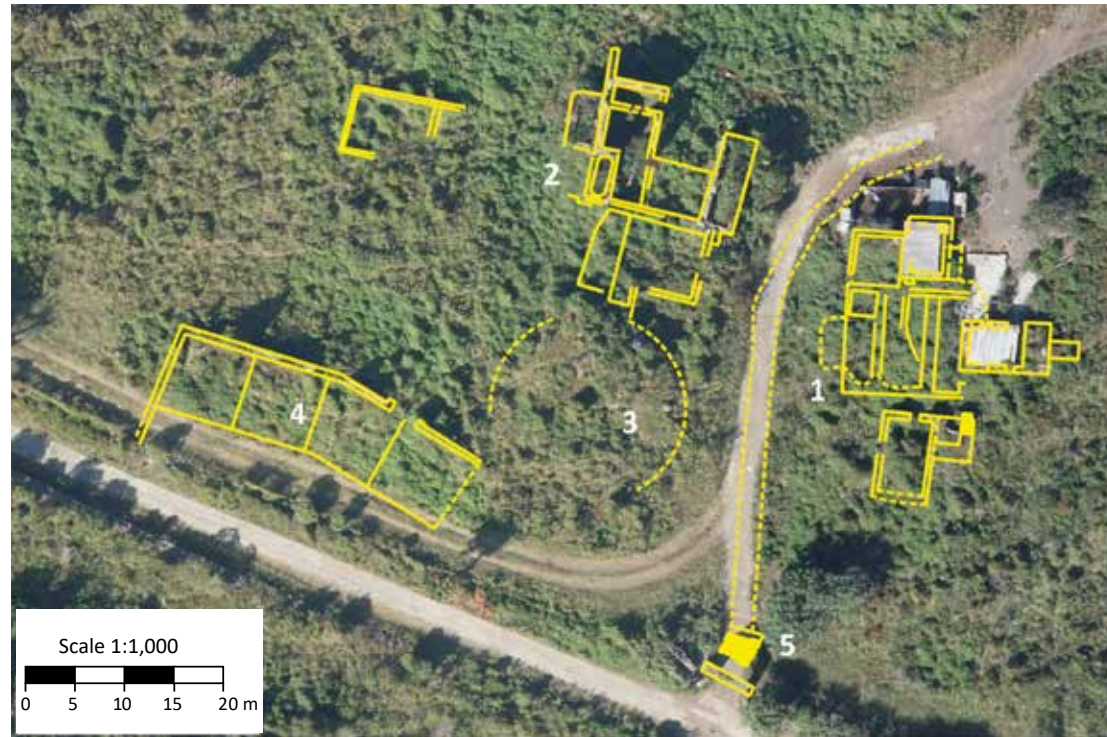
Island	Year	Free people	Enslaved people	Total	Ratio free–enslaved
Saba	1715	336	176	512	1:0.52
St. Eustatius	1715	524	750	1,274	1:1.43
Jamaica	1734	7,644	86,546	94,190	1:11.3

Africans. They performed the heavy work under horrific conditions. Archaeologist Ruud Stelten cites Dominicus Zimmerman the Elder, a young merchant who visited the island in 1792 and described the slave huts, in his dissertation: *“On every plantation there is usually a village of 30 to 40 small huts where the poor creatures live.”*

Zimmerman also complained about the heat inside the dwellings: *“It is terribly hot here, as hot as can be imagined. If it were not for the daily east wind, I don’t believe I could live long. For example, I must change my linen four times a day and my other clothes twice a day. Sometimes the sweat runs in streams down my hands and face.”*

At first glance, few plantations are visible today. Yet for those who know where to look, the island is still scattered with remnants of its plantation past. Sometimes a house remains, but more often the traces are found in ruins, outbuildings, slave walls (plot boundary walls), or other relics. Most, however, have disappeared entirely, been parceled out, overgrown, or partially collapsed.

The most significant plantation house ruin is that of Concordia. It lies “hidden” behind the fire station near the airport. This two-story main house belonged to Governor Johannes de Graaff around 1776, who was then the richest man on the island. A grand



[Fig] Map of the ‘English Quarter’ plantation showing: 1. The plantation house, 2. The factory, 3. The sugar mill, 4. The stables and 5. The ornamental gate.

staircase leads to the bel-étage, which no longer has its floor. Archaeological research has revealed that this plantation also had a duck pond. It was located near the entrance and served partly to impress visitors. Both the pond and the ducks had to be imported, making them true symbols of luxury. The gate of another important plantation, English Quarter, also deserves mention. In the eighteenth century, the colonial elite

would throw enormous parties on this plantation.

But remnants of old plantations can also be found outside the Cultuurvlakte. These are actually better preserved, as this area faced less pressure from urban and agricultural development. On the southern slope of the Quill, for example, lie the remains of Bellevue, including traces of a house, a cistern, and boundary walls that made use of gum trees. Bellevue is now entirely part of the National Park. On the grounds of the oil terminal built in 1976 lie the remains of the Little Mountain plantation, which were



[Fig left] The nearly collapsed sugar mill of the Fair Play plantation.

[Fig right] Interior view of the grand house at the Concordia plantation. (photo: David Koren)

largely left untouched. In the Northern Hills, substantial remains of the plantation of M. Cuvillier can be found, including an old cattle pen.

A final attempt to revive agriculture took place in the early twentieth century. Under the leadership of Lieutenant Governor Van Grol, efforts were made to stimulate honey production and to reintroduce cotton cultivation. The distinctive sugar mill of the Fairview plantation, built in 1831, dates from this period, when agriculture was already losing its prominence. Today, the mill lies in ruins, a consequence of Hurricane Lenny, which passed over the island in 1999, causing part of the mill to collapse. The main house and several outbuildings also remain standing.

A Landscape “Guilty” of Slavery

At first glance, the landscape of St. Eustatius reveals few traces of its slavery past. The plantations where enslaved people were forced to work are difficult to recognize, and the meager “houses” in which they once lived have disappeared, since these structures were built from perishable materials such as wood, clay, and thatch. Nevertheless, archaeologist Ruud Stelten was able to document a complete slave village at the plantation of Schotsenhoek. To this day, it is the only fully recorded example on the island.

With the exception of Fort Oranje and Fort Amsterdam, there are no visible sites where enslaved people were traded, punished, or imprisoned. The saying goes that history is



[Fig] Old livestock enclosure on the plantation of Michel Cuvilliers in Boven National Park.

FEATURED

Oral history

One of the few ways in which information that was never written down can still be passed on to future generations is through oral history: the generational transmission of stories. Archaeologist Ruud Stelten learned through this method that the owner of the Golden Rock plantation, Mr. Moore, was remembered as one of the cruelest plantation owners on the island. He routinely beat enslaved people, including pregnant women. According to oral tradition, he did so for entertainment, especially when drunk. Another well-known story is that of an enslaved woman who, in despair over her fate, descended all the way to the inaccessible Venus Bay to take her own life.

Oranjestad naturally plays a key role in the island's history of slavery. It was the point of arrival for enslaved people, and many came to work in the Lower Town, supplying warehouses and ships. It was also the seat of colonial government. In 1848, it became the stage for a slave uprising that began at the home of Lieutenant Governor Johannes de Veer, led by Thomas Dupersoy. The revolt was brutally suppressed by the Dutch authorities.

After the abolition of slavery in 1863, many people moved from the rural areas

written by the victors. In this context, the word “victors” could easily be replaced by “people with power, money, status, and influence”. A walk around Fort Oranje confirms this, with its commemorations of “important” figures such as naval hero Michiel de Ruyter. But the enslaved masons and stonecutters who built the fort remain unmentioned.

Yet enslaved people were part of the island for centuries. Until around 1660, Amerindians – the so-called “red slaves”, brought over from other islands – were forced to work on the tobacco plantations. After 1660, plantation owners turned to African enslaved people, who were considered stronger, better, and cheaper. The exploitation based on race continued, in full scope, until emancipation in 1863. The most important physical reminder of this painful past is Fort Amsterdam. Although much of the fort has been destroyed, a massive seaward-facing wall still stands. Here, enslaved people were confined upon arrival on the island, often exhausted after the long and brutal journey in the ship's hold. Many had not survived the passage due to hunger, disease, or mistreatment.

The fort functioned as a transfer point, where enslaved people could be sold on. Some remained on the island to work on

plantations. The slave house within the fort could accommodate up to 450 enslaved people. This structure no longer exists. Today, the fort itself is closed to the public due to the nearby mass graves of enslaved people discovered on the grounds of the Godet plantation. This “guilty landscape” now enjoys protected status. On 9 October 2024 it was recognized by UNESCO as a “Site of History and Memory associated with Slavery and the Slave Trade”.

At the same time, the burial ground of the Golden Rock plantation received the same designation. It was discovered in 2021 during archaeological research ahead of the airport expansion, directly south of the runway. It turned out to be a large cemetery that had formed part of the slave quarters of this plantation. The excavation has brought increased attention to African cultural heritage on the island. The only other known burial grounds are those at the English Quarter plantation and the graveyard at restaurant Breeze, located on the site of a former indigo plantation. It remains profoundly distressing that, of the 76 plantations once on the island, the burial places of the enslaved are known for only four.

into town. The quality of the houses that were built during the late nineteenth century is limited, and many are now at risk of disappearing from the streetscape. An important reminder of slavery is the Slavenpad, the “Slave Path”, which has connected the Upper and Lower Towns since the seventeenth century. Enslaved people were forced to carry building materials and goods uphill along this path.

The most visible remnant of slavery in the landscape are the “slave walls”, the walls that once enclosed and confined the plantations. These walls were primarily built as property divisions and livestock boundaries, but also to retain soil and thereby counteract erosion. Livestock was usually kept in a separate cattle pen, allowing the animals to stay safely together at night and for their manure to be collected. The sheer weight of the stones and the immense size and length of the walls indicate that they must have been constructed by enslaved people. Especially in Boven National Park, these plantation boundaries remain clearly visible. Their size and scale are astonishing. Walls several meters thick were constructed running parallel to the contour lines, but also walls running transversely across the hills, through very difficult terrain, and built without any help other than (super)human muscle power.



[Fig] Impressive walls built by the enslaved in Boven National Park.



[Fig left] Typical Oranjestad architecture of the period following the abolition of slavery. (photo: Wereldmuseum)



[Fig right] The Slave Path, a centuries-old link between the Upper and Lower Town.

Military Landscape

St. Eustatius's immense economic importance required protection. Pirates targeted the island's wealthy warehouses, neighboring islands saw a rising rival, and European powers recognized a trading center that could supply their enemies. For this reason, alongside Fort Oranje in Oranjestad, a ring of forts and batteries was constructed. In total, 24 were built. Four of the five forts were located on the easily accessible Caribbean west coast of the island. The remaining batteries were located on the more difficult to access eastern Atlantic coast.

The fact that St. Eustatius changed hands 22 times in less than 200 years shows that the forts, batteries, armaments, and defenses were far from optimal. In practice, only Fort

Oranje, Fort Panga, and Fort Amsterdam possessed real defensive value. The remaining defensive works were batteries, or open gun emplacements. Some "forts" were nothing more than modest redoubts near a larger fort, such as "Fort" Jussac near Fort Panga. Most fortifications were poorly built and poorly maintained. Although the forts were equipped with cannons, many were inoperable, and artillerymen were not always available to operate them. The West India Company was primarily a trading company, investing as little as possible in "non-profitable matters".

The forts and batteries were not isolated installations but formed an interconnected military landscape. Many were linked by paths or roads, as can still be clearly observed between Jussac's Battery and Fort



[Fig] A view over Venus Bay.

Panga on Signal Hill. A concealed road even connected the two sites across a distance of 220 meters, with carefully placed bends designed to limit exposure to enemy fire. These routes were vital for transporting ammunition and for supplying stationed soldiers with food and water. Accordingly, most forts were equipped with a cistern for drinking water, and fruit trees – such as tamarinds – were planted so there was always something to eat (and drink). The forts and batteries were small. They carried only a few cannons, and there were no extensive bastions or curtain walls.

In 1748, a construction campaign created a number of water batteries, some of which may have been deliberately placed among



[Fig] A view from Fort Panga overlooking half of the island. (photo: David Koren)

the extremely poisonous and dangerous manchineel trees. These trees could aid in deterring unwanted visitors. Breaking a leaf or twig releases a potent toxin that can cause severe reactions (blistering, bacterial infections, gastrointestinal inflammation, bleeding). Even sheltering under these trees during rain is dangerous, as dripping water can cause serious burns. An example of a battery built among manchineel trees is Ryal Battery, a redoubt of Fort Panga.

Today, the military landscape of St. Eustatius is only partially recognizable. From the early nineteenth century onward, the need for strong defenses disappeared. The island was no longer of interest to pirates or foreign powers, since the once richly stocked warehouses stood empty and had collapsed into ruins.



Fort Oranje naturally remains the most significant site in St. Eustatius's military history. It was fundamental to Dutch colonization and to the development of Oranjestad. In the future, it will play a central role in welcoming visitors to the island. It will become the place where the story of St. Eustatius is told. Many other batteries have nearly vanished or are in ruins. Some have been cleared for industrial development (Tumble Down Dick Battery). Others have partially fallen into the sea due to ongoing cliff erosion (Bouilles Battery). Yet even ruined forts can possess great aesthetic appeal, such as Fort Corre Corre, built in the second half of the eighteenth century.

Tourism and Recreation in the Landscape

At Easter, when merchants of the Lower Town took stock of their inventories, trade came to a complete standstill. Enslaved people were given two days off, which they often spent at the seaside. Easter has therefore remained one of the most extensively celebrated holidays on the island. In the eighteenth century, Oranjestad already attracted a considerable number of visitors. Although many foreigners slept aboard the ships that had brought them, some stayed in town. The Old Gin House, now one of the island's few hotels, was already a place of accommodation

[Fig] Fort Corre Corre with a view of Saint Kitts.

in the eighteenth century. In 1924, the Government Guesthouse was opened, intended for official visitors to the island.

On recreation, Teenstra noted the following in 1827: *"One does not find public recreational facilities here. Along the bay one finds a few taverns, among which a billiard house is counted, yet clubs or other associations for entertainment are found here no more than on St. Maarten. Horse riding and walking on windy and shadeless roads become, in such a limited space, quickly monotonous and thus tedious, while pleasure trips by water... are not sought here."*

What has long topped the list for both residents and visitors is a visit to the crater of The Quill. The difficult-to-reach crater, at around 250 meters above sea level, has its own tropical inner world with giant trees. The oldest (touristic) inscriptions carved into the crater's trees date from the eighteenth century.

Only after the Second World War did more modern forms of recreation and entertainment emerge, such as the first

[Fig] Easter celebration in the Lower Town. (photo: David Koren)





[Fig left] A hiking trail inside the Quill crater.



[Fig right] An abandoned hotel in the Lower Town. (photo: David Koren)

movie theatre (Ideal, 1949), the first Scouts group (Garfield, 1949), the first steel band (1952), and the first theatre (Madam Theatre, 1966, initially a movie theatre, later also used for party nights). Understandably, these forms of recreation were concentrated mainly in Oranjestad, where practically everyone lived. Children entertained themselves playing football on the rocky ground, swimming in the bay, and the more adventurous ones roamed farther afield for walks across the island.

One resident recalls “moonlight walks”, when people strolled under the moonlight to meet friends – and sometimes new or secret lovers. On 5 October 1965, His Royal Highness Prince Bernhard switched on the island’s first electric lighting. Still, electricity

remained very limited on the island until the 1990s. In most places, older residents would light a gas lamp at 6 p.m., hang it up for the evening, and keep it burning until about 1 or 2 a.m. In any case, until the 1990s – without computers, mobile phones, or electric transport – the island retained a very rural character.

Modern tourism emerged in the second half of the twentieth century, after the modernization of the airport in the years following 1960. The first hotel, Hotel Caribbean, opened in 1960. Due to the lack of “real” beaches, tourism never grew to the size seen on other Caribbean islands. Nevertheless, several hotels did appear in the Lower Town.

The most recent phase in tourism development, with major implications for the landscape, is the construction of resorts. On St. Eustatius, the Golden Rock Resort was established in 2021, built on the former indigo plantation Guyeau. Since then, questions have been raised about whether its scale and design are appropriate for the island. Plans to create a faster connection between the resort and the airport could mean that historical roadside trees need to be removed, and that old walls and hedges along the roads may disappear. Even the monumental 1857 gateway of the English Quarter plantation could face demolition.

To this day, St. Eustatius has managed to preserve much of its character and authenticity. With a balanced approach to utilizing its cultural and natural assets, the island holds a winning hand in an age where authenticity, experience, sustainability, and slow tourism are key concepts.



[Fig] Mass grave of enslaved people at the Golden Rock resort site, with a toilet facility constructed directly beside it. (photo: David Koren)



[5] LEON DERKSEN & MARTIJN MANDERS

MARITIME TRACES IN THE LANDSCAPE OF ST. EUSTATIUS

We are in the middle of Oranjebaai, the old anchorage or roadstead on the western coast of St. Eustatius. On this leeward side of the island, sheltered from the wind, the water looks calm. At least, so it seems. Through the eyes of a sailor, however, the roadstead was “... completely open and nothing but a very unsafe anchoring place”. And one definitely wouldn’t want to go near the unnavigable and (to this day still) life-threatening east coast. Nevertheless, over the centuries, the west coast became so appealing that the lack of shelter was accepted. Once you reached the coast, you could at least still come ashore reasonably well. This explains why the island has changed the most on the leeward side. Approaching from the sea today, traces of that past suddenly come into view. These traces are all part of St. Eustatius’s maritime cultural landscape, which this chapter explores.

[Fig] A cannon of the Bouillé Battery on the cliff edge.



[Fig] The Oranjebaai of St. Eustatius, early 19th century, by A. Nolson and Emans. (photo: National Archives)

Living with the Capricious Sea

From as early as the Amerindian period of settlement, seafarers appear to have approached primarily from the west side of St. Eustatius. As described in more detail elsewhere, traces of their presence appear here and there along the coast in the form of tools and middens of fish and shell remains. The relationship with the sea and the maritime landscape was therefore of undeniable importance even for the earliest visitors to and inhabitants of Statia. After the arrival of the Europeans, the landscape around Oranjebaai gradually developed into a maritime hotspot.

Increasing numbers of ships anchored in the bay. Historical descriptions and images suggest the roadstead must have been quite spacious – a welcome feature, as maritime traffic increased dramatically over the centuries while Statia grew into a crucial hub in the seafaring trade network between Europe and the Americas.

Ample room to maneuver in this bay was desirable. During busy spells as many as 200 ships sometimes anchored here, even the slightest gust of wind could cause collisions unless precautions were taken. To navigate and anchor safely, captains ideally relied on natural and cultural landmarks. Teenstra noted that in the nineteenth century a captain could find good anchoring ground by keeping “the church tower north-northeast of him...” This referred to the Reformed Church, whose ruins still stand today.

Yet the ships on the roadstead remained highly vulnerable – especially during hurricanes. When a storm approached from the south, ships had to make for open sea immediately. Staying at anchor would end in disaster. Many vessels did indeed founder. We read about these losses in archival documents and travel accounts, but we also encounter their remains on the seabed. Among the objects recovered from the ocean floor, are what appear to be



[Fig] The Dutch fleet in front of St. Eustatius' harbor, late eighteenth century.



[Fig] An 18th-century shoe buckle, before and after restoration. (photo: Restaura)



[Fig below] Three old anchors under a reef, no younger than the 19th century. (photo: RCE)

personal belongings, such as shoe buckles and clothing clasps, as well as ceramics, porcelain, and bottles – whole ones, but more frequently broken ones. Construction materials such as bricks are also present, including the distinctive yellow IJssel bricks that were once used as ballast on Dutch ships and later repurposed for building houses on the island. Various ship components – iron nails, mast rings, rudder fittings – are scattered across the bottom of the sea. Several anchors can be found stuck among the coral riffs, and numerous cannons lie in the bay. After every storm, and certainly after every hurricane, the seabed shifts again. A dive afterwards will often reveal new objects that have become exposed.

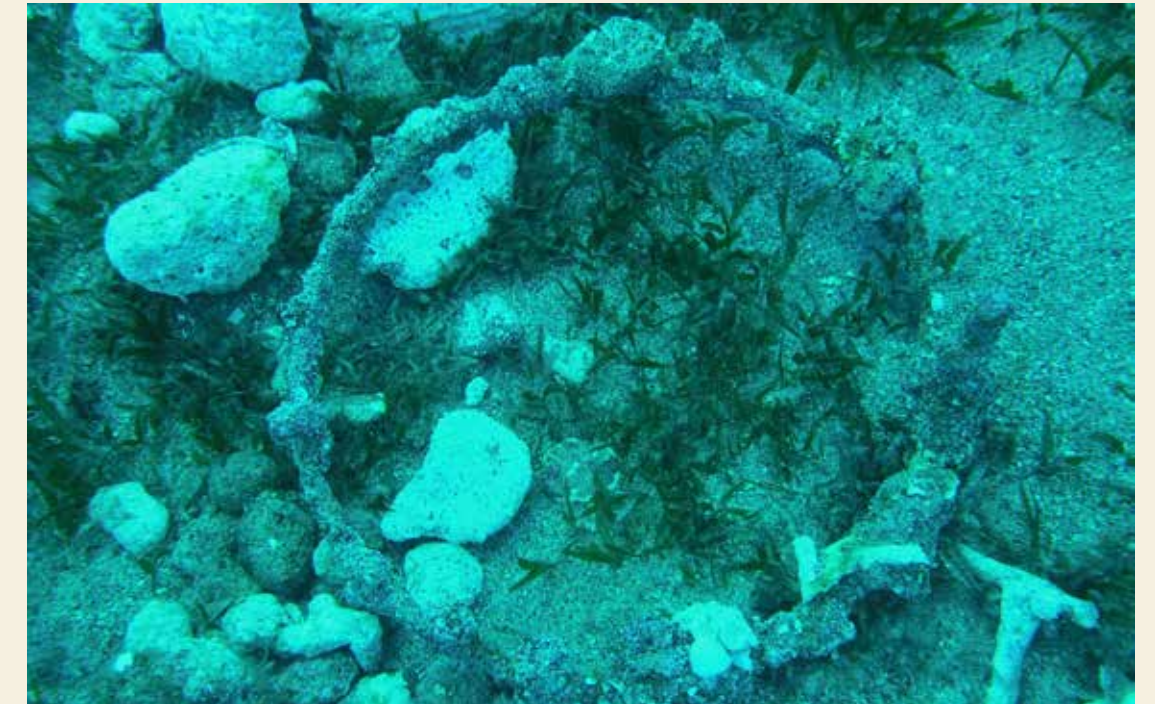
Not all of this material, however, indicates actual shipwreck sites. The crowded roadstead was a place where people smoked, drank, and tossed refuse overboard. Items were dropped during the transfer of cargo from ship to rowing boat. These heavily laden boats had to cover the final stretch to shore with the goods that had to be unloaded. Traces of all this activity accumulated on the seabed. In addition, some material must simply have been washed into the sea from the coast.



[Fig below] A nearly complete 18th-century cellar bottle. (photo: RCE)

[Fig top right] Presumably a mast ring on the seabed of the bay. (photo: RCE)

[Fig bottom right] A complete 18th-century onion bottle on the seabed of the bay. (photo: RCE)



International Maritime Trade Network

Over time, the coastline transformed into a picturesque scene lined with whitewashed warehouses. Initially tobacco was stored. As the first sugar plantations, and later cotton and indigo plantations, emerged, more warehouses were built to temporarily store harvests as well as imported goods from around the world. Especially after 1756, when Statia became a free port with no import duties, the number of warehouses increased dramatically. The landscape must have looked entirely different: at one point, hundreds of warehouses stood along a strip of roughly two kilometers.

This growth accelerated further when Statia became a key supplier of arms to the North Americans during their War of Independence (1775–1783) against Britain. A maritime moment still remembered today is the First Salute, when Governor Johannes de Graaff (unintentionally) ordered a gun salute to an American warship – still in the midst of the conflict – as if it were the vessel of a sovereign nation. This much to the dismay of the Brits.

Ruins of the warehouses can still be found along the coast, some even partially submerged. These structures are slowly crumbling. This process is partly accelerated by the constant pounding of the sea where

the warehouses stand below the waterline. Statia is notorious for its history as an entrepôt not only for goods, but also for people. These enslaved people were purchased, among other places, at the infamous slave market on the Gold Coast near Elmina, from where the crossing was made to the Caribbean Sea. For Dutch ships, the route to the West typically ran from ports such as the roadstead of Middelburg, on to Elmina in present-day Ghana, and then onward to St. Eustatius and other colonies. We now refer to this route as the “transatlantic triangular trade”.

After a dehumanizing journey lasting from several weeks to several months, most enslaved individuals were sold via St. Eustatius. Most of them eventually ended up in North America. Many thousands of enslaved people were traded through Statia in this way. The importance of Statia in the maritime trade network also grew enormously as a result of this role.

Maritime Activities on Land

Along the shoreline of Oranjebaai, warehouses were not the only structures to be found. There were also ship chandler’s shops, various kinds of other businesses, and – almost inevitably – taverns. Many sailors had come to rely on alcohol as a constant companion. All that drinking needed to be supplied. It is therefore no

surprise that fragments of bottles litter the roadstead, complementing the rum distilleries excavated on the island. The nineteenth-century minister Gerardus Bosch complained extensively in his travel account about drunken sailors. There were also brothels. In short, there was no shortage of entertainment for seafarers.

Maritime traces in the landscape can be discerned not only through physical remains, as Ruud Stelten demonstrated in his dissertation. Several locations on St. Eustatius still bear names reflecting past maritime activities, often corroborated by archaeological evidence. We already mentioned Signal Hill, where incoming ships could be signaled. Kay Bay also has a maritime connection: it is an English corruption of the Dutch word Keij Baai, referring to the rocky seabed that makes the bay difficult and practically unsafe to navigate; it serves as a warning to sailors. Another example is Interlopers Cape, where *lorrendraaiers* – smuggling ships operated by Dutch private traders – sold enslaved people directly to the Spanish, English and French. Statia and the wider Caribbean attracted not just respectable merchants.

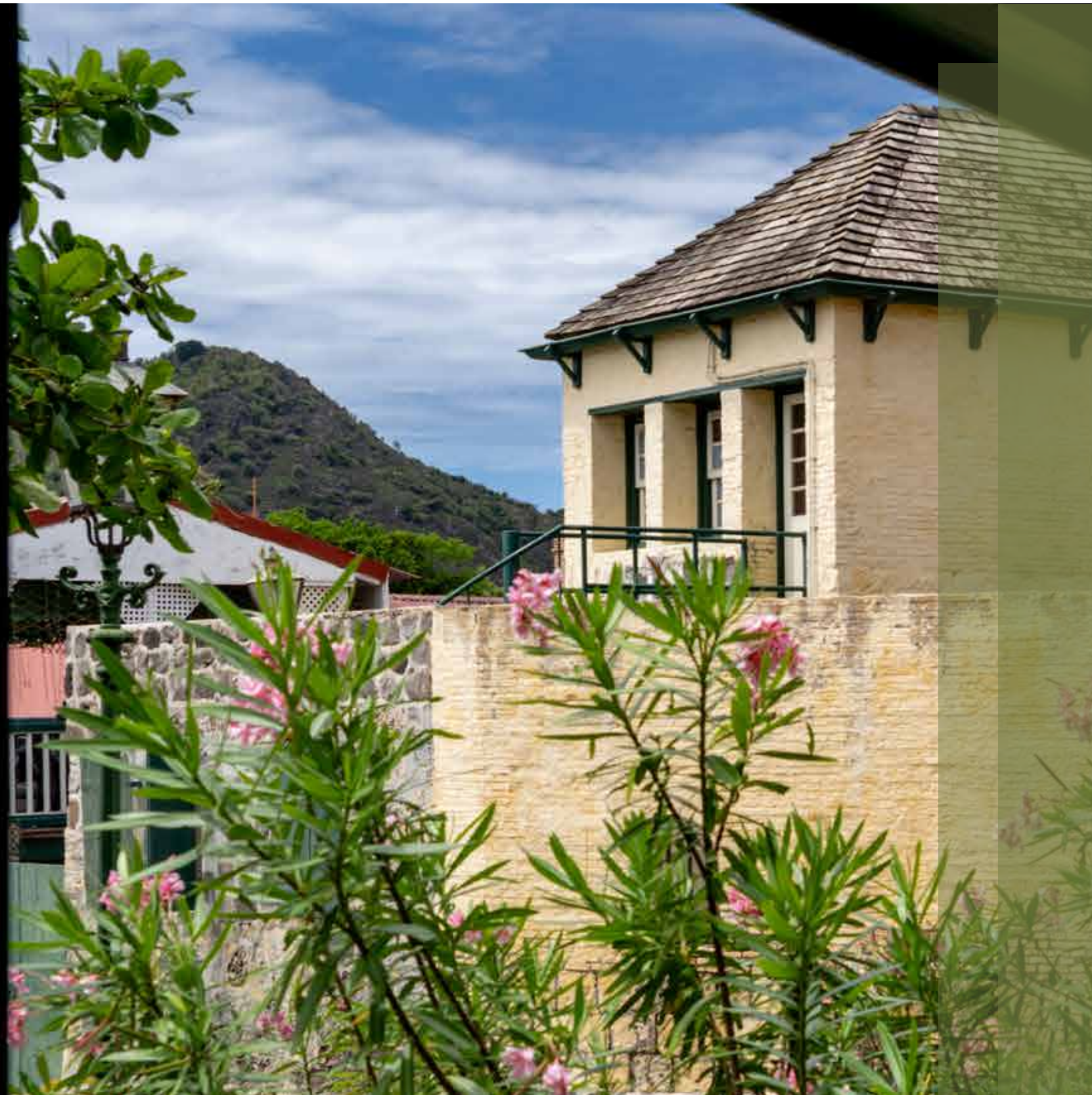
Today, seafaring has become somewhat easier around Statia. There is a harbor with a breakwater, and just a little further north in the bay lies a long pier where oil tankers



report to ProStar’s GTI Statia oil terminal. Yet along the coast, both recent and older remnants of past constructions still jut from the water, such as the early-twentieth-century pier built in 1906. And although

since 1946 the island can also be reached by plane, the inhabitants still partly rely on shipping for their supplies. The relationship between the sea and St. Eustatius is a connection that will never disappear.

[Fig] Remains of the early 20th-century pier. It fell into decay after 1935.



[6] MICHAEL A. NEWTON

HISTORICAL SETTLEMENTS AND ISLAND-SPECIFIC ARCHITECTURE

St. Eustatius has only one settlement: Oranjestad. This capital is divided into an Upper and a Lower Town. The Lower Town is located along the bay with direct access to the sea, while the Upper Town is situated high above on a cliff. From the early seventeenth century onward, Oranjestad gradually developed into the town we know today. This chapter examines the history of the settlement and the distinctive architecture that characterizes it.

[Fig] Annex of the Government Guesthouse.

Origins and Growth of the Upper Town

European presence on St. Eustatius began with the arrival of French settlers in 1629. They constructed the Bay Path from the shoreline up the hill and built a small fort at the top. This moment marks the birth of the settlement now known as Oranjestad. After only a few years, the French abandoned the island, most likely due to the lack of natural freshwater sources. Shortly afterward, on 25 April 1636, colonists from Zeeland took control of the island.

The colonists from Zeeland built a larger fort on top of the remains of the French one. They installed sixteen cannons and named it “Fort Oranje”. In the Upper Town, the settlement developed along three sides of Fort Oranje. The shortage of freshwater sources was addressed through the construction of the rainwater reservoirs known as cisterns. From the seventeenth century onward, the urban layout of the Upper Town has remained remarkably stable. Fort Oranje functioned as the central point. From here, roads led outward to the surrounding plantations: today’s Kerkweg to the south, Fort Oranjestraat to the east, and Paramiraweg towards the northeast.

In 1636, the population numbered roughly fifty people, primarily from Zeeland, but also Walloons and Flemings. Little is known

about possible buildings during this early period. A document from 1639 mentions a storage building for tobacco, but its location is unknown. In 1673 reports speak of “houses near the fort”. These earliest residences were most likely scattered farmsteads around Fort Oranje.

Urbanization of the Upper Town began during the eighteenth century, as prosperity and population numbers increased. From the 1720s onwards, the island developed into the main commercial hub of the Caribbean, earning the nickname The Golden Rock. Plantation owners became active in trade and began building houses in Oranjestad to be closer to money (the harbor) and political power (the fort).

The Upper Town has always been the main residential area. Initially, the higher and middle classes lived there. As early as 1715, the village had become too small. Commander Jan Donker wished to expand the town southward but received no reply from the WIC. Only in 1739 did permission come to subdivide the Compagnieplantage (Company Plantation), south of the present Fort Oranjestraat. As the harbor and the economy grew, merchants also built warehouses along the shoreline in the Lower Town.

Enslaved people lived not only on plantations. Since many merchants owned no rural estates, they housed their enslaved workers in town. An advertisement in the St. Eustatius Gazette of 17 August 1792, for instance, offered a house in the Upper Town for sale, including several “negro houses”. Commander Johannes de Graaff owned two plots in the Upper Town on which “negro houses” stood. Many enslaved people labored in the Lower Town, carrying goods to and from ships and hauling them up the steep paths between the Lower and Upper Town. Some of them were also housed in the Lower Town.

Economic growth gave the core of “the Village” an increasingly urban appearance. With this expansion, the name Oranjestad came into common use around 1820. Growth was concentrated particularly at the points where the previously mentioned roads to the plantations converged. With the addition of a marketplace and the Dutch Reformed Church (built in 1755), the Kerkweg – particularly the section near the fort – became the most “urban-looking” street of the settlement.



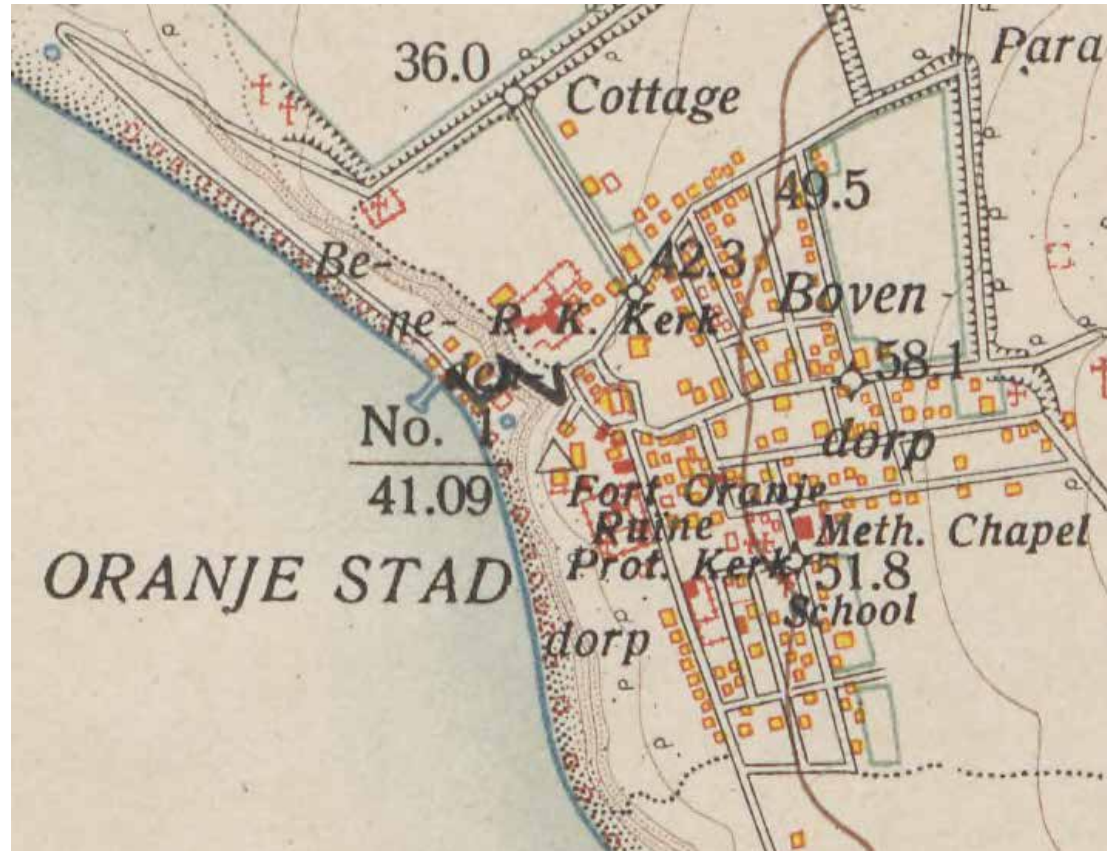
[Fig] PLAN DE L'ISLE DE ST. EUSTACHE detail by Nicolas, around 1781. One of the earliest maps of the island, illustrating the urban and building layout of Upper and Lower Town. (photo: Bibliothèque Nationale de France)

FEATURED
From Feverish Growth to Near Stagnation

When comparing the 1781 map of the Upper Town with the detailed topographic map of 1915, the continuity in urban form is remarkable. The streets are the same, and the settlement hardly expanded during those 135 years. There is only a slight increase in the number of houses. Today, this gives Oranjestad the impression of being a historical place frozen in time.

The 1915 map is informative in another respect: its color coding shows differences in building techniques. Stone buildings are marked in red and wooden buildings in yellow. The vast majority of houses were built with wood.

The elite of St. Eustatius lived in compounds: enclosed urban yards containing a main house, outbuildings, kitchens and privies. These structures were partly built of Dutch IJssel bricks and/or local natural stones known as face-stone. Wooden upper-story walls were common. The homes of enslaved domestic workers were likely also located on these premises. These homes were more huts than houses and for that reason they are seldom preserved.



[Fig]The 1915 Topographic Map details the difference in building material by color: stone buildings in red and wooden houses in yellow. Most houses are made of wood.

Only a handful of these compounds still exist. The Hill Compound is the most intact, with its fully enclosed courtyard. The present Government Guesthouse and the Simon Doncker House, with their associated outbuildings, also show compound characteristics. Another compound, later known as the “Godet House”, saw its wooden main building severely damaged by fire in May 2020 and subsequently demolished. Whether it will be rebuilt remains uncertain. Compounds were always the exception rather than the norm. The

middle and lower classes lived in simple, single-story wooden houses.

The English admiral Rodney described the Upper Town as follows: *“The Upper Town lies on a steep cliff at least 21 meters high. You climb it by a zig-zag road, very difficult and steep, and it must have cost much*



blood had the enemy defended it. The town is neat, orderly, healthy, airy, and for the West Indies beautiful. The Governor and all people of importance lived there.”

Although the Lower Town functioned as the commercial heart, the Upper Town fulfilled many important public functions. People sold food and goods on the streets and at the market. Government officials lived and worked there, and it housed the island’s largest fortification. Many goods entering or leaving the island passed through the Upper Town. Several religious buildings and burial grounds were located there as well. Its atmosphere must have contrasted strongly with the bustle of the Lower Town – yet it was busy, people from all social classes worked and lived there.



[Fig left] Fort Oranjestraat, around 1920; on the left, the wall of the large compound of Johannes de Graaff (1729-1813) and his wife, “Madam”. (photo: Wereldmuseum)

[Fig right] The Upper Town, with Fort Oranje on the right, depicted by Gerard Voorduin in 1860. (photo: Rijksmuseum)

During the nineteenth century, Statia’s economy gradually declined. This is also visible in the appearance of the town. In 1837 agricultural consultant Marten Douwes Teenstra visited the island and wrote: *“The whole town, with rather large houses of red or yellow bricks or of blue rough stones, shows many traces of former wealth and prosperity. The houses in the Upper Town often have only a small garden, shaded by a few coconut or tamarind trees.”* After the abolition of slavery in 1863, many formerly enslaved people moved to town, hoping – mostly in vain – for better opportunities. Those who had moved to town lived in modest houses that were of limited quality. Even so, Oranjestad did not expand rapidly. Most new houses were built on the large existing lots, making the town denser rather than larger.



[Fig] Dilapidated house in Oranjestad.

Founding and Growth of the Lower Town

St. Eustatius was a free port. This meant that ships of all nations could anchor here, easily evading the trade monopolies of various European powers. Its location on the edge of the Caribbean was also advantageous in the era of sailing ships, when navigation depended on sea currents and prevailing winds. Because of the increasing trade, there were always sufficient supplies available for exchange. To strengthen its commercial position, import duties were abolished in 1756, making Statia a free port and entrepôt.

Oranjebaai was – and still is – nothing more than a large anchorage. There were two landing stages, but cargo and passengers were usually brought ashore in small boats. Around 1740, the first warehouses were built along the bay, initially near the weigh house of the Dutch West India Company. It did not take long before merchants began living there as well, sparing themselves the descent and climb between the Upper and Lower Town. This was despite the fact that the Lower Town was much hotter than the Upper Town due to the lack of wind. In 1750, Statia’s population numbered 2,315 inhabitants, of whom 1,513 were enslaved people. Over one hundred merchant houses were established during this period.

The Lower Town occupied a narrow strip of land – partly reclaimed from the sea – situated at the foot of a high cliff. Soon, buildings stretched two rows deep along the entire two-kilometer length of Oranjebaai. There were warehouses and residences, but also wine houses, shops, and brothels. Attempts were made to create more space by reclaiming a strip of land seaward of the shore. This proved insufficient, however. Due to the lack of storage space, goods were sometimes stored outdoors out of necessity. It was also during this second half of the eighteenth century that prosperous St. Eustatius became known by the name Golden Rock.



A description of the Lower Town at the height of its commercial activity comes from the Scottish visitor Janet Shaw in January 1775: *“A market runs uninterrupted along the length of the town, from end to end, where goods of the most varied uses and qualities are displayed before the shop doors. Here hang rich embroideries, painted silks and flowered cotton. [...] The next stall contains the most exquisite silver plates, the finest I have ever seen, and next to them iron pots, kettles, and shovels.”*

In the year of 1779, more than 3,000 ships from Europe, America and Africa anchored off Oranjestad – equivalent to the number arriving in Amsterdam during that same time. On some days, more than twenty ships arrived. Up to 200 vessels could lie at anchor simultaneously. The number of warehouses kept increasing, reaching

an estimated 600 by the late eighteenth century. Some merchants’ homes even took on “palatial” proportions. One such example was the house of Anthony Vaucrusson. All his rooms were “richly furnished”, and from his house a bridge extended across the street to a rooftop garden on an adjacent warehouse.

While most houses in the Upper Town were built of wood, the buildings in the Lower Town were constructed of stone. Many were made of brick: either the yellow IJssel bricks or the larger red bricks that had been carried from the Netherlands as ballast in sailing ships. Local face-stones, quarried from the rock formations, were mainly used for the foundations and lower walls.

When the Americans began their war for independence from Britain in 1775, the

[Fig left] Detail of the painting of the Lower and Upper Town, around 1790.

[Fig right] Detail of the map of the Lower Town. Martin, St. Eustatia, 1781.



[Fig] View of the island of St. Eustache. Samuel Fahlberg, ca. 1820. (photo: Wereldmuseum)

Dutch supplied them with weapons via St. Eustatius. On 16 November 1776, the American naval vessel Andrew Doria sailed into Gallows Bay, flying the new Grand Union flag. The ship's salute was answered – on the order of Commander Johannes de Graaff – with eleven cannon shots. It was the first time a foreign power honored the flag of the United States with a salute. The Americans interpreted this as the first official recognition of their independence by another sovereign state, namely the Republic of the Seven United Netherlands. The English responded by declaring war on the Dutch. Admiral George Brydges Rodney and General John Vaughan invaded St. Eustatius with a large fleet in February

1781. Their troops plundered the island extensively and with vindictive zeal. Rodney and Vaughan intended to destroy the entire Lower Town. They even requested permission from the government in London. This permission was never granted, which meant the Lower Town remained standing. The plundering by Rodney is often cited as the principal cause of Statia's economic decline. This is not entirely correct. Shortly before the invasion, on 10/11 October 1780, the island and many islands in the surrounding region had been struck by a severe hurricane. Many buildings in both the Upper and Lower Town were heavily damaged.

Although the economy initially recovered in the years after Rodney's plundering and returned to a level of prosperity comparable to the pre-invasion period, the island's trade economy collapsed entirely around 1800 and would never revive. In 1837 Teenstra wrote: *"The Lower Town, usually called the bay, consists of shops and warehouses. The houses are spacious and solid, placed in a double row yet very irregularly, forming narrow crooked alleys, called streets. Generally, but especially in the Lower Town, the buildings are in a very dilapidated state, which inevitably makes an unpleasant impression on visitors. Moreover, these houses are very dangerously situated, threatened on one side by landslides*



[Fig] Ruins of the Lower Town, 1948. (photo: National Archives, Spaarnestad collection)

from the cliff above, and on the other by the pounding waves, which have already exposed the foundations of some."

The substantial warehouses – particularly those closest to the sea – fell into ruin and largely disappeared into the waves. Empty warehouses built of locally quarried face-stones were demolished in 1927. The stones were sold at a minimal price to Saba for the

construction of roads. By 1917 only twenty people still lived in the Lower Town; by 1961 only one poor family remained, living in the former gin house.

Only in the late twentieth century did the Lower Town begin to revive somewhat. Alongside the construction of a breakwater and a concrete pier at Gallows Bay, a small cargo and yacht harbor was created. The ferry connecting the islands docks here a few times a week. The island's electricity plant (GEBE) is also located in this area.

Another part of the Lower Town has taken on a tourist-recreational role, with restaurants, dive shops and a hotel.

Historical Architecture of St. Eustatius

The architecture of St. Eustatius is essentially part of the West Indian wooden building tradition also found on St. Maarten and Saba. In the Upper Town, the oldest parts of the settlement are characterized by compounds with a two-story main house. These could be constructed entirely of stone or entirely of wood. However, a combination is most common: the ground floor built in stone, either brick or local face-stone, and a wooden upper story.

The wooden walls are clad with traditional wooden shingles or the more "modern" clapboard siding. Shingles are thin wooden strips, nowadays usually made of cedar. They measure roughly 45 centimeters in length and have a highly variable width of 6 to 25 centimeters. Their thickness also varies because they taper: the lower end is up to 1 centimeter thick, the upper about 0.3 centimeters. They are applied with a vertical overlap of about two-thirds, fixed onto a base of wide horizontal wooden boards.

Most common are the single-story wooden houses built on a foundation of natural



[Fig] The Government Guesthouse, stonework on the ground floor, wood above.

[Fig below] Single-story wooden house with a natural stone foundation and wooden shingles on both the roof and walls.

stone. These are topped with either a hipped roof or a gable roof. The interior of an average Statian middle-class house was divided into three rooms. Usually there was a gallery or outdoor terrace at the front. The central room served as the living room. On either side were the bedrooms, sometimes combined with a kitchen. The kitchen could also be at the back. A stone cellar for



[Fig] Residential building with a gabled roof and a front porch with gingerbread ornamentation.

[Fig below] Basic traditional residence, gable roof made of corrugated sheets, walls covered with shingles. (photo: Michael A. Newton)

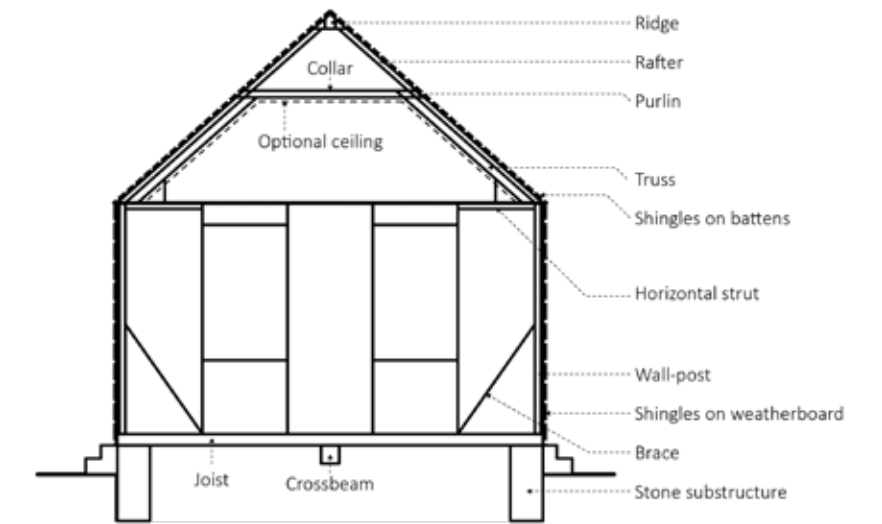
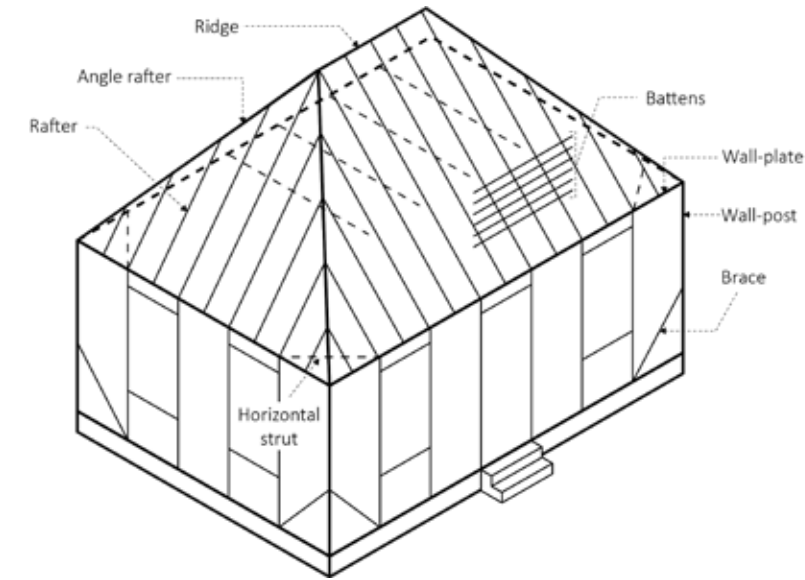
storage was not uncommon. A cistern might be present in the garden, or not.

These single-story wooden homes can be found in the oldest part of Oranjestad near Fort Oranje, but also in the southern expansion area of Oranjestad that was parceled out from 1740 onwards. The very simple, small wooden houses with gable

roofs can also be seen in the eastern part of the town. These were partly the homes of formerly enslaved people who moved from the plantations to town after the abolition of slavery in 1863. The roofs – like the walls – were originally covered with wooden shingles. Most were replaced during the twentieth century by corrugated steel sheets, which are more durable and better suited to withstand storms. Over time, many of these small houses were expanded by adding a second building block behind or beside the original structure.

The building tradition of the Lower Town was largely shaped by the prosperous period of the eighteenth century. Many stone warehouses were built, using both local face-stone and Dutch brick, with one or two stories. The vast majority of these warehouses disappeared during the nineteenth and twentieth centuries due to decay, storms, and demolition for the reuse of their stone.

Statian stone buildings were primarily constructed from local natural stone, the face-stone. Dutch brick was also used, usually the yellow IJssel bricks. Structural stability and hurricane resistance were achieved mainly through the heavy and massive wall structures. In two-story buildings, the upper story was usually made of wood. Its construction followed



[Fig] Schematic drawing of a traditional West-Indies cottage, after sketches by Temminck Groll.

[Fig left] Hurricane shelter constructed from local natural stone with a brick-arched roof.



the same principles used in single-story wooden houses: vertical posts, horizontal beams and rafters forming a rigid structural frame connected and anchored to the substructure or foundation.

Naturally, it was crucial that the houses could withstand annual hurricanes. Corner beams were reinforced with diagonal and horizontal bracing at 45 degrees. Roofs had a pitch of approximately 35 degrees and no overhang, minimizing wind pressure on the structure. Hipped roofs proved more hurricane-resistant than gable roofs. Wide

[Fig] Photo from 1966 with the Old Gin House on the left, before restoration. (photo: RCE)

horizontal wooden boards were fixed to the outside of the structural frame, and the shingles were nailed onto these boards.

Among the more distinctive constructions are the “hurricane shelters”, of which several examples survive on Statia. These buildings are made entirely of natural stone or brick, with vaulted roofs. Their massive construction made them resistant to hurricane forces, allowing people to shelter inside. Some even had cooking facilities. Because of their sturdy construction, they have survived the passage of time.

Old Gin House

The Old Gin House, now a hotel, is one of the many warehouses in the Lower Town. The name has nothing to do with the alcoholic drink. A gin house was a facility where cotton seeds were removed from locally grown cotton. After processing, the cotton was baled and shipped overseas. The rectangular, two-story building, constructed entirely of brick, stood vacant from the early twentieth century. Its brick construction likely ensured its survival, as it was not demolished for the reuse and sale of local natural stone to Saba.

In 1970 the dilapidated building was sold. According to the buyer, the roof, windows,



and doors had all disappeared by then. In the following years it was restored by the new owners and converted into a popular hotel. A particularly striking feature is the long, covered balcony on the first floor. Over time, what was then the island’s only hotel was gradually expanded and gained an attractive restaurant on the seaside terrace. The Old Gin House has recently undergone a thorough restoration. All floors, staircases, and interior finishes are now executed in oak. The large cellar space has also been restored.

Fort Oranje

Fort Oranje is the oldest, largest, and most important fort on St. Eustatius. It is perched on the edge of a high cliff overlooking the Lower Town, approximately 25–30 meters above the beach below. Originally built as a defensive work, the fort included, among other things, facilities such as a commander’s residence, barracks, and a church. Although the island changed hands many times, the fort never saw any significant combat. In most cases this would have been futile anyway, as the fort was often undermanned and poorly supplied with artillery. Surrender was therefore usually the practical choice, to avoid the destruction of the many warehouses along the bay.



[Fig] Fort Oranje, on the edge of a steep cliff, is accessed by a bridge and gate. (photo: Michael Bacon, Alite b.v.)

The fort covers a total area of 2,940 square meters, making it the second-largest surviving fort on all six Dutch Caribbean islands; only Fort Amsterdam on Curaçao is larger. The fortification has a square layout, except on the western side, where a quarter-circle replaces one of the right angles. Each of the three remaining corners is reinforced with a bastion, with the northern bastion being significantly truncated. The site contains several buildings, a cistern, a well, and various memorials. The stone parade ground – the

open central area of the fort – features multiple height differences.

Although the fort remained the administrative center throughout the twentieth century, little attention was paid to its maintenance. In 1978–1979 it once again required extensive restoration. After a partial fire in 1990, the fort was restored yet again in the late 1990s. The long-standing concern about the stability of the fort on the edge of the cliff was only addressed recently. To stabilize the eroding cliff and prevent further degradation, the entire cliff face beneath the fort was reinforced between February 2019 and May 2020. The project involved the installation of



[Fig] The courtyard of Fort Oranje.

2,800 rock anchors, 7,400 square meters of geotextile fabric, and more than 15,000 square meters of wire mesh, all firmly anchored into the rock. The mesh allows vegetation to grow through it, giving the cliff a greener appearance over time and gradually replacing its dark grey color.

Synagogue Honen Dalim

Around 1700, the first Jewish merchants settled on St. Eustatius. Over the following decades, a thriving Jewish community developed on the island. By 1737, the Jewish population was large enough to establish a congregation named Honen Dalim, meaning “He who shows mercy to the poor”. In 1738, the congregation received permission to build a synagogue. The synagogue was used by both Sephardic Jews of Spanish-Portuguese background and Ashkenazi Jews of German and Eastern European background.



[Fig] Honen Dalim Synagogue after consolidation works.

One of the conditions for building the synagogue was that its services should not interfere with Christian worship services. For this reason, it was constructed at a considerable distance from the street. As a result, it now appears to stand directly on Synagogue Path, although this is actually the rear of the building, which was completed in 1739.

In 1792, a hurricane tore the roof off the synagogue. It was never repaired, and the building fell into decline, as did the Jewish community itself: by 1818 only five Jews remained on the island. The synagogue is a

two-story rectangular building, constructed largely of yellow IJssel bricks. The corners, along with the door and window openings, are framed in local natural stone. The twelve arched windows symbolize the twelve Jewish tribes. On the exterior, a stone staircase leads to the women's gallery on the upper floor. In 2005, a mikveh (ritual bath) was discovered within the synagogue grounds.

The heavily deteriorated walls were fully stabilized in 2001 as part of the Historic Core Restoration Project. As a result, the ruins now have a strikingly crisp appearance, despite the absence of a roof, windows, doors, or floor.

Dutch Reformed Church

On St. Eustatius, several adjoining rooms in Fort Oranje were originally used as a church. In 1701, the fort church contained five benches and a table for the minister. As early as 1742, plans were drawn up to build a proper church outside the fort. In 1755, the church – constructed of local natural stone – was opened. Its relatively spacious size by Statian standards reflects the growing prosperity of the period. It was destroyed in the November 1772 hurricane but rebuilt between 1775 and 1776. The church suffered further damage from natural disasters several more times thereafter.

When Marten Douwes Teenstra visited Statia in 1834, he described the church as follows:

“The Reformed Church is a low, half-cruciform structure [...] with a square tower 70 feet high, its upper section made of wood and topped with an octagonal blue roof. It is fitted with a clock. Both the church and the tower are white-plastered on the south side. The interior is lined with wood, very dark, and contains neither an organ nor any other ornamentation. This, together with the high benches and small windows, gives it a somber appearance. On the north end, where the cruciform section is located, the cliff-stone walls are black, covered with moss and grass. No services have been held in this church since 1817.”

In 2000 the surviving wall sections were consolidated as part of the Historic Core Restoration Project. The church ruins are occasionally used for open-air events.

Bethel Methodist Church

Methodism is a movement within Protestantism. It emerged around 1738 from the British Anglican Church with John Wesley's "Holy Club", which emphasized the importance of living a devoted Christian life. The Methodists were known for their support of the abolition of slavery. The Methodist congregation on St. Eustatius



[Fig] Dutch Reformed Church.

was founded in the 1780s by the formerly enslaved man known as "Black Harry". Despite severe personal persecutions, his following continued to grow, particularly among the enslaved and formerly enslaved.

Methodism is the largest religious group on the island, with two congregations: Bethel and Jeems. The Bethel Methodist Church dates to 1848. It was built to replace a chapel that had been destroyed shortly before by a strong earthquake. A tower was added later, in 1896. Above the door is a stone engraved with "JJvP", in reference to John James van Putten, one of the community's most prominent members at the time. The tower contains a bell cast in London in 1894.



[Fig top] Bethel Methodist Church.

[Fig below] The Bethel Methodist Church, 1947. (photo: National Archives)

[Fig] Roman Catholic Church, 1947. (photo: National Archives)



The church is a substantial structure built of local natural stone. All exterior windows are arched with semicircular fanlights. On the ground floor, the windows are fitted with heavy shutters.

Catholic Church

From 1836 onwards, the Catholic mission on St. Eustatius was pursued in earnest under the direction of Monsignor Martinus Niewindt, Apostolic Prefect of Curaçao. A house near the synagogue and the Dutch Reformed Church was rented and then purchased in 1843. In 1845, the priest exchanged this building for the former home of Commander de Windt at the edge of the cliff. He sold his previous residence because he feared it might collapse over the nearby steep cliff. The building was later demolished, but remnants of its walls can still be seen to the west of the present church.

The Catholic Church on Statia is part of the Diocese of Willemstad on Curaçao. Today, approximately 23 percent of the population is Roman Catholic, making it the second-largest religious group after the Methodists (25 percent). The current church building was erected in 1910. It is modest in size – rather narrow, with an elongated gable roof. The side walls feature arched window openings with wooden shutters. The small bell tower disappeared at some point, either due to a storm or structural failure. In the 1980s,

[Fig] Roman Catholic Church with concrete tower. (photo: Michael A. Newton)



[Fig] Roman Catholic Church after restoration.



a rectangular concrete open tower was added to the front façade. During the most recent restoration in 2023–2024, the top of this tower was removed, and the cross was placed on the front façade.

Simon Doncker House

The Simon Doncker House dates to the first half of the eighteenth century. The property’s history goes back to the plantation residence originally named “Doncker’s Nieuwe Tempel”. It appears under that name on the earliest known detailed map of the island and is clearly marked on a plantation map drawn by Reinier Ottens in 1775. This house was the residence of Simon Simonse Doncker, a wealthy planter and merchant who lived from 1714 to 1796. The large plot, with this distinctive house at its center in Oranjestad,

functioned as a compound.

In the first half of the twentieth century, the owner at the time carried out several alterations. A rear extension – the so-called “Statia Room” – was added as a bedroom, and the upper-floor balcony was temporarily enclosed. Several outbuildings stood in the back garden. Directly behind the house was an old stone kitchen with a brick chimney, which was unfortunately demolished. There had also been a coach house. Several cisterns remain on the property. The compound almost certainly also included living quarters for enslaved people.

In 1983, the St. Eustatius Historical Foundation purchased the house to establish a museum. According to local

[Fig left and right] Front view of the Simon Doncker House, between 1905 and 1940. (photo: Wereldmuseum)

accounts, former Queen Beatrix supported the acquisition, making the museum possible. Restoration and the installation of exhibits took place over the next two years, and the museum officially opened on September 8, 1985. The exhibitions offer a comprehensive insight into life and history on the island.

Hill Compound

The Hill Compound consists of four buildings arranged around an enclosed courtyard and is the most authentically preserved compound on the island. The main building, also known as the “Old Library”, is a two-story structure likely dating from the first

[Fig top-to-bottom] The Old Library; main building of the Hill Compound from the 18th century.

Three Widows; 19th-century wooden house built in West Indian architectural style, 1995. (photo: RCE)

Inner courtyard of Hill Compound with wooden upper floors.



half of the eighteenth century, built partly of IJssel bricks and partly of local face-stone. A defining feature is the full-width wooden gallery on columns along the western façade, overlooking Fort Oranje. The most prominent building is the Three Widows, a nineteenth-century, single-story

wooden house and an excellent example of traditional West Indian architecture. Around 1920, Statia received a donation of about 750 books – mostly classics – from Mrs. Gertrude Schachner-Judson in the United States. This made it possible to open a library in 1922 on the upper floor of the Hill Compound’s main building. Over time, the collection grew to around 3,000 volumes. The library operated until 1980.

At the rear of the compound are two buildings that originally had two stories. In the first, the ground floor was built of yellow IJssel bricks with a wooden upper floor. The second was constructed of local face-stone, also with a wooden upper floor. By the early twentieth century, both wooden upper stories had disappeared, either from decay, storm damage, or a combination of the two.

In 2021, the long-vacant complex in the center of Oranjestad was acquired by PMCN, a subsidiary of the Caribbean Netherlands Pension Fund (PCN), which subsequently carried out a full restoration. The Old Library and the Three Widows were restored to their original state. On the third brick building, located on Kerkweg, the wooden upper story was completely reconstructed using historical photographs as a guide. The fourth building, with its face-stone walls, was stabilized.

Madam Theater

The Madam Theater was built between 1964 and 1966 by Statian Charles Arnold (1900–1992). After spending thirty years living and working abroad, he returned permanently to St. Eustatius in 1947. He became a farmer, cultivating crops and raising livestock. Two years before his permanent return, he had already conceived the idea of showing movies on Statia as entertainment for the island’s residents.

Charles Arnold had the movie theater designed by his cousin, who lived in the Dominican Republic. Its style was inspired by the Art Deco architecture common to many movie theaters across the Caribbean in the mid-twentieth century. Measuring over 13 meters wide and 5 meters high, the front facade in particular incorporates characteristic Art Deco elements, most visible in the vertical banding extending the full elevation. The four playing-card symbols above these bands add distinctive and playful touches. The curved wall on the left side of the façade and the rounded forms inside the ticket booth are also typical features of Art Deco design.

When television and later videotapes became commonplace and cinema attendance declined, Charlie repurposed the building for parties and disco nights.



Various groups could also use the space free of charge for their own activities. Later, he sold ice cream from a small room on the front terrace. Once the building had fallen into disrepair, it was even used for sports such as badminton. Eventually the complex was sold by Charlie’s descendants to the government. Due to the risk of collapse, the roof was removed. This remarkable building is currently undergoing restoration and will be adapted for multifunctional cultural use.

[Fig] Madam Theater’s front, designed in Art Deco style.

Appreciation and Protection

In contrast to the Netherlands (and other European countries), interest in built and archaeological heritage on the six islands of the former Netherlands Antilles emerged only gradually over the course of the twentieth century. The first initiative came in 1913. In that year Governor Nuijens

(1909–1919) established a monuments commission charged with describing all monuments on Curaçao and advising on their preservation. The other islands were likewise asked to collect information. Only St. Eustatius responded positively; the remaining islands declared that they possessed no monuments.

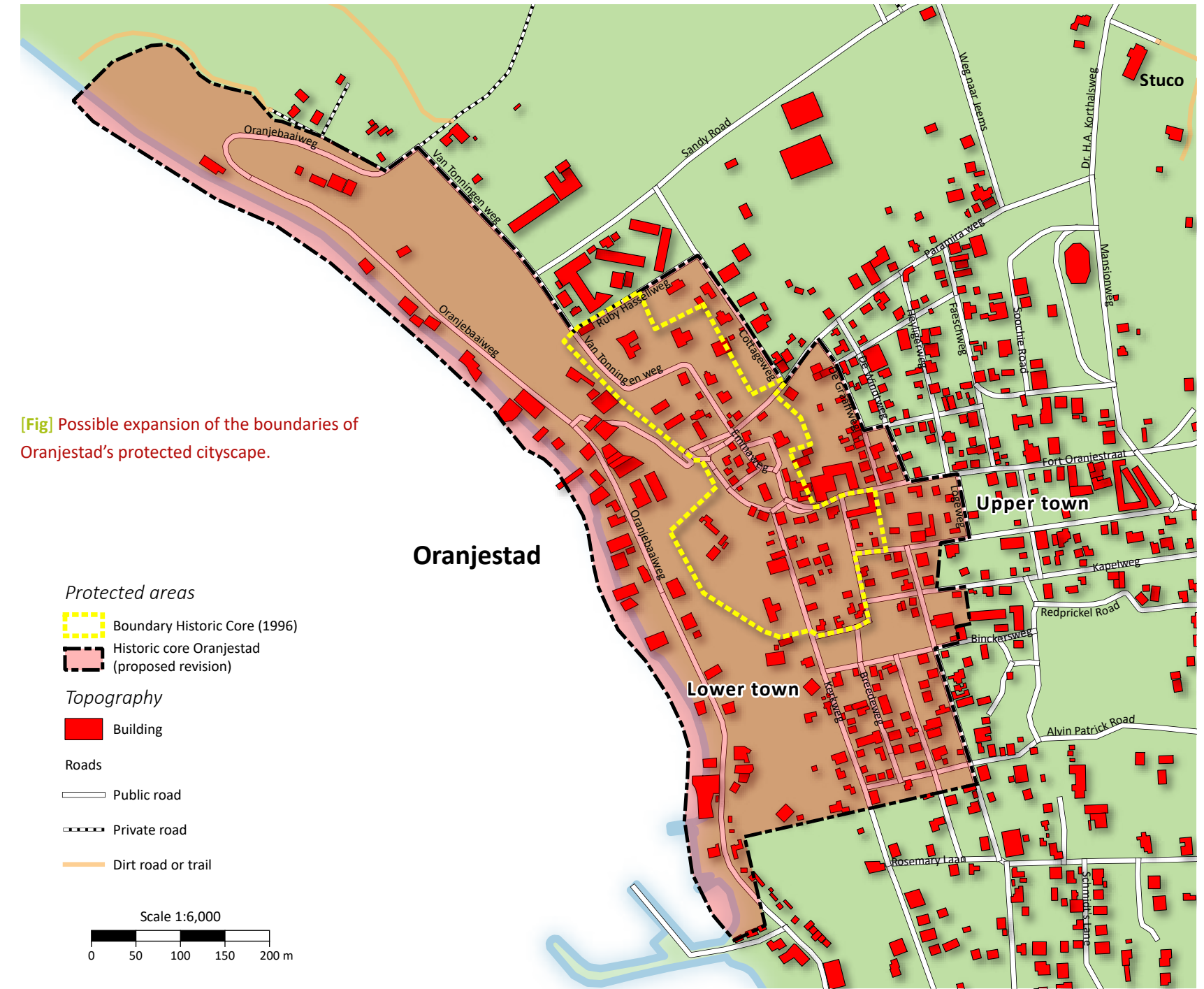
A first general inventory was conducted in 1967 by Dr. Ir. C.L. Temminck Groll. Nine years later, by then Professor of Restoration at the Delft University of Technology, he was asked by the government of the Netherlands Antilles to advise on heritage protection for St. Eustatius and the other islands. In Oranjestad, eight buildings were designated as A-monuments, while 51 structures in the Upper Town and ten in the Lower Town were classified as B-monuments. The resulting report, Facet Plan for Monument Care in the Netherlands Antilles, also included recommendations for establishing a comprehensive heritage policy across all the islands. Temminck Groll emphasized the need for external financial support, as Statia alone could not bear the cost of monument preservation.

Very little action was taken on the recommendations. Some initial restoration work did take place: in 1977 and the following years Fort Oranje was restored, followed by consolidation of the ruins of

the Dutch Reformed Church, the Simon Doncker House, and the Government Guesthouse. In 1988 a Spatial Development Plan for St. Eustatius was published, defining the boundaries of the historic core of Oranjestad. In 1996 a Development Plan for the Historic Core was adopted. Between 1998 and 2003, eighteen buildings within the historic center were restored or renovated.

However, these efforts did not result in a monument ordinance, an integrated heritage policy, or a dedicated governmental implementing body. A private organization – the St. Eustatius Monuments Foundation (SEMF) – was established, creating a Monuments Office. In 2008–2009, the foundation compiled the Monument Inventory of St. Eustatius, listing 110 protection-worthy sites across the island, each with a description and historical background. The inventory was presented to the Island Governor in 2009 and incorporated into the adopted Spatial Development Plan, providing the listed properties with formal protection.

In September 2023, the revised Spatial Development Plan for St. Eustatius was adopted. It once again included a list, now comprising 123 protection-worthy sites. While this does not grant them legal monument status, it does provide a



[Fig] Possible expansion of the boundaries of Oranjestad's protected cityscape.

level of protection within the framework of spatial planning. A permit is required whenever culturally, archaeologically, or geologically valuable sites may be affected, relocated, or wholly or partially removed (Article 33.1 Development Permit). These planning frameworks have so far ensured that the historic character of the old town – both Upper and Lower – has been largely preserved.

Since 2020, St. Eustatius has also legislative protection for monuments. The Monuments Island Ordinance originates from the 2010 BES Monuments Act and aims to safeguard monuments and historic townscapes. Work is currently underway on a future “Protected Townscape Oranjestad”, with plans under consideration to expand the existing historic core. This applies to both the Upper Town and the Lower Town, with the new boundaries potentially extending as far as Fort Amsterdam.

A key focus – perhaps even more important than the protection of individual monuments – is preserving the historic character of the settlements in relation to their surrounding landscape. The scale of new development has grown considerably, and in recent years, an increasing number of hotels and a resort have been built on St. Eustatius. To maintain the character of Oranjestad within its landscape, it

is essential to take cultural-historical values into account. Only in this way can the identity of this unique Caribbean island, with its distinctive architecture, be preserved.

[Fig] Fort Oranje



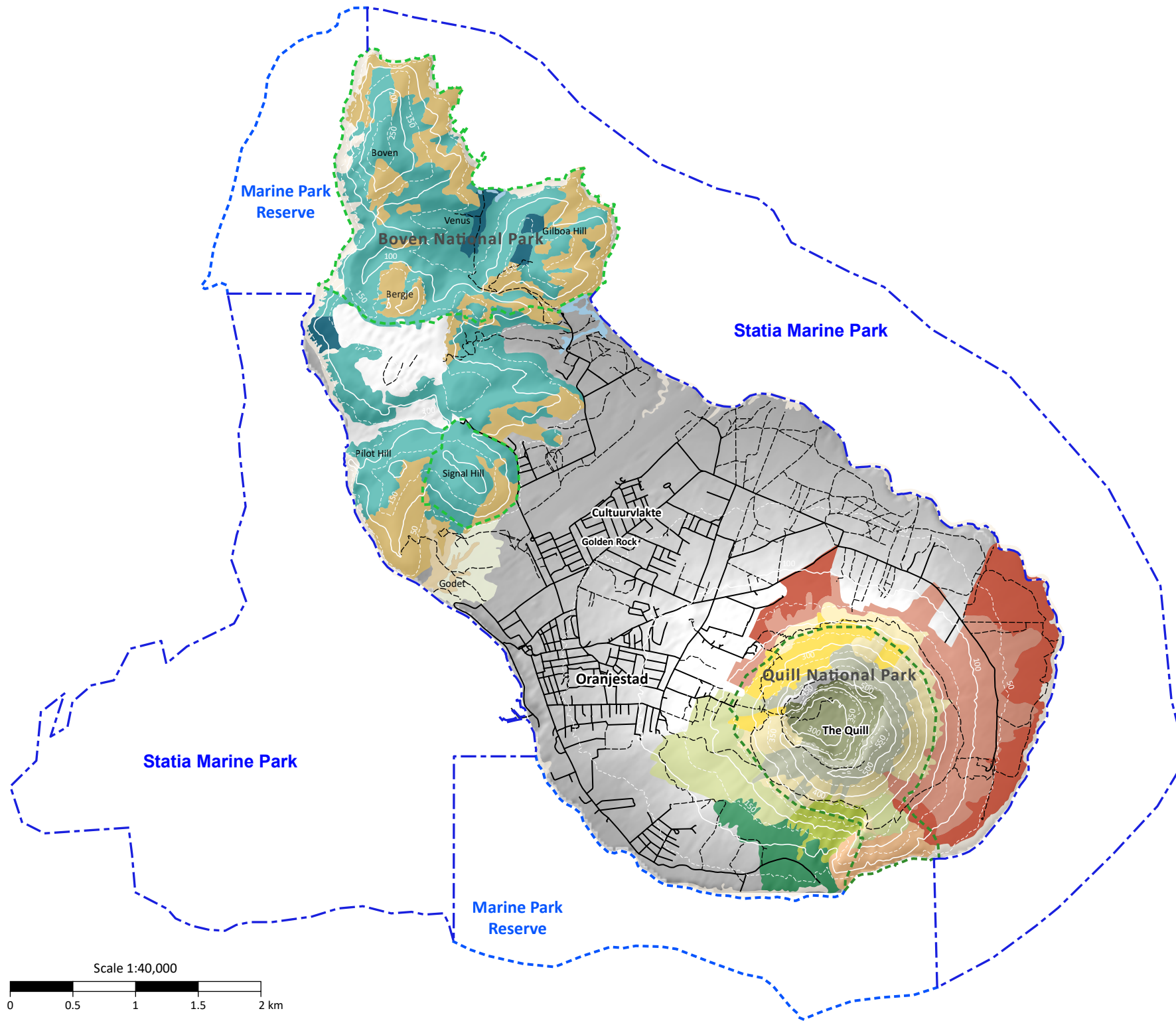


[7] STACEY MAC DONALD

NATURE AS CULTURAL HERITAGE

St. Eustatius is an island of just 21 square kilometers that holds remarkable historical significance and natural richness beyond what its modest size might suggest. Once called the Golden Rock for its lively eighteenth-century trade economy, this volcanic island also holds a different kind of treasure: a rich diversity of ecosystems packed into its compact terrain, from the tropical rainforest within the crater of the dormant Quill volcano to seagrass beds and coral reefs surrounding its shores.

[Fig] Statia viewed from above. (photo: Ruud Stelten)



[Fig] Map of the vegetation zones.

Protected areas

Statia Marine Park

Protected_areas

Boven National Park

Quill National Park

Contour lines

50m line

100m line

Topography

Roads

Public road

Dirt roads and trails

Vegetation

Dutch Caribbean Vegetation Database

Vegetation - 2014 Freitas et al.

- B Cocoloba Beach
- C Cocoloba-Bothriochloa Cliffs
- EXX explosieven gebruikt
- H1 Pisonia - Justicia Hills
- H2 Pisonia -Bothriochloa Hills
- L1 Pisonia-Antigonon Lowlands
- L2 Bothriochloa-Antigonon Lowlands
- M1 Myrcia-Quararibea Mountains
- M2 Cocoloba-Chionanthus Mountains
- M3a Chionanthus -Nectandra Mountains, high variant
- M3b Chionanthus -Nectandra Mountains, low variant
- M4 Capparis-Pisonia Mountains
- M5 Pisonia-Eugenia Mountains
- M6 Capparis-Antirhea Mountains
- M7 Pisonia-Antirhea Mountains
- M8 Antirhea-Cocoloba Mountains
- M9 Rauvolfia-Antigonon Mountains
- NS Not surveyed

Despite its modest size, Statia harbors several distinct ecological zones. It serves as a crucial refuge for endangered species like the Lesser Antillean Iguana and endemic plants. The island's diverse topography, ranging from the towering Quill volcano in the south to the rolling Northern Hills and the flat Cultuurvlakte between them, creates a mosaic of habitats that have sustained both wildlife and human communities for centuries.

For generations, Stadians have lived intimately with their landscape. People cultivated fruit trees, gathered bush medicine, sought refuge in the mountains, fished the surrounding reefs, and allowed livestock to roam freely across the terrain. These practices reflect not just adaptation to a challenging environment, but a cultural relationship with the land that has shaped identity, tradition, and daily life on the island. Many Stadians see their natural environment not just as background scenery, but as true cultural heritage. Something of value and use and to be passed down through generations.

This chapter explores three interconnected themes: first, we'll examine Statia's natural diversity and the ecosystems that make this island special. Then we'll look at how this natural environment shaped Stadian society and culture over centuries. Finally, we'll



consider how human activity has changed the island's ecosystems and what's being done today to balance conservation with community needs and cultural heritage.

Statia's Natural Wealth

Statia's landscapes tell a story written in volcanic rock and shaped by millions of years of geological forces. The island emerged from the Caribbean Sea through successive periods of volcanic activity, creating the distinctive terrain that defines its character today. The southern half is dominated by the Quill, a dormant stratovolcano whose crater shelters the island's most lush and biodiverse habitats. To the north, older volcanic formations including Boven and Signal Hill create drier, more exposed conditions. Between these contrasting regions lies the Cultuurvlakte, a relatively flat area that has borne the brunt of centuries of human settlement and agriculture.

Twelve distinct ecological zones are identified across Statia's compact terrain. Each has its own character and importance to both wildlife and people.

The first important ecosystem, the montane forest, covers the upper slopes of the Quill from about 250 meters above sea level and

[Fig] Tropical Dry Forest.

undergoes striking transitions as elevation and exposure change. The vegetation shifts from thorny woodland below to montane thickets and dry evergreen forest on the northwestern slopes. Here, epiphytic bromeliads form in abundance while larger trees such as the silk cotton tree develop distinctive buttress roots that help them anchor to steep volcanic slopes. The forest canopy includes white cedar, locust tree, and the culturally significant gum tree. This diverse forest community provides essential habitat for many of the island's bird species while preventing soil erosion on the volcano's steep flanks.

FEATURED

The Disappearing Cloud Forest

Up until 2017, the highest rim of the Quill used to have a small cloud forest habitat. As one of the Caribbean's most specialized ecosystems, the rim towards Mazinga peak used to be dominated by balsam and copey vera, creating a dense canopy. Persistent mist and high humidity supported elephant ears and create ideal conditions for epiphytic orchids and mosses. However, hurricane damage, invasive plant species and presence of feral grazers have resulted in a decline of this fragile ecosystem.

The descent to the Quill's crater floor reveals one of the Caribbean's most remarkable forest ecosystems: a hidden



[Fig] Inside the Quill Crater.

evergreen seasonal forest closely related to tropical rainforest. The highest trees reach around 40 meters, creating a cathedral-like canopy. This forest is dominated by silk cotton trees, yellow plum or mombin, and the distinctive trumpet wood with its large lobed leaves bearing silvery-white undersides. This rich understory supports epiphytic ferns, mosses, bromeliads, and wild banana. Human influence is also visible in the form of cultivated plants like cocoa trees, reflecting centuries of human interaction with this protected ecosystem. The crater's sheltered position and rich volcanic soils create growing conditions



[Fig] Bromeliads on tree branches on the inside of the crater.

[Fig right] Statia Morning Glory, the rarest plant within the Kingdom of the Netherlands. (photo: Pauline Raimbault)

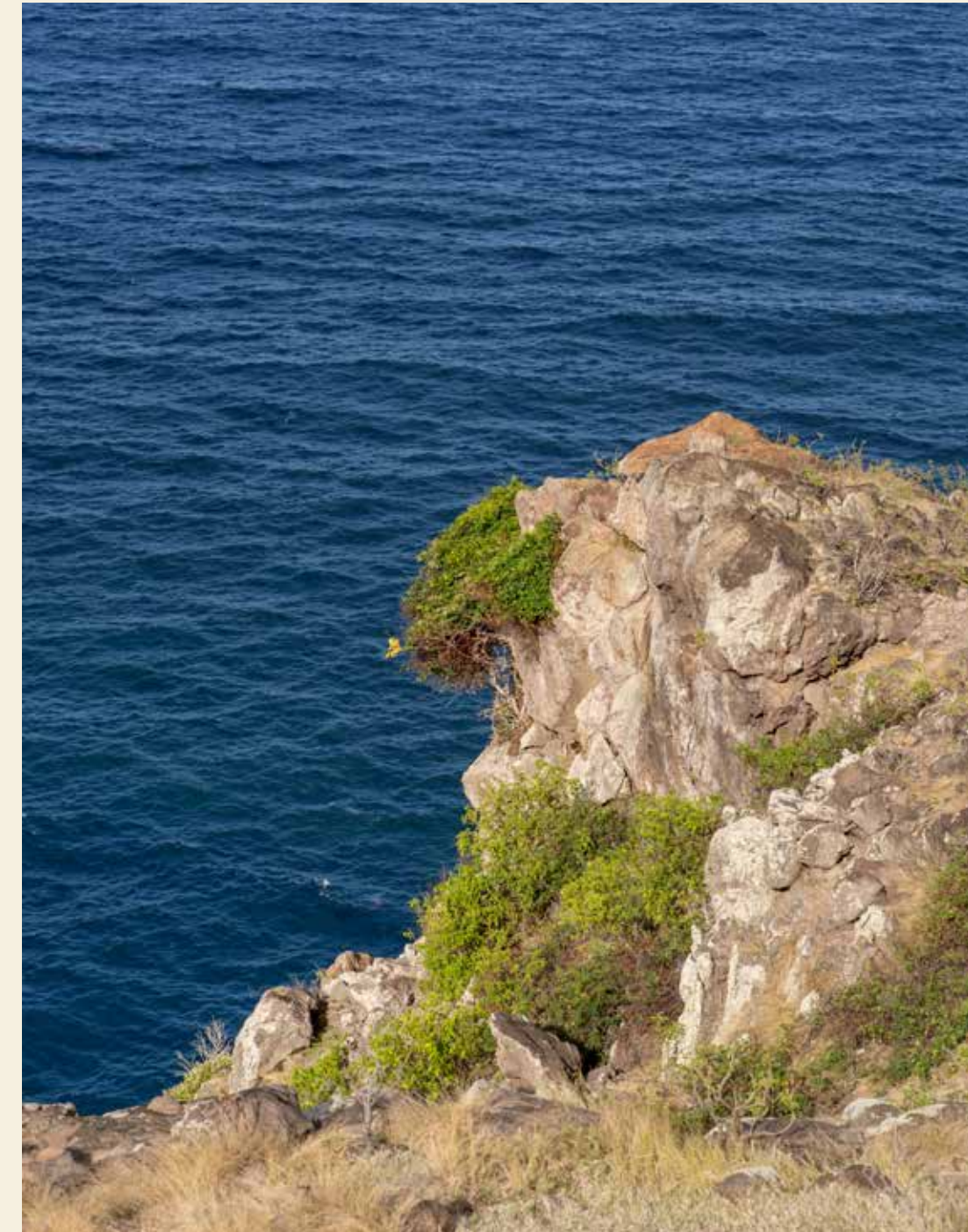
more typical of much larger tropical islands, making this small patch of rainforest a biological treasure trove.

On the lower outer slopes of the Quill and throughout the Northern Hills, are home to Tropical Dry Forest and hold the legacy of agricultural activities has created thorny woodland communities dominated by hardy, drought-adapted species. This vegetation presents a stark difference to that found on the Quill, as the most abundant plants include acacias, the culturally significant Christmas tree, and Mimosa. The western slopes support

West Indian cherry, blackberry, sugar apple, and mappoo. The eastern slopes feature additional arid vegetation including various Capparis family species alongside the omnipresent acacias. This ecosystem demonstrates how human land use has shaped vegetation patterns while still providing habitat for specialized wildlife adapted to seasonal drought conditions.



The Northern Hills also showcase some of Statia's most challenging growing conditions, where arid conditions give rise to sparse, thorny vegetation. The landscape here is dominated by hardy grasses, drought-resistant cacti, and thorny woodland species. They can survive intense sun exposure and limited water availability. Despite the harsh appearance, these habitats support notable biodiversity, including the island's endemic Statia Morning Glory, a creeper vine that can be found climbing through vegetation on Bergje and Signal Hill.



[Fig] Vegetation on the rocky northern coast.

Stretching across the nearly flat volcanic footplain between the Quill and the Northern Hills, the Cultuurvlakte represents approximately 25 percent of Statia's surface. This lowland area, ranging from 10 to 80 meters above sea level with an average elevation of 40 meters, takes its name from its historical use as farmland. Centuries of agriculture, livestock grazing, and the introduction of invasive species have dramatically transformed this landscape, leaving only small remnants of semi-natural vegetation. The most intact patches survive in the coastal areas around Billy's Gut on the northwestern coast. Here, the plain meets the sea through gullies rather than the steep cliffs that characterize most of Statia's coastline. A distinctive mosaic vegetation pattern emerges. Scattered groups of relatively tall trees, including the native Pisonia, rise above a low shrubland where invasive vines like Coralita (*Antogonon leptopus*) and dense stands of grasses compete for space. Despite heavy grazing pressure and ongoing disturbance, these resilient lowland communities demonstrate nature's persistence in recovering from centuries of human influence, while the broader Cultuurvlakte continues its role supporting limited agriculture and cattle grazing that sustains local livelihoods.



[Fig] A diver within the Statia Marine Park. (photo: Ruud Stelten)

Along exposed beaches, cliffs, and low-lying coastal areas, sparse but highly specialized vegetation consists of hardy, salt-tolerant plants adapted to constant wind and salt spray. Species like Sea grape and the distinctive but toxic manchineel tree have evolved remarkable adaptations to survive in this challenging environment. These coastal plant communities help stabilize cliffs and sand dunes and provide the first line of defense against storm surge and erosion.

Statia's terrestrial diversity is matched by equally rich marine environments that extend the island's ecological influence far beyond its shoreline. Coral rubble beaches, volcanic sand shores, and limestone coastal formations provide critical nesting sites for sea turtles and diverse habitats for crabs, conch shells, and other marine invertebrates.

Shallow, protected waters support extensive seagrass beds that serve as nurseries for juvenile reef fish while providing crucial feeding grounds for endangered green and hawksbill sea turtles. The island's coral reefs have developed on a variety of volcanic substrates, including volcanic bombs, lava blocks, and solidified lava flows shaped like fingers extending from the seafloor. A third reef type has formed on the remains of shipwrecks dating from the 1700s, creating artificial reefs that now support thriving marine communities. This represents a unique fusion of natural processes and human history.

How Nature Shaped Statian Life and Culture

On Statia, as on many small Caribbean islands, the relationship between people and nature has always been one of dependence and mutual adaptation. The island's isolation, challenging terrain, and limited resources created a society built on resilience, ingenuity, and deep knowledge of local environmental conditions.

For generations, Statian families cultivated a rich diversity of fruit trees that served as both practical necessities and cultural anchors. Introduced and native species, including mango, tamarind, guava, West Indian cherry, and genip trees, provided more than just food. These trees became community gathering places, natural property markers, and enduring symbols of family heritage. Their canopies created cool, shaded refuges where children played, adults socialized, and elders shared stories, weaving themselves into the very fabric of daily life and community identity.

The island's tradition of maintaining medicinal plants reflects generations of accumulated ecological wisdom. Families cultivated and harvested soursop, elderflower, and blackberry leaves for home remedies, passing down knowledge about optimal harvesting times, preparation methods, and therapeutic applications.



[Fig] The Caribbean hermit crab. (photo: Guillermo Guerao Serra/Shutterstock.com)

This "bush medicine" tradition represented more than healthcare. It embodied a deep understanding of plant ecology that connected families to the rhythms of their environment.

Like fruit trees, livestock played, and continues to play, a central role in both sustenance and social identity. As one resident recalled, the number of animals a family owns serves as a visible marker of wealth and status, even as these animals roam freely across the landscape. The island's food traditions extended beyond cultivated species to include native wildlife. The abundant hermit crabs, or Soldier crabs as they are called by Stadians, inhabiting the Quill and surrounding areas were also considered a delicacy. Families organized cooperative expeditions to



[Fig] The queen conch. (photo: Rachel Rowland/Shutterstock.com)

collect these crabs, particularly the larger females, from the mountain slopes. While some family members ventured up the mountainside for collection, others remained at home preparing the stock for boiling the gathered crabs.

Marine resources complemented these terrestrial food sources through fishing practices refined over generations. Families developed sophisticated knowledge of seasonal patterns, weather indicators, and fish behavior, enabling them to harvest from coastal waters. The Queen Conch, for example, is a species that was and continues to be regularly consumed.

The island's unpredictable climate and challenging growing conditions fostered a culture of diversification and careful



resource management. Rocky, erosion-prone soils and seasonal droughts made farming difficult, while hurricanes could destroy entire harvests overnight. These environmental pressures encouraged families to spread their risks across multiple food sources, creating resilient communities adapted to environmental uncertainty. Water management became a cultural practice, with families learning to maintain cisterns, and stretch resources through dry seasons. Traditional building practices incorporated understanding of wind patterns, drainage, and storm protection, reflecting generations of learning how to live safely in a dynamic tropical environment.

Beyond material sustenance, Statia's landscapes have always provided essential space for reflection, recreation, and community bonding. Hiking the Quill became a rite of passage for young Stadians, offering both physical challenge and spiritual connection to the island's most iconic natural feature. The volcano's trails and crater, as well as the spaces in Zeelandia beach and Concordia Bay overlooking the Atlantic Ocean, provided escape from the intensity of small-island life, creating space for contemplation and renewal.

[Fig] Few people still collect the fruit of the tamarind tree.

Traditional gathering places under large tamarind or mango trees served as outdoor community spaces where elders played dominoes, families shared stories and meals, and children learned social skills. At night, some believe the trees house spirits and should be left at peace. These natural social spaces fostered community cohesion while reinforcing connections between human activities and the natural environment that sustained them.

Human Impact on Statia's Natural World

While Statia's natural environment shaped human society, centuries of human activity have equally transformed the island's ecosystems. The cumulative effects of agriculture, settlement, introduced species, and changing land use practices have created both challenges and opportunities for biodiversity conservation.

While precolonial Amerindian inhabitants made some impacts through harvesting trees for canoes and dwellings, practicing cultivation of crop species, and introducing new plant and animal species as food sources, their influence was minimal compared to the transformations that followed European colonization. The most dramatic changes to Statia's ecosystems occurred during the plantation era of the seventeenth and eighteenth century, when



the island's "Golden Rock" economy drove extensive clearing of native forests for sugar, cotton, and coffee cultivation. Vast areas of dry tropical forest and montane forest were converted to agricultural land. This fundamentally altered the island's vegetation patterns and wildlife habitat. This period of intensive land use left lasting scars on the landscape, reshaping ecosystems in ways that remain visible today.

This colonial transformation created lasting legacies in both the landscape and the soil. Many areas that appear to be mature forest today are actually secondary growth recovering from historical clearing. The rich volcanic soils of the Cultuurvlakte bear the traces of intensive agriculture. Abandoned

[Fig] The Cultuurvlakte.

plantation sites scattered across the hillsides continue to influence vegetation patterns through altered soil chemistry and hydrology. While the plantation era has ended, its ecological consequences set the stage for ongoing pressures that continue to shape Statia's ecosystems.

Modern impacts on Statia's biodiversity operate at a smaller scale but with persistent effects. Building on centuries of land alteration, free-roaming livestock – particularly goats, sheep, and donkeys – continue to exert pressure on native vegetation through overgrazing and soil compaction. These animals prevent forest



[Fig] Free roaming goats eat away vulnerable vegetation.



[Fig right] The invasive coralita vine smothering landscape.

regeneration by consuming young seedlings and create pathways for soil erosion on steep volcanic slopes, particularly in areas already compromised by historical land use.

The impact of grazing is most visible in areas where former dry tropical forest has been reduced to shrubland and grassland. While some of these open habitats represent natural climax vegetation adapted to harsh conditions, others clearly show signs of degradation where diverse forest ecosystems have been simplified into low-diversity grass and shrub communities. Beyond grazing pressure, invasive plant species pose increasingly serious threats to native ecosystems. The Coralita vine, an aggressive climbing vine, smothers native shrubs and trees throughout dry forest and shrubland areas, fundamentally altering forest structure and species composition.

This invasion is facilitated by habitat disturbance from grazing and human activities, creating a feedback loop where degradation enables further invasion, which in turn causes more degradation.

Compounding these biological threats, growing contemporary development initiatives add further pressure to already stressed ecosystems. While modest compared to larger Caribbean islands, these developments create cumulative impacts on Statia’s small but diverse ecosystems. Road construction, housing development, and infrastructure expansion fragment remaining forest habitats and create edge effects that favor invasive species over native ones. Residents recall the island being densely forested, stating that nowadays over 60 percent of the trees are no longer there *“all for the sake of*

progress”. And they note: *“What value has progress if we can no longer breathe clean air?”*

These ecosystem-level changes cascade to individual species, with several of global conservation significance now facing mounting pressures from habitat loss and degradation. Despite its small size, Statia harbors remarkable biodiversity that deserves protection. The Lesser Antillean Iguana maintains what may be its largest remaining pure population on the island. However, even here it faces threats from habitat loss and the danger of hybridization with invasive green iguanas from neighboring islands.

Endemic plant species, including the Statia Morning Glory and several unique snail species, survive in increasingly fragmented habitats as development and invasive species reduce available space. The island’s endemic red-bellied racer snake and bridled quail-dove depend on forest habitats that have been significantly reduced over time. The decline of forest habitats continues to be accelerated by the increasing impacts of climate change, with hurricanes posing particularly severe threats.

Beyond terrestrial ecosystems, the marine environment faces its own suite of conservation challenges. Regional



[Fig] The Lesser Antillean Iguana.

coral diseases, climate change impacts, and coastal development threaten reef ecosystems that support both biodiversity and traditional fishing practices. Sea turtle nesting beaches face pressure from coastal construction, artificial lighting, and sand mining, while seagrass beds suffer damage from boat anchors and coastal run-off. Despite these challenges, Statia’s ecosystems show resilience when given opportunity to recover. The establishment of the Quill/Boven National Park has provided protection for approximately 18 percent of the island’s terrestrial area, allowing forest recovery in previously degraded areas and providing refuge for native wildlife.

Reforestation efforts, particularly the tree planting projects along Zeelandia Beach, demonstrate both community commitment to environmental restoration and the potential for degraded ecosystems to recover with appropriate intervention. These projects not only restore habitat for wildlife but also reconnect community members with conservation efforts through hands-on participation.

Marine conservation efforts have shown promising results, with marine protected areas supporting recovery of fish populations and coral reef communities. Community-based monitoring programs engage local residents in tracking ecosystem health while building understanding and support for conservation efforts.

Balancing Conservation and Community Today

The relationship between Statian society and conservation represents a complex evolution of attitudes and practices. Historically, many residents viewed nature primarily through a utilitarian lens, seeing trees and land as renewable resources that would regenerate naturally. This perspective, shaped by both necessity and colonial patterns of resource exploitation, led to practices that prioritized immediate needs over long-term environmental health. However, beneath these utilitarian

approaches lay deeper cultural connections to specific places and species. The continued reverence for heritage fruit trees, the protection of certain medicinal plants, and the growing cultural significance of native iguanas and sea turtles reveal enduring bonds between community identity and natural heritage.

The establishment of the Quill/Boven National Park in 1998 and contemporary environmental education programs have begun to reframe these relationships, encouraging residents to see conservation not as external imposition but as protection of cultural heritage. This shift represents an ongoing negotiation between traditional practices, contemporary conservation science, and evolving community values. The present-day relationship between Stadians and their natural environment reflects both the persistence of traditional connections and the pressures of rapid social and economic change. As the island navigates between conservation priorities, development needs, and cultural heritage, new challenges and opportunities continue to emerge.

Traditional ecological knowledge systems that once guided sustainable land use are experiencing significant erosion as economic priorities shift toward wage labor and imported goods. Fewer families

maintain extensive fruit trees, young people have limited knowledge of bush medicine preparation, and farming practices are increasingly abandoned in favor of purchased foods. This knowledge erosion represents more than just a loss of skills. It reflects the breaking of cultural connections that once bound families and communities to their natural environment.

Yet alongside this erosion, positive developments offer reasons for optimism. Species once considered primarily as food sources are now culturally valued and receive growing community support for protection. Sea turtles exemplify this transformation most clearly. Through dedicated education and awareness programs, cultural shifts in community norms and values have fundamentally changed how these marine creatures are perceived, moving them from dinner table to conservation priority. This demonstrates that attitudes can evolve when conservation efforts align with community values and education.

The establishment of formal conservation programs has created both opportunities and tensions within the community. While many residents support protecting Statia's unique natural heritage, conservation policies can sometimes feel disconnected from local realities and traditions,



[Fig] A garden wall made of queen conch shells.

particularly when they restrict access to areas that families have used for generations. Finding approaches that honor both ecological needs and cultural practices remains an ongoing challenge.

These conservation challenges are compounded by climate change, which intensifies existing environmental pressures while creating new threats to both natural ecosystems and human communities. Rising

temperatures and changing precipitation patterns stress native plant and animal communities adapted to specific climatic conditions. More frequent and intense hurricanes cause increasing damage to forests, reefs, and coastal habitats that require progressively longer recovery periods between storms.

Despite these mounting pressures, the greatest opportunity for addressing

contemporary challenges lies in developing approaches that integrate traditional ecological knowledge with modern conservation science. Elders' understanding of plant ecology, weather patterns, and sustainable resource use provides valuable insights that can inform contemporary conservation strategies. Community-based monitoring programs that engage local residents in tracking ecosystem health while drawing on traditional observation skills represent promising models for collaborative conservation that bridges the gap between scientific and cultural approaches.

As one community member reflected: *"We've always lived with this land and this sea. The challenges are different now, but the connection is still there. We just need to find new ways to honor both what we've inherited and what we need to preserve."* This sentiment captures the essence of Statia's path forward. Not abandoning tradition for conservation or vice versa but finding innovative ways to weave them together.

Lessons from the Past, Hope for the Future

The story of St. Eustatius is ultimately one of resilience. Ecological resilience that has maintained extraordinary biodiversity within a small volcanic island,

and cultural resilience that has sustained human communities through centuries of environmental and economic change. As the island faces contemporary challenges from climate change, development pressures, and social transformation, its future depends on strengthening the partnerships between nature and culture that have always defined life on Statia.

Historical experiences offer valuable guidance for contemporary challenges. Traditional practices such as mixed fruit tree cultivation, water harvesting, and seasonal resource management demonstrate time-tested strategies for living sustainably within environmental constraints. The cultural significance of heritage trees, medicinal plants, and native wildlife provides foundations for conservation approaches that resonate with community values and identity. These historical practices are not relics of the past but living examples that can inform present-day solutions.

Building on this traditional knowledge, islanders are actively working to revive ancestral practices and pass them on to new generations. Recognizing the significant loss of vegetation over recent decades, community members have launched initiatives to replant the island, cultivating fruit trees, flowering plants, and edible crops – including sweet potatoes



and other root vegetables – that provide both sustenance and self-reliance while restoring shade and natural beauty to the landscape. These reforestation efforts are demonstrating the potential for land recovery, though they have also sparked important debates about managing free-roaming livestock. While many islanders view these animals as part of their cultural heritage, protecting regenerating forests requires finding a balance between tradition and ecological restoration.

Nature itself demonstrates that recovery is possible. The island's regeneration from historical plantation clearing shows the remarkable capacity of tropical ecosystems to heal when given opportunity and protection. Similarly, the persistence of endemic species and unique habitats despite centuries of pressure demonstrates

the biological resilience that makes conservation efforts both feasible and worthwhile. These examples of natural recovery provide hope and practical evidence that restoration investments can succeed.

Recent conservation initiatives demonstrate promising approaches for balancing ecological protection with community needs. The establishment of the Quill/Boven National Park provides a model for protecting critical habitats while maintaining access for cultural and recreational activities. Educational programs that connect schoolchildren with their natural heritage help ensure that environmental knowledge and conservation values pass to future generations who will become the island's next environmental stewards. These programs create bridges between

[Fig left] Grazing goats.

[Fig right] Young trees planted by the 'Reforestatia' project.



traditional knowledge and modern conservation understanding.

The integration of traditional ecological knowledge with modern conservation science offers particularly promising opportunities for Statia. Community-based approaches to invasive species control and habitat restoration can achieve conservation goals while providing employment opportunities and strengthening social connections to the land. Tourism development that emphasizes natural heritage and cultural traditions can provide economic incentives for conservation while celebrating the unique character that makes Statia special. These integrated approaches recognize that conservation and community wellbeing are interconnected rather than competing priorities.

As the island moves forward, the relationship between people and place that has sustained life on Statia for centuries provides both foundation and inspiration. The challenges ahead are substantial: climate change, habitat loss, and economic pressures demand thoughtful, sustained responses. Yet Statia's history demonstrates that communities rooted in their natural environment, drawing on both ancestral wisdom and innovative approaches,

[Fig] Signage of nature walks.

possess the resilience to navigate change. The path forward lies not in choosing between conservation and community, but in recognizing that the future of both depends on continuing the partnership between people and nature that has always been Statia's greatest strength. In this partnership lies the promise that the Quill will continue to capture clouds and shelter endemic species, that the sea will continue to support marine life and island livelihoods, and that the people of Statia will continue to adapt and thrive by honoring both their natural inheritance and their cultural wisdom.



[8] SUZANNE LOEN

STATIA'S STRUGGLE WITH WATER

Small islands like St. Eustatius face particular challenges, especially due to the limited availability and vulnerability of natural resources such as freshwater. The island's unpredictable climate – with periods of both water scarcity and sudden excess – has driven its inhabitants to develop inventive solutions. Today, the island's traditional water knowledge, especially the harvesting and storage of rainwater, holds renewed relevance for its future.

[Fig] A large cistern at Crook's Castle.



[Fig] Remains of a cistern in the Lower Town, photographed in 1995. (photo: RCE)

The Natural Supply of Water

St. Eustatius has no freshwater pools, streams, lakes, or rivers. The island is simply too small, and its geological composition too unsuitable, for such natural water bodies to form. What Statia does have are “guts” – ravines and gullies that carry water only after sufficient rainfall. The forested slopes of the Quill play a crucial role in the island’s water system, absorbing rain and slowing run-off, whereas bare slopes retain water far less effectively. Especially during heavy rainfall, storms, and hurricanes, erosion and landslides present significant risks.

Traditionally, Statians relied almost entirely on rainwater collected in cisterns for drinking. Water from springs and wells along the coast and on the Cultuurvlakte was less suitable for consumption and was primarily used for household purposes, livestock, and during periods of extreme drought. In addition to rainfall, atmospheric moisture also plays an important role in Statia’s water system.

The interaction between humans and their environment shaped what can be called Statia’s “water culture”. The availability of freshwater changed over the centuries, influenced by climate, geology, and human activity. On small islands, the impacts of land use are amplified: hunting, farming, deforestation, and settlement significantly altered the island’s soil, vegetation, and water system. Scarcity of drinking water gave rise to characteristic practices, such as terraced farming and rainwater harvesting in cisterns.

Today, Statia’s drinking water comes from desalinated seawater. This supply is costly and highly vulnerable to storms and hurricanes, which are occurring more frequently due to the climate crisis. Meanwhile, demand for water grows with population increase and tourism. The island’s traditional knowledge of how to capture and use scarce rainfall is therefore



[Fig] Rainwater collected from a roof into a traditional cistern at a house in Oranjestad.

more relevant than ever. Preserving and fostering this local expertise enhances Statia’s resilience and helps the island cope with drought, water scarcity, and flooding.

Discussions about Statia’s unpredictable weather go back centuries. Many older residents recall that it used to rain more often, while others insist the climate was always capricious. What is certain is that the island was once largely forested. Deforestation after European colonization likely contributed to more erratic rainfall. A newspaper article from 1895 captures this concern: “... complaints increased about the rocky soil and the scarcity of water. Was this

scarcity caused by the continual removal of the tall trees, which, when the island was first occupied, covered the slopes of the cone to a considerable height and, as some claimed, attracted the clouds?” Statian Albertus J. Courtar puts it succinctly in 2025: “Trees attract rain; if you cut them down, the rain won’t come.”

Despite its small size, Statia exhibits strikingly varied climates. Lower areas – such as the Cultuurvlakte and the Northern Hills – experience a dry savanna climate, with high evaporation driven by the trade winds. At elevations above roughly 400 meters on the Quill, conditions grow more

humid: a monsoon climate prevails, and inside the crater a true rainforest climate dominates. Annual rainfall averages around 1,000 millimeters, yet prolonged droughts are common. Tropical storms and hurricanes, mostly occurring from August to October, can bring extreme rainfall in a short period – sometimes up to 200 millimeter – causing flash run-off and erosion. Statia continuously balances between water abundance and scarcity.

Pastor Speklé described the destructive hurricane that struck the island in 1928: “The town’s streets were unrecognizable – rivers of foaming, filthy water, trees across the roads, houses in the middle of the streets, roofs blown loose everywhere, and sheets of zinc blocking the drainage channels.” To survive such storms, people built hurricane shelters: sturdy structures with thick walls and a rounded vaulted roof. Residents also sought refuge in basements and churches, such as the Methodist Church. Statian historian Raimie Richardson recalls that many people stayed home to protect their property: “(...) only when the roof was blown off did you go to the shelters.”



[Fig] A hurricane shelter in Oranjestad. Only wealthy residents could afford one. (photo: Suzanne Loen)

FEATURED

The Quill, the green water tower of Statia

The Quill is invaluable to Statia – not only for its striking appearance and exceptional biodiversity, but also for its central role in the island’s water system. In the Caribbean, forested volcanic mountains like the Quill are regarded as “natural water towers”.

Around the top, an estimated 1,500–2,000 millimeters of rainfall is produced annually by orographic precipitation. Moist air carried by the northeast trade winds is forced upward against the mountain,

cooling as it rises and forming clouds, mist, and rain.

The summit and crater of the Quill are humid, supporting tropical rainforest within the crater. The forest keeps the mountain cool, and its dense root systems help retain water. Intercepted moisture



[Fig] The European Dutch politician H. van Kol conceived the idea of turning the Quill into a literal water tower: “Originally, I cherished the hope that the crater might serve effectively as a rainwater reservoir.” During a visit in 1903 he realized the idea was not feasible.

– rainfall captured on leaves and trunks – is crucial for the island’s flora and fauna and continuously nourishes the soil. This infiltrated water also helps maintain soil moisture even in drier areas of the island. Recent research suggests that the northern slopes of the Quill contribute to recharging the freshwater lens beneath the Cultuurvlakte.



[Fig] Forest vegetation has a vital function in regulating the water system. Most deforestation took place to create plantations in the 17th century, but it continued in the 19th and 20th centuries. One driver was fuel. The image depicts charcoal burners in an acacia forest near Schotsenhoek on St. Eustatius in 1920. (photo: Leiden University Libraries)



[Fig] The vegetation on the top and inside the crater absorbs moisture from mist and fog, allowing the area and soil to remain damp during dry periods.

Water and Islanders through Time

Freshwater availability on a small island is always vulnerable. Over the centuries, each population group developed its own strategies for managing water and the landscape.

The Amerindian communities traveled between islands in small groups, temporarily settling where food, resources, and especially freshwater were available. Their archaeological sites are therefore often found near coastal springs and sources on the Cultuurvlakte. From the seventeenth century onward, European colonists settled on Statia. Both colonists and enslaved people relied on two water sources: wells and rainwater. Wells were located along the coast and on the Cultuurvlakte. On the Cultuurvlakte, the sun and wind quickly dried out the soil. Eventually, even the cooler and more humid mountain slopes were almost entirely converted into plantations.

Cisterns were built to harvest and store rainwater. These sealed stone reservoirs were built at boat landing sites, plantations, homes, warehouses, and forts. Many survive today, some in ruins and others still in use. Constructing a cistern was costly. Without one, residents relied on wells and



[Fig] A watering site for livestock at a brackish spring near the coast, 1964. (photo: Wereldmuseum)

government cisterns. During prolonged droughts, cisterns could run dry, leaving people reliant on well water, which was not really suitable for drinking. During prolonged droughts, well water often turned brackish. To alleviate shortages, water was imported from St. Kitts. Yet an early nineteenth-century report noted that even St. Kitts could run out: “During prolonged drought it has often been necessary to purchase water from the



[Fig] A cistern at Fort Oranje.



[Fig right] A ruin of a cistern in the Lower Town.

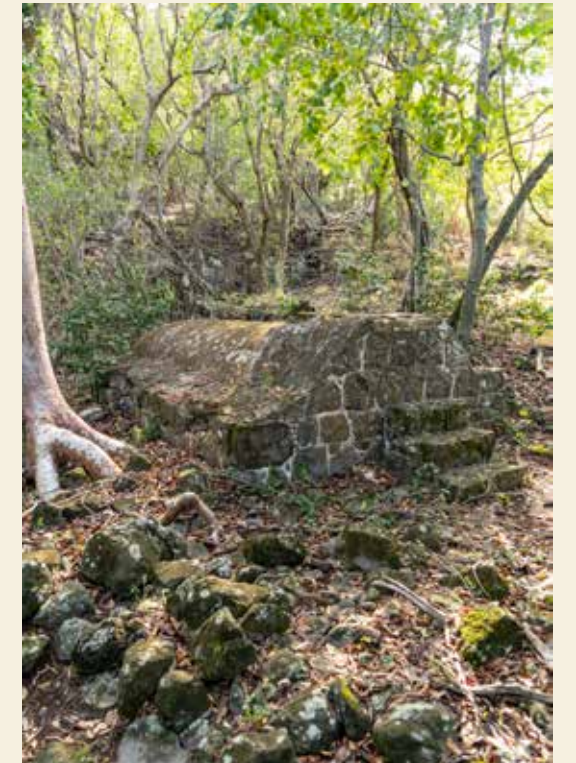
neighboring island of St. Christopher [St. Kitts], and it is not uncommon for vessels to be unable to obtain water at all."

On 1 July 1863, 1,138 enslaved people on St. Eustatius were freed. Their former owners received compensation, but the newly freed were left with nothing. No provisions had been made to help them secure a livelihood. To make matters worse, 1863 was an exceptionally dry year. Due to the erratic weather, the population was extremely vulnerable. In years of poor rainfall, hunger was widespread, and livestock perished. The newly freed community suffered most from the drought and water shortage.

In the early twentieth century, efforts were made to address water shortages and agricultural challenges. Among others,

Governor Jan Olphert De Jong van Beek en Donk and politician Henri van Kol hoped that the construction of new dams and the restoration of existing embankment-like structures would improve water management. In the end, however, the government did little to act on these ideas. The remains of older water systems, as well as the local Stavian knowledge associated with them, likewise went largely unused.

Across the island, remnants of embankments, dams, and low stone walls can still be found. These basic structures were indispensable to water and soil management. They retained and slowed runoff, prevented erosion, and protected settlements and farmland. On slopes, they functioned as retaining walls for terraced agriculture.



[Fig left] Ruins of the English Quarter plantation. Stone and earthen walls line the road behind.

[Fig right] A ruin of a cistern on the Quill.

In 1904, politician Van Kol described stone dams on the Quill that regulated rainwater run-off and low dikes that enhanced infiltration. At Fair Play, he observed "heavy stone walls" and a well with a windmill that "still yielded good water". Water was directed through openings in both dry-stacked and mortared stone structures. The construction of these works involved extremely heavy labor and was carried out by enslaved people, many of whom possessed specialized expertise in building dams and cisterns – although this knowledge was rarely documented.

By 1910, there were six government wells and twenty public rainwater cisterns serving the island's water supply. The wells were considered suitable primarily for livestock and household use. Government cisterns were located at public facilities, including government buildings, schools, and hospitals. In 1910, two additional reservoirs were constructed at Taylor's Well, and in 1939 a new cistern was built at the public school. Residents without private cisterns relied on these public rainwater reservoirs for drinking water, which was made available to the population by the government.



the other islands, it is well documented that private individuals who owned cisterns and wells also sold water to others, sometimes at exorbitant prices. Whether similar practices occurred on Statia remains unknown.

From the early 1940s, following the installation of a small pipeline network with public taps, water was supplied free of charge to the entire population. Today, drinking water on Statia is more than five times more expensive than in the European Netherlands. In 2025, the Statia water company charges €7.05 (\$8.10) per 1,000 liters, compared to approximately €1.30 (\$1.50) in the European Netherlands, while local incomes on Statia are significantly lower. During prolonged droughts, when household cisterns run dry, some residents can no longer afford to purchase drinking water. This results in a stark inequality in access to safe drinking water between the European and Caribbean Netherlands.

Even in the second half of the twentieth century, problems with water management persisted. The island's unpredictable weather meant that good harvest years alternated with poor ones. Mr. Ivan Berkel recalls how dry years led to food shortages: *"We didn't have drought every year. We grew yams and sweet potatoes. But once it*

[Fig] A large cistern at Crook's Castle.

FEATURED What is the Cost of Water?

Water from the government reservoirs was not always free. In 1910, a can holding 18 litres of water cost one cent. By 1939, however, government water was described as being "provided free of charge". Water pricing also differed between the islands.

On Saba, for example, water from public reservoirs was sold to residents "for a small fee". During periods of severe drought, rationing was introduced: rainwater could be used "for drinking only". On Saba and



was so dry that there was no food left. Food was sent from the Netherlands – flour and sugar."

During this period, proposals to construct large water reservoirs at the foot of the Quill resurfaced. Various water supply systems were built, including a pipeline network with public taps supplied by Taylor's Well and Concordia Well. The hospital reservoir also formed a crucial part of the island's water system. In the 1970s its capacity was expanded from 590 m³ to 890 m³, yet even this proved insufficient



[Fig left] The remains of Taylor's Well. (photo: Suzanne Loen)

[Fig right] Children at a tap outside the Guesthouse. (photo: National Archives, Van de Poll collection)

during prolonged drought. At the end of June 1974, a tanker operated by the West Indian Transport Company had to deliver 400 tonnes (400,000 liters) of drinking water from Puerto Rico to replenish the public reservoirs. Today, when household cisterns run dry, residents contact the water company STUCO. A water truck is dispatched to make the rounds and refill private cisterns.

[Fig] A gorge eroded by water between the Lower and Upper Town.



From Guts to Cisterns: The Water-Building Blocks of St. Eustatius

Statia's landscape was shaped by volcanic activity. Although the island has no lakes or rivers, it contains countless guts – debris-filled ravines and watercourses that descend from the Quill and the Northern Hills. These channels were carved over long periods by water and wind. On densely vegetated slopes, they are barely visible, but on bare hillsides they stand out clearly. Even though they rarely carry flowing water, guts play a crucial role in the island's hydrological system. During heavy rainfall, they can transport large volumes of water to the sea in a short time. Vegetation and well-rooted topsoil slow this run-off, allowing water to infiltrate and recharge the underground freshwater lens. On bare slopes, rainwater runs off quickly, carrying sediment and debris that contribute to coral degradation. Along steep cliffs – such as between the Upper and Lower Town and near White Wall – water plunges downward like waterfalls, accelerating cliff erosion and increasing the risk of collapse.

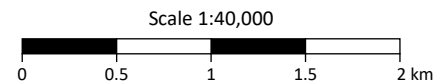
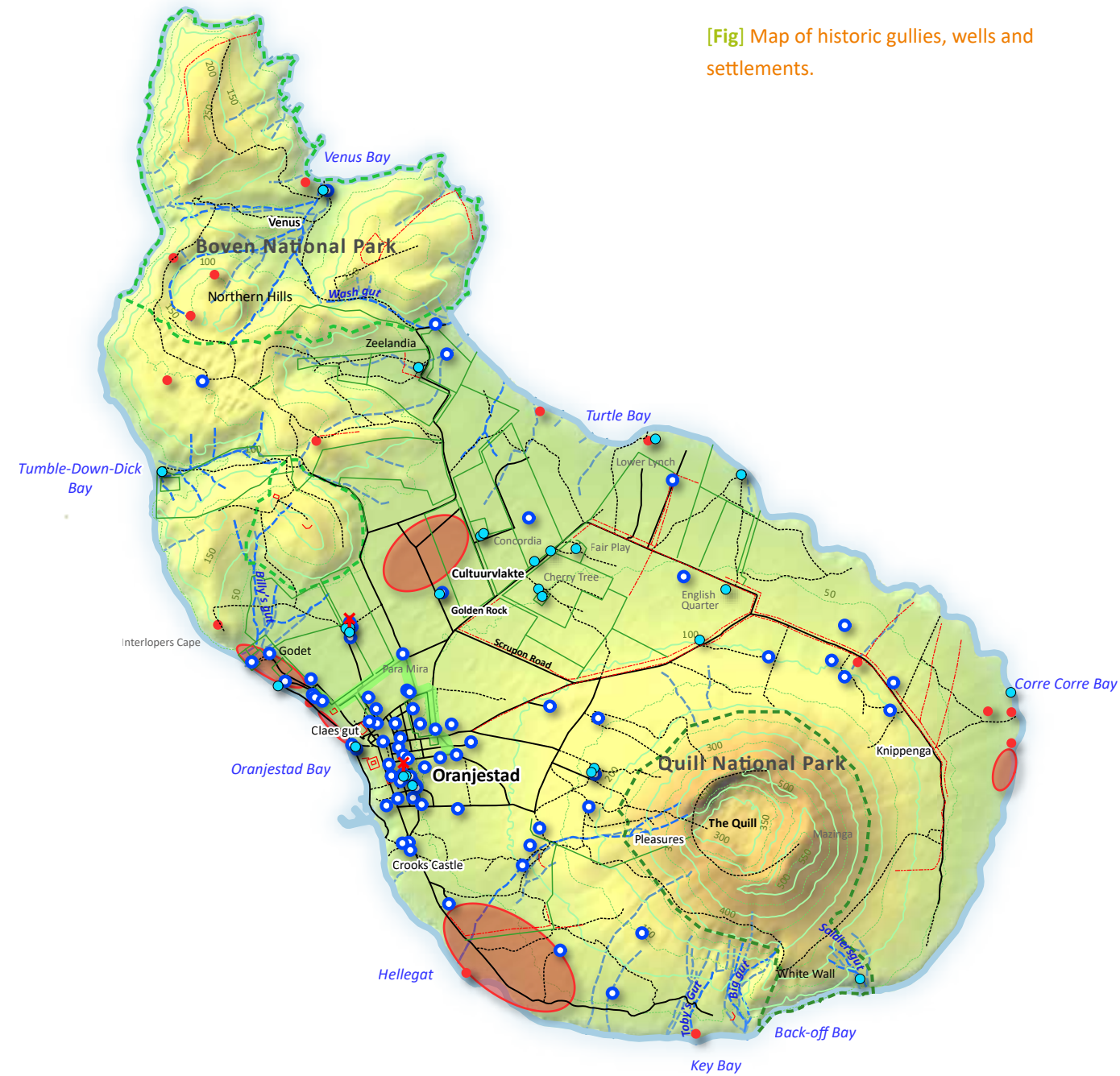
Guts also played a key role in shaping how humans used the Statian landscape. Before roads existed, they served much like creeks and rivers elsewhere, acting as natural markers and travel routes. Because guts retained moisture even during dry periods, they were important for agriculture.



Settlements, fields, and waterworks were often located within their catchment areas. Their original courses, however, are unknown today, as natural erosion, deforestation, and later construction altered the terrain. People also attempted to harness guts for practical purposes, such as agriculture and water management. In several ravines on the Quill, remnants of stacked stone walls can still be seen – structures that once held back water and fertile soil for cultivation. Guts also hold cultural significance in local oral history. For example, Venus Gut is said to be named after the enslaved woman Venus, who,

[Fig] A well at Venus Bay. Venus Gut can be seen in the background. It is said that an enslaved woman called Venus was driven to jump off these cliffs. Well's for livestock are often brackish and lie downstream of the guts, near the coast. The animals sometimes fell ill due to the poor water quality. (photo: Rijksvoorlichtingsdienst)

[Fig] Map of historic gullies, wells and settlements.



Protected areas

- Boven National Park
- Quill National Park

Archaeology

Indigenous Amerindian sites

- Sites point
- Site areas

Historical maps

Topographical map 1915

- Walls and hedges
- Stone wall
- Stone barrier
- Hedge or barbed wire fence
- Dikes
- Gullies

Topographical map 1963

Roads

- Footpath
- Road
- Gullies

Water

- Well
- ✕ Well with mill
- Cisterns

Contour lines

- 50m line
- 100m line



according to oral history tradition, leapt from the cliff in despair.

[Fig] Stormwater drainage channels around Kerkweg and Breeweg. (photo: Suzanne Loen)

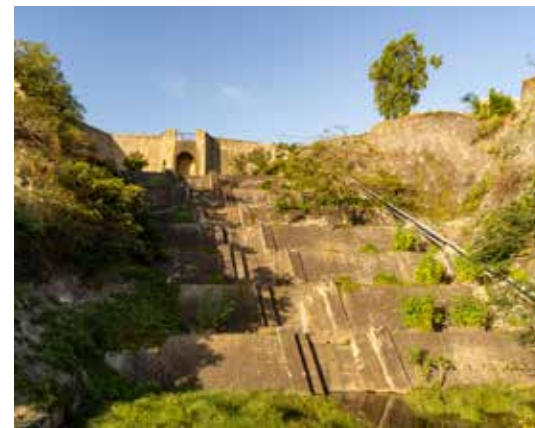
Oranjestad developed in a strategic location near freshwater sources and coastal landing sites, but the town has faced water-management challenges since its earliest days. In 1904, politician H. van Kol noted: "After a brief shower of half an hour, the streets of the town stand several feet under water and are nearly impossible to walk." Today's elevation map explains why: the main access roads largely follow the natural depressions of the original guts. Pleasure Drive, Old Quill Road, and C.A. Millard Road trace these low-lying contours along the volcanic slopes. As they descend toward

Oranjestad, they merge into the town's street grid. During heavy rain, rainwater rushes directly through the town – via the Slave Path and Cleas Gut – toward the sea. It is therefore highly likely that Oranjestad was originally located on natural watercourses that were later covered by urban development.

FEATURED

Het waterwerk van Claes Gut

In the past, Claes Gut was a traversable ravine with a footpath connecting the Lower and Upper Town. Eyewitnesses described it as a “miniature Quill”, filled with tropical vegetation and large trees clinging to the cliff walls. Rainwater gradually eroded the ravine deeper, and during heavy downpours a waterfall could form. As early as the nineteenth century, residents worried about collapse, as loose tuffstone regularly crumbled and threatened buildings – including Fort Oranje – perched above. In the early 1970s, a water-management and preservation plan was developed. The cliff face was reinforced with a terraced concrete structure, which also included a large water reservoir for local farmers.



[Fig from top, down, left right]

Claes Gut ravine, circa 1973.

Claes Gut's 'Waterfall' with Wim de Jong.

Plant life within the Claes Gut gorge.

Site plan of Claes Gut in 1975.

A view of Claes Gut from beside the cistern of the Old Gin House in the Lower Town.

Laborers building the Claes Gut water system.

Underground Water Reserves: Springs and Wells

Wells have always played a central role in the island's water supply. Springs were found on the Cultuurvlakte, in Oranjestad, and along the coast. Statia's volcanic soil is highly porous: rainwater percolates quickly through the ground, replenishing the deeper layers and forming a freshwater lens that floats atop the underlying seawater, separated by a brackish transition zone.

Wells were easiest to dig at the foot of hills and along coastal cliffs, where groundwater lay closest to the surface. Notable west-coast wells included Samson Well, King's Well, Manahega Well, and New Well near the Gin House. On the east coast lay Zeelandia Well, and at Concordia Bay stood Spout Well, where water may once have “spouted” from the ground under natural pressure. In the 1950s, coastal wells reached groundwater at depths of roughly 4 to 10 meters. On the Cultuurvlakte, however, wells were much deeper – sometimes exceeding 70 meters.

The precise shape and extent of the groundwater system remain unclear. The slopes of the Quill and the Northern Hills likely play a major role in recharging the freshwater lens beneath the Cultuurvlakte. Groundwater ultimately flows out to sea along the coast, and some island residents



believe that underground watercourses run downslope from the Quill.

[Fig] A farmer and a donkey at a livestock well. (photo: Wereldmuseum)

Wells also appear in local oral traditions. Enslaved people were sometimes thrown into wells as a form of punishment. Children once feared the deep Cherry Tree Well, which is said to be the site where a cruel man cast an enslaved person to their death.



[Fig. 8.32 top] Taylor's Well prior to 1910.
(photo: Wereldmuseum)



[Fig. 8.34 top] The Concordia Well..



[Fig. 8.33 below] The Golden Rock Well with remains of the windmill. (photo: Suzanne Loen)



[Fig. 8.35 below] The Concordia Well reservoir.

FEATURED

The Mystery of the Reservoirs of Pleasures and Knippenga

Since the early twentieth century, the idea of constructing large rainwater reservoirs at the foot of the Quill has been discussed. In the 1970s – around the same time that the Claes Gut works were built – these plans gained renewed attention. The plans envisioned concrete-lined hillsides and cisterns to capture rainwater runoff and direct it toward large reservoirs. These concepts, however, were not new. Statian historian Raimie Richardson notes that two major waterworks of this type once existed.

Their remains can still be found at the plantations Pleasures and Knippenga. Both systems consisted of a series of interconnected cisterns arranged in cascading rows along the hillside. Water collected in these reservoirs was conveyed via gutters to the hospital. Many Statians still remember fetching drinking water from the hospital's large cistern. According to a newspaper article from 1976, one of the reservoirs was damaged by gunfire during the First Salute.



[Fig top] Ruins of rainwater reservoirs on the slope of the Quill near Knippenga..



[Fig down] Interconnected cisterns at Pleasures. (photo: RCE)



Cisterns and Rainwater Reservoirs
Capturing rainwater for drinking was once indispensable. Today, however, it is far less common. According to Statian resident Althea Merkmann, this change is partly due to the establishment of the public water company: people no longer need to collect rainwater themselves. Research conducted by Fred van Keulen in 2017 found that of the 133 mapped cisterns on the island, approximately 60 percent were no longer in use.

[Fig top left] A traditional arched cistern in Oranjestad. (photo: National Archives, Van de Poll collection)

[Fig top right] Woman collecting water. (photo: Nationaal Archief, Van de Poll collection)

[Fig below] Water storage in drums. (photo: Wereldmuseum)

Cisterns were constructed at houses, schools, churches, forts, plantations, and government buildings. The vast majority had a capacity of between 10,000 and 40,000 liters, while larger examples could hold as much as 70,000 liters or more. Building one large cistern – or several – was costly and often affordable only for the elite. The Methodist Church cistern, built in 1883, cost around 500 dollars, an enormous sum at the time that was raised collectively.



It was, quite literally, built for and by the community. To fill the cisterns and water reservoirs, rainwater was collected from rooftops and in basins.

Less affluent Stadians could not afford to build their own cisterns or had to save for many years to do so. As a result, a large portion of the population depended on communal cisterns belonging to churches or the government. By the early twentieth century, there were around twenty such government reservoirs.

The range of cistern types on Statia is remarkably diverse in age, form, size, location, and function. The arched, or “traditional”, cistern is the oldest type and characteristic of both Saba and Statia. The earliest examples likely date to the seventeenth century. These cisterns are partially sunken into the ground and usually stand separate from other buildings. They were constructed of brick, carved blocks of basalt or Bermuda stone, cement, lime, and “tras” – a highly valued volcanic material quarried on Statia.

The simplest type of cistern consists solely of the arched chamber itself. It is supplied with rainwater harvested from surrounding roofs. Water flows from the roof into gutters and through the spout into the cistern. Part of the structure includes a slightly sloping



plastered stone basin – the “catch” or “dish” – which directs the water toward the arch openings, where it enters the cistern. These openings also served for ventilation and were fitted with mesh screens to filter out debris; they often became completely green with algae. The raised masonry opening, known as the mouth, was tightly sealed with a wooden or metal strainer. Some cisterns had stairways built against them leading up to the mouth. Today, cisterns are most commonly constructed as partially above-ground basements or as substructures beneath houses.

[Fig] One of Gin House’s largest cisterns. It has a capacity close to 60,000 liters.

FEATURED
Characteristic Cisterns on Statia

The Simon Doncker Museum was once the home of a wealthy planter family. The house and its grounds contain several cisterns – a clear sign of wealth.

[Fig right] Leonicia Merkman standing on a flat cistern. (photo: Suzanne Loen)

Mr. Ivan Berkel (1943), a retired ship’s engineer, built a house along the coast with a modern cistern beneath it. He grew up on Statia in a family of nine children. A nature lover, he sets out small dishes of water and kitchen scraps in his yard to feed the little “soldiers” (hermit crabs).

During this visit, many family members were staying with him for the holidays. His brother, Remond Berkel (1945), visiting from the European Netherlands, explained how water is managed now and how it was managed in the past: *“There were nine children in our family. We used a bucket on a rope to draw water from the cistern.”* Rainwater was first collected on a platform and then flowed down into the cistern below.

Ms. Blondel lives in her grandmother’s family home. The house has a traditional cistern with a pump, which was likely already present when her grandmother purchased the land. The cistern includes a



[Fig left] Althea Merkman next to a copper cauldron in the museum garden. (photo: Suzanne Loen)

[Fig top] Cistern at the Simon Doncker Museum.

[Fig below] Mr. Ivan Berkel next to a domestic cistern. (photo: Suzanne Loen)



[Fig] Cistern of Mrs. Blondel. (photo: Suzanne Loen)

large catchment platform, which she refers to as the “cistern plain”. Ms. Blondel also explains that she plans to move her garden to the cooler, shaded side of the house. In recent years, increasing heat and drought have been scorching her plants.

Statia’s Water Heritage – Inspiration for a Sustainable Future

Because of its erratic climate – where water scarcity and flooding alternate – Statia has always faced challenges in managing water. Limited supplies of freshwater and arable land forced residents to develop inventive solutions. This historical knowledge remains invaluable for the island’s resilience, now and in the future.

Three elements form the foundation of a resilient water system: rainwater cisterns, embankment-like structures and terraced landscapes with dry-stacked stone walls, and guts. For generations, Stadians harvested rainwater in cisterns. This tradition appeared to decline in importance for a period due to the introduction of utility water, but today more and more residents recognize that harvesting and using rainwater is vital for the island’s self-sufficiency. Terraces supported by stone retaining walls once made agriculture on steep slopes possible: they prevented erosion and helped retain water. Today, tree roots and the remnants of old walls can be seen working together on the hillsides, stabilizing the soil and supporting forest recovery. The guts form a natural network for water run-off and retention. In an era of increasingly extreme rainfall, these guts can be used even more as green-blue corridors

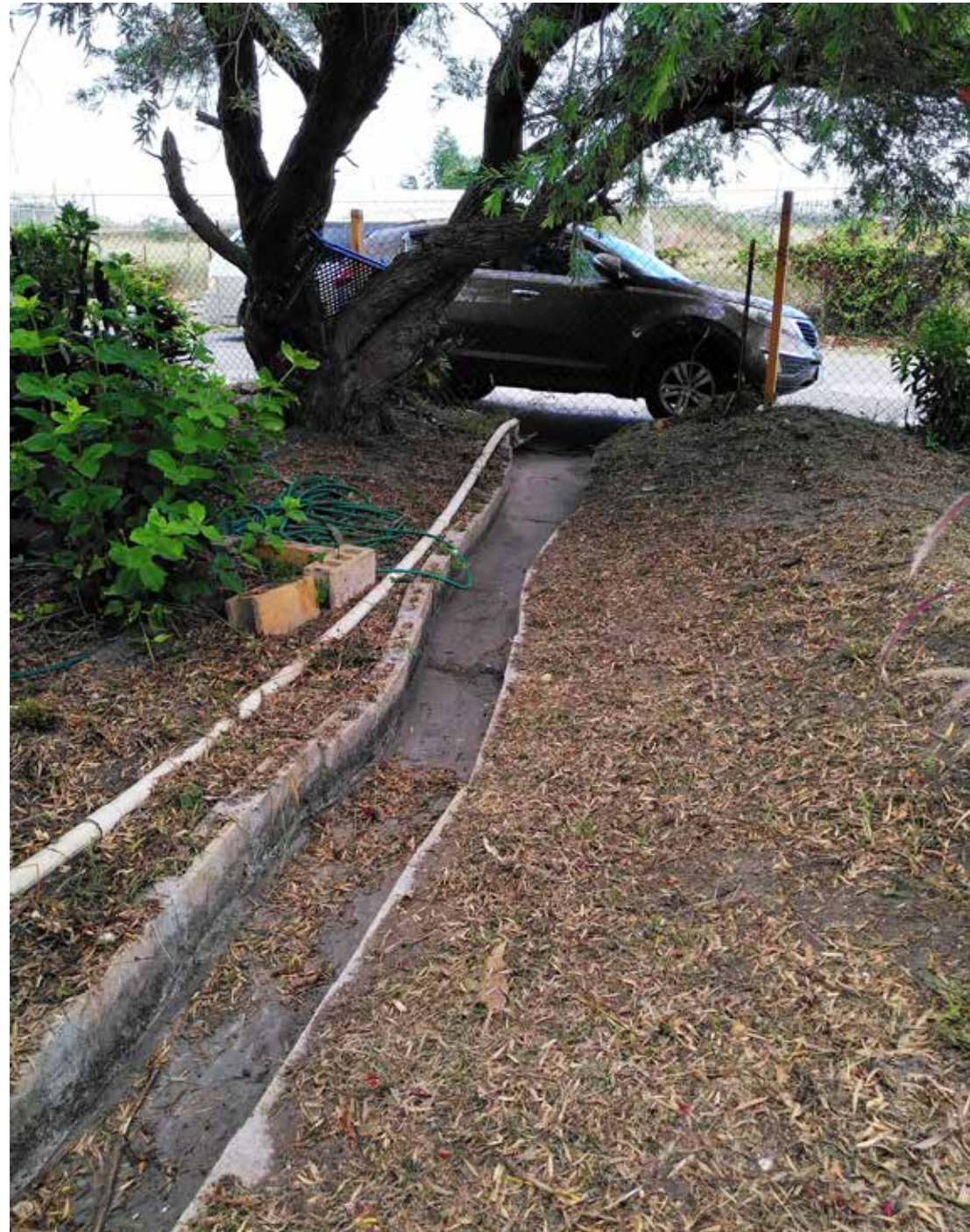
that help hold water and reduce flooding. Above this all rises the Quill, Statia’s “green water tower”. The mountain captures moisture from the air, stores it in its forested slopes, and sustains the island’s ecosystems. Reforesting the Quill is therefore essential. Together, these elements form an interconnected system in which heritage, culture, and nature strengthen the island’s water resilience.

Statia’s water heritage shows that traditional knowledge and local solutions are once again highly relevant. By preserving, restoring, and integrating this heritage into policy and future planning, it can continue to support a sustainable and resilient Statia.

FEATURED

Historical Structures Still in Use

Mr. Melville Hazel is an agricultural specialist and one of Statia's last farmers. He explains that he came to the island years ago at the invitation of the government to help revive agriculture and horticulture. Mr. Hazel is convinced that with proper land and water management – and reforestation – Statia can once again grow much of its own fruits and vegetables. He channels rainwater from public roads into his cistern through channels he built on his property.



[Fig] Mr. Hazel harvesting rainwater from the street. (photo: Suzanne Loen)

[Fig right] Mr. Hazel on his plot at the Cultuurvlakte. (photo: Suzanne Loen)





[9] JET BAKELS

LIVING HERITAGE IN CRAFTS, CELEBRATIONS, AND FOOD

This chapter offers an impression of the island's "living heritage" or "intangible heritage", meaning the island's cultural traditions. These include celebrations, knowledge and practices related to nature, craft skills, and the preparation of particular dishes and drinks. These customs are typically learned from parents, grandparents, or fellow community members and passed down from generation to generation as heritage – something people wish to preserve for future generations. This living heritage plays an important role as a cultural expression of local values and practices that give life on St. Eustatius its form, color, and meaning. People often attach great importance to their intangible heritage.

[Fig] Blue bead fragments

Heritage in Motion

Cultural traditions connect people to the past, provide stability in the present, and offer a perspective on the future. They reflect and shape the identities that emerge on the island, which, like the sea around it, are always in motion. Within these traditions, we hear the voices of different individuals and groups – of various ages, genders, origins, and backgrounds. These voices meet in shared customs and habits and help create a sense of being “from Statia” – or at least of belonging “on Statia”. The context in which cultural traditions emerge, evolve, and fade on this small island is central to this dynamic.

[Fig] Althea Merkman wearing blue beads.

The constant change in cultural traditions is partly due to the island’s small size and population. In 2025, St. Eustatius has 3,270 inhabitants, according to the Central Bureau of Statistics. This means that even minor changes can have a significant effect. In the realm of intangible heritage, there is no large reservoir of knowledge or skills to draw from. The death of a single person can, for example, bring an end to a particular musical tradition.

A second factor is migration. Like most islands in the region, Statia’s population is strongly shaped by ongoing migration flows.

Many newcomers arrive from Spanish-speaking Caribbean islands, bringing their language and customs with them. At the same time, young Stadians often leave for long periods – or permanently. This raises questions about which forms of intangible heritage residents identify with most: do they embrace the interaction between the various traditions present on the island, or do they hold on to an idea of what is “authentic” or “typically Stadian”? And if so, what exactly does that mean?

A third factor is the history of slavery. This history has created disadvantages in many areas that, where possible, need to be addressed or remedied. Intangible heritage of African origin has largely disappeared and remains poorly documented. A key question today is how decisions are made about which forms of heritage are supported and which are not. For example, investments have gone into the monumental restoration of Oranjestad and the colonial fort, while the former landing site of slave ships at Fort Amsterdam receives little attention. Near Fort Amsterdam, a burial ground was recently discovered where both Amerindian inhabitants and African enslaved people were laid to rest. UNESCO has recognized this site as heritage of special significance, but although this designation raises the site’s profile, it carries no enforceable rights or obligations. For now, the future of

these burial grounds remains in the hands of private landowners. For the island’s population, however, treating these dead and their black history with respect is of immense importance. Only when such sites are formally recognized as material monuments can new (intangible) forms of remembrance and mourning emerge. A fourth factor is climate change. Shifting seasons, along with increasingly strong and frequent hurricanes, threaten both people and nature. As we will see, this encourages a desire for self-reliance, but it can also be discouraging.

In describing intangible heritage and broader cultural trends, we focus on beloved bush tea, culinary traditions, and the celebration and commemoration of events such as Statia Day, Independent Day, and Carnival. Particular attention is given to the role of the island’s slavery past, for instance in the striking significance of the “blue beads”. We also consider various crafts and musical traditions, as well as ecological knowledge and the practices associated with it. This chapter further discusses cultural traditions that do not necessarily take the form of clearly defined behavioral patterns but nevertheless represent important cultural values on the island. Finally, we examine the role of museums as platforms for cultural expression.

Our starting point is what various Stadians themselves mention in conversation as characteristic of life on the island. These examples are not exhaustive. Each community and every island resident continuously (re)negotiates their relationship with the island, cherishing older – or perhaps entirely new – forms of intangible heritage. Here, we describe only the examples raised by the islanders we spoke with.



[Fig] Statia’s coat of arms at Fort Oranje.



[Fig] The Congo Man Store. (photo: Jet Bakels)

New Stories of Blue Beads

The transformation of traditions is also driven by new insights and internal developments, such as the processing and reevaluation of the history of slavery. In various celebrations, publications, and podcasts, this renewed sense of identity is clearly expressed. After generations of silence, a renewed interest in the African roots of Black Caribbean cultures has emerged. On Statia, this is evident in new celebrations (see below) and in the names of businesses and bars, such as Congo Bar. But the most striking symbol is the role of the blue beads, which tangibly link people to their roots in the era of slavery.

Ask a Statian what they consider typical of the island's culture, and the famous "blue beads of Statia" are almost always mentioned. Raimie Richardson, born and raised on Statia and for many years the island's heritage inspector, also highlights the remarkable significance of the island's "Blue Bead Culture". Some even speak of a prevailing "blue bead fever". Richardson explains: *"These beads are, of course, linked to the very dark period of the slavery past. But today they are worn with pride. I find that very moving and hopeful. People do not remain trapped in their suffering but see wearing the beads as a sign of strength and a victory over the past. It is remarkable how such a small, museum-like artifact can hold so much meaning."*

The five-sided, deep-blue beads were produced over a long period. From the seventeenth century onward, they were taken to Africa as part of the trade in other goods and used as a form of currency for goods and services. Enslaved people were also purchased with these beads. Beads continue to play an important role in the dress and jewelry of many African communities today. They reflect status and identity, and the use of particular colors and motifs can refer to religious concepts.

Several types of beads, including the blue beads, arrived in the Caribbean on ships



[Fig] Detail of Althea Merkman's self-made necklace of blue beads and pipe stems.

of the WIC (Dutch West India Company) and the MCC (the Middelburg Commercial Company). They were likely widely used as trade items, especially in dealings with other Caribbean islands and the Americas. Blue beads were probably among the few possessions enslaved people were allowed. According to oral tradition, the beads served as a kind of currency in the small-scale trade that enslaved people were permitted to engage in.

Stories passed down through the community describe how the blue beads functioned as a medium of payment and exchange in the Black community, and how they played a role in various customs among both enslaved and freed Black people. A well-known anecdote recounts that, when the abolition of slavery was proclaimed on Statia on July 1, 1863, the newly freed people threw their despised blue beads into the sea en masse, symbolically casting off the terrible yoke of slavery.

Today, these beads form a tangible thread that island residents cherish as a meaningful and emotionally resonant link to their ancestors. As Richardson emphasized, this is a remarkably vital transformation that reflects a renewed sense of pride and awareness. After a long and painful silence about the past, attitudes began to change toward the end of the twentieth century. The beads came to be treasured and worn more frequently as a connection to ancestors and a past that has been overcome. From around 1970 onward, blue beads have regularly been found in the sea or washed up on the southwest coast beaches, further heightening their significance. That these beads likely originated from a shipwreck or a collapsed warehouse does nothing to diminish their meaning.

Althea Merkman, a well-known cultural expert on the island, wears her striking and beautiful necklaces made from Statia blue beads almost every day. *"I wear my blue beads every day with pride. They come from my ancestors, who used beads as currency. They also cared for me later in life. I sold some of the necklaces and used the money to pay school fees for my four children. On Independent Day, many more women wear the sea en masse, symbolically casting off the terrible yoke of slavery. Whenever I leave the island, I always take them with me, so my ancestors are always with me."*

Others, however, deliberately leave their beads on Statia when they travel. Richardson says: *"When I tell people that these blue beads were once slave beads, they are shocked. But when they realize that this heritage isn't just in a museum but is worn with pride by the descendants of enslaved people themselves, as an amulet, in such a positive way... that is truly extraordinary. Their ancestors could never have imagined this."*

Tourists also collect blue beads from the seabed on diving excursions. There has long been a debate about the heritage status of these beads. Are they allowed to leave the island or not? Many Statians oppose it, and the local dive shop tactically sells identical five-sided beads made at Jo Bean's glass studio on neighboring Saba. But the

authentic blue beads “belong on Statia”, according to Althea Merkman. “And they choose who may wear them. You don’t find the bead... the bead finds you. And if the bead finds you, you will return to the island.” In this way, the stories surrounding the blue beads crystallize into a vivid image of an almost magical connection between beads and people – one that threads past, present, and future together.



[Fig] Blue beads made on Saba sold at a dive shop on St. Eustatius.

Celebrating and Remembering

St. Eustatius observes several holidays linked to historical events, such as Emancipation Day on July 1 and Flag Day on November 16. In addition, people celebrate Christmas, Easter, and Carnival – holidays recognized around the world but given a distinct local character everywhere. Beyond attending church, these occasions are primarily about coming together and reconnecting with family members who, in pursuit of education and work,

have dispersed across the Caribbean, the Netherlands, and the United States, and now return to the island. Traditional dishes are central to these gatherings: Johnny cakes, hard cakes, and the beloved bush tea – a blend of ingredients that, like the island’s inhabitants, come from many places but feel to everyone like “coming home – truly Statia”.

Street fairs and musical performances are staple elements of these celebrations. In recent years, however, the musical performances have increasingly lost their local character, with the island’s traditional string-band music becoming rarer. These groups were centered mainly around string instruments such as guitar, banjo, and ukulele and were sometimes complemented by (mostly homemade) instruments like flutes and drums. The lyrics frequently carried a critical tone, a tradition originating in the slavery era that persisted in Carnival celebrations until the mid-twentieth century. On Statia and beyond, the Killy Killy Band was well known; a bronze sculpture in a square in Oranjestad still commemorates it. The band (named after the American Kestrel) was active from the 1950s until the beginning of the twenty-first century, performing in various lineups that included women. Today, predominantly Spanish-Caribbean musical styles can be heard.



[Fig] Statue of the Killi Killi Band.

Another shift in these celebrations, according to the island’s elders, is that nowadays all food and drink is sold, whereas “in the old days it was shared”. This reflects how Statia’s once relatively homogeneous and close-knit society – where everyone knew and helped one another, and people were addressed by characteristic nicknames – is changing.

On St. Eustatius, Emancipation Day on 1 July has long been an important holiday. It commemorates the day in 1863 when enslaved people in the Dutch colonies (after those in the British and French territories) formally gained their freedom. In 2018, Walter Hellabrand, then director of the Simon Doncker House Historical Museum,

organized an exhibition on the island’s slavery past. “The day is still celebrated every year... In 1883, festivities were held to mark twenty years since the abolition of slavery.” July is also the time when the flamboyant tree (*Delonix regia*, originally from Madagascar), known locally as the “July tree”, bursts into bloom with bright red flowers.

In the nineteenth century, freed people on the island wore a red sash as a sign of recognition – women around the waist, men as a band on their hats – making red the color of freedom. According to

oral tradition, formerly enslaved people decorated their homes with red flamboyant blossoms on the day they gained their freedom. This custom is still observed on Emancipation Day. It is also said that the song sung today on Emancipation Day was first heard back then. “On 1 July 1863, people came into town dressed in white and adorned with the flowers of the flamboyant tree. They sang the song we still sing on 1 July,” explains Althea Merkman. She sings:

*Happy happy July Day
I’m glad I live to see the day
I’m free I’m free I’m free today
Humbug won’t come humbug me
Happy, happy July Day.*

Today, Emancipation Day is the day when women wear their blue beads. The freedom song is sung, and houses are decorated. People experience it as a celebration that “truly belongs to them”, more so than Flag Day, another national holiday.

Flag Day is celebrated on November 16, with an official ceremony at Fort Oranje. However, the day is not as deeply rooted in the island’s own history and identity, so many residents feel less personally connected to it. As one local put it: “It’s more a celebration for America, not so much for us.” The holiday commemorates the First Salute, the cannon salute given in 1776



[Fig] During Emancipation Day people adorn their homes with branches of the flamboyant tree.

[Fig right] Easter celebration on St. Eustatius in 2025. (photo: Jet Bakels)



to a ship from what was then a rebelling America, in the midst of its struggle for independence from Britain. Since 2004, Statia's new flag has also been ceremonially raised on this date. Today, the celebration is preceded by a full week of activities, street fairs, and musical performances, including Caribbean Week.

Carnival is said to have been brought over from elsewhere in the Caribbean in the previous century and has only been celebrated on Statia for about sixty years. Some recall an earlier, related custom that took place during and shortly after the slavery period. This event reportedly occurred on December 26 and involved



[Fig] Statia's flag beside the flag of the European Netherlands.

groups of enslaved and free Black residents walking from house to house, entertaining one another with satirical songs. That tradition has long since disappeared. Today's Carnival is no longer tied to the

ecclesiastical calendar and is celebrated during the last two weeks of July, when families and children who study or work elsewhere return to the island. The festivities include parades, concerts, and parties.

For immigrants from other parts of the Caribbean, Carnival is an easy "entry point" into the island's culture. A woman from the Dominican Republic, who has been working on the island for several years, explains: "I always take part in Carnival; that's when I truly feel part of Statia's culture. The same goes for Easter. It's also an important celebration here, with lots of parties, music, and stalls on the beach."

Living off the Land

"Everybody uses it. Bush tea is good for adults and children. My grandchildren would rather drink sugary soda, but I don't allow that. Bush tea is healthy: fever grass, paracetamol plant, basil, and sage. They cleanse the stomach and lungs and help treat colds and fevers. If a child has bronchitis, boil the seeds of the haga bush with a little salt." The speaker is Alicia Courter. Like many other (mostly) women on the island, she has a variety of potted plants in her small garden, as well as larger plants and shrubs in borders. She harvests from these plants to make bush tea, which is widely loved across the Caribbean.

On Statia, this herbal drink is very popular, especially among older generations. Courter says: "Every morning I drink a mix of leaves from avocado, mango, guava, and soursop, sometimes with cloves and cinnamon. I boil them first. They help with high blood pressure and diabetes, which many people suffer from. I trust my plants."

Courter learned how to prepare and use bush tea from her grandmother; her parents were too busy with two or three jobs to support the family. In the past, mostly the men went out to gather ingredients along the roadsides or in the hills where small plots used to be farmed. Women stayed at home more and often kept their herbs in the garden. They usually prepared the tea, though this division of roles wasn't rigid. For every ailment, there was a known combination of plants – an important resource, especially at a time when healthcare was very limited. Bush tea still remains important today, although it's unclear what younger generations will choose. "Many young people now head straight to the hospital," says Courter. "I'm not against that, but bush tea helps prevent illness."

It is not surprising that the application of bush tea for diabetes and high blood pressure is frequently mentioned in conversations. Until the 1960s, much more



[Fig] Rika Courtar in her garden with various plants used for bush tea.

homegrown fruit and vegetables were grown and eaten on Statia. Today's diet, with its emphasis on fatty meats, sugary drinks, and processed foods, has led to widespread obesity and related health issues.

Rika Courtar also has an extensive herb and plant garden from which she sources her ingredients for bush tea. Her interest in the effects of bush tea developed later, when she began experiencing physical complaints herself. She gathers most of her knowledge "from Google", where a great

deal of information about Caribbean plants can be found. The tea she prepares should not be boiled; it is made as a true infusion, by pouring hot water over the herbs. The possible applications are numerous. The tea is usually ingested, but sometimes it can also be used externally. Courtar, for instance, uses the soursop leaf as a sleeping aid, as a tea, but "a leaf behind the ear also helps one to fall asleep".

In addition to its medicinal uses, bush tea also serves important social functions. It is a drink that symbolizes a connection to both family and the island. "When my brothers and sisters get together on Saturdays, there is always bush tea. Before they leave, we drink it together – a mix that includes cloves and cinnamon. It helps you sleep well," explains an older bush tea enthusiast. "When my sister returns to New York, she takes a suitcase full of bush tea with her."

Aloe vera is internationally known; its cut stem is applied to open wounds to disinfect and promote healing, and it is also used for sunburn and skin aging. The sap from the stem of the pondu plant is said to reduce swelling from bee stings. The use of plants for magical protection, for example to ward off evil, seems to be mostly a thing of the past on Statia. Back then, some recall, sage was burned around doorways and aloe hung up to drive away evil spirits.

The realization that fresh food and home cooking, as in the "old days", is better for one's health has sparked a new trend. Statians are beginning to grow more of their own fruits and vegetables or purchase them from larger gardens and cooperatives. Initiatives such as the Farm to Table project have been established for this purpose. This has also renewed interest in cooking with wood-fired ovens. Brick ovens were common until the 1960s, when Statia still had no electricity. They were often located in home yards, and occasionally inside, and some still exist today. These ovens originally replaced small charcoal stoves. The wood ovens were, in turn, later replaced by gas and electric stoves.

The renewed interest in restoring these ovens is not just about healthier eating. It also reflects a sense of lost traditions, and with that, a loss of local identity and neighborhood cohesion. "In the past, people helped each other in the neighborhood. Every family had its own stone oven, and everyone shared food. Now everyone just buys their own food at the supermarket." It is a commonly heard lament. In a few cases, baking in wood-fired ovens has continued uninterrupted, mostly on Saturdays. Dishes such as banana bread, pumpkin pie, and sweet potato pudding are baked in the oven. Heat control in the oven and the duration of baking are a matter

of experience, of traditional, practical knowledge.

FEATURED Hard Cake

Perhaps the best-known local product is the hard cake, also called hard bread, a chewy, gingerbread-like biscuit baked in an S-shape. Today, people interpret this S as standing for Statia, but according to Raimie Richardson, it originally represented the S of Sinterklaas (Saint Nicholas). Hard cake is baked in the island's two bakeries, but also at home, nowadays mostly in electric ovens. It is a staple of traditional festive occasions. Because it is so hard, it is ideal for taking back to other islands, the United States, or the Netherlands after visiting family on the island. "It stays good for months," say the Statians. Every family has its own recipe. The Statia Cookbook, published by the St. Eustatius Historical Foundation in 2007, provides the following recipe:

Ingredients:

- 1 lb flour
- ½ lb packed brown sugar
- 2 eggs
- ½ cup of butter mixed with a little Crisco
- ¼ tbs cinnamon
- ¼ tbs orange peel
- ¼ tbs aniseed
- 1 cup of watered milk
- ¼ yeast dissolved in a little warm milk

- A dash of baking soda
- 1 tbs essence of some raisins

Instructions:

Mix sugar and butter together. Add eggs and spices, then add milk, essence, and raisins. Add yeast and baking soda alternately with flour. Mix, but do not knead, just roll with your hand and shape. Let sit overnight. Bake at 350°C for approximately 45 minutes. Be careful not to burn the bottom of the cakes.

[Fig] Saturday's traditional baking in a brick oven. (photo: Jet Bakels)



Landscape and Identity

How can we meaningfully connect the past with the present and the future? Many Stadians are asking themselves this question today. The past is embedded in the landscape, both visibly and invisibly: in springs and cisterns, in Amerindian pottery, in the ruins of plantation buildings, and in the human remains of enslaved people. But it is also present in the blue beads, and in all the trees, crops, and herbs that were brought from different directions and found a place in fields, along roadsides, in gardens, and in pots, where they were admired, eaten and drunk, and used as fuel and building material. Alongside the land lies the sea, which sustains fish, shellfish, and seabirds – and with them, the islanders – and over which ships continually come and go, bringing new people, languages, and products. In this sense, the landscape is also a cultural space, providing landmarks on which memories can be anchored in a society where much of its history and traditions are passed down orally.

Abandoned and overgrown fields and plantations bear witness to forms of cultivation that have since been abandoned – though some are once again being brought back into use today. Other traces of remembrance are fading, perhaps forever. The significance of the flamboyant tree remains very much alive. But the tamarind,

a tree linked to African spiritual traditions, is slipping from view. During the period of slavery, people are said to have been buried beneath the tree, and for a long time it also served as a gathering place. The best-known tamarind on Statia is the one under which the renowned Methodist preacher “Black Harry” is said to have preached in the late eighteenth century. It is still a tree that people recognize, but its history will fade if it is not documented.

The landscape is shaped by human hands, experienced in people’s minds, but it also has its own dynamics. Climate change is affecting many of the forms of intangible heritage discussed here, as well as the relationship with the past, when the island was more self-sufficient. The women who grow plants for bush tea in their gardens note that longer dry periods are occurring. If not carefully tended, the plants wither. They also speak about Hurricane Maria, which struck in 2017 and toppled many fruit trees.

Because more goods are now imported, the island has become increasingly dependent on outside supplies. This creates vulnerability when transport is disrupted by hurricanes, which appear to be happening more frequently. “*During hurricanes, it becomes very clear that the traditions and skills of the past are important,*” say the women of the Farm to Table Project. “*We*

used to have a garden – a ‘kitchen garden’ – by the house; we kept chickens. Those were ways to survive. We need to bring that back.” People also note that, due to worsening drought, goats and donkeys are entering gardens in search of food.

Storms also threaten native animal species. Hurricanes Irma and Maria damaged the forests on the volcano’s slopes to such an extent that the local quail dove population was decimated, a decline further accelerated by habitat destruction caused by invasive species such as free-roaming goats and chickens. The population of the already vulnerable Lesser Antillean iguana continues to decrease for the same reasons. There also appear to be fewer Caribbean hermit crabs in the Quill than there were 40 years ago. Older islanders recall the exciting annual expedition of their youth in April, when the crabs were said to descend the Quill at night on their way to the sea. While children went into the Quill with flashlights to collect them, pots of water were already set to boil at home. Today the crabs are protected, and the collective hunt no longer takes place.

Memories, of course, can be deceptive – or perhaps better put, they are shaped by the concerns of the present. The free-roaming goats on Statia, which many Stadians consider “part of the island” and whose



freedom they defend emotionally from that perspective, are also said to be of relatively early date. The free-roaming is said to have only begun in the 1950s. Partly as a result of a hurricane that is said to have destroyed the fences at the time. The animals broke loose and people “*simply left it that way*”. Before then, stray livestock was rounded up by the police and kept in an enclosure at Fort Oranje.

FEATURED

[Fig] Caution sign – iguanas crossing.



[Fig] Mural made by Hanneke Floor.

Mural at the performance stage in Oranjestad

Dutch painter Hanneke Floor created this mural in 2020 at the request of the island's Department of Culture, while she was living on St. Eustatius. In consultation, she selected a range of themes and figures that together reflect the identity of Statia. On the left, the mural depicts the island's churches, the coastline in front of the old quay, and the volcano that dominates the landscape, followed by the island's emblem. This is followed by a scene of two men riding donkeys, based on a historical photograph. Their identities were

traced; one of the men turned out to be a fishmonger.

The adjoining panel features a portrait of Taro Merkman, a pioneer of greenhouse vegetable cultivation on the island. During her 2019 state visit, Princess Beatrix toured these greenhouses. In the lower right of the panel appears Miss Brooks, whose extensive knowledge of vegetables, fruit, and herbs finds expression in the produce she grows in her garden and sells locally. The following panel is devoted to nature, depicting several birds, a turtle, an iguana, and the name of STENAPA, the island's nature conservation organization.

Following this, we see a series of portraits of people who have played an important role on the island: the renowned Killy Killy Band and craftspeople such as bakers, nurses, and seamstresses, all indispensable to everyday life on the island. In the upper right, Stanley van Putten is depicted, who for many years was responsible for raising the flags of St. Eustatius and the Netherlands and ringing the bells at Fort Oranje, at 6 a.m. and 6 p.m. Next to him are the impressive waterworks beneath Fort Oranje and the island's two museums. The rightmost panel celebrates Carnival and is based on various individuals and their costumes.

Intangible Heritage as a Beacon and an Instrument for Change

All the developments described above are also setting intangible heritage in motion. The present period is perhaps most strongly marked by the breaking of the silence on the harsh period of slavery and a renewed appreciation of the heritage from that time. In addition, it is proving essential to integrate local knowledge – Traditional Ecological Knowledge (TEK) related to agriculture and nature management – into policy whenever possible.

Museums and heritage centers can play an important role here, as can festivals such as the Statia Roots Festival, which explicitly aims to reconnect the people on the island with their African roots. In cooperation with schools, presentations are developed about the island's history and current developments. These focus not only on the past but also on present-day changes, which are discussed with the community.

This happens, for example, at the Heritage Centre, where an exhibition on crafts (in 2025) looks back to the past from a fresh perspective. By examining the role and significance of Black craftspeople – especially the women among them – a forgotten history is brought to light, inspiring pride and strong emotion in today's generations. *“At the opening, many*



[Fig] Humorous sign to alert people to close the gate to keep goats outside.

attendees discovered that their ancestors had practiced a particular craft that is still carried on within their families today. Suddenly, they understood its origins,” says curator Raimie Richardson. *“It was an incredibly emotional moment.”*

This example demonstrates how museums and heritage centers in the region can provide a social platform for new insights and societal developments related to heritage and identity, in accordance with ICOM's definition of a museum's role. Investing in staff and resources would further enhance the function of these educational platforms. A proper monumental treatment of currently

unmarked sites of memory linked to the history of slavery – such as the “African Cemetery” and the slave trade harbor – would also make a vital contribution to the island’s emancipation process. Marking such monuments is, in itself, a form of emancipation: it allows the community to honor and reflect on their past on their own terms and, based on these sites of memory, to develop new forms of commemoration. Cultural traditions – bush tea, cooking practices, old and new celebrations and commemorations – are essential to the formation of a community’s identity. “*Cultural traditions define what you represent as a people,*” say two women involved in the Farm to Table project. “*You really want those traditions to live on. A people’s identity is rooted in their traditions.*”

In this way, living heritage serves as both a beacon and a means of expressing the diverse voices within a society, which are constantly reflected in daily life on the island.

FEATURED Caribbean Celebrations and Commemorations in the (European) Netherlands

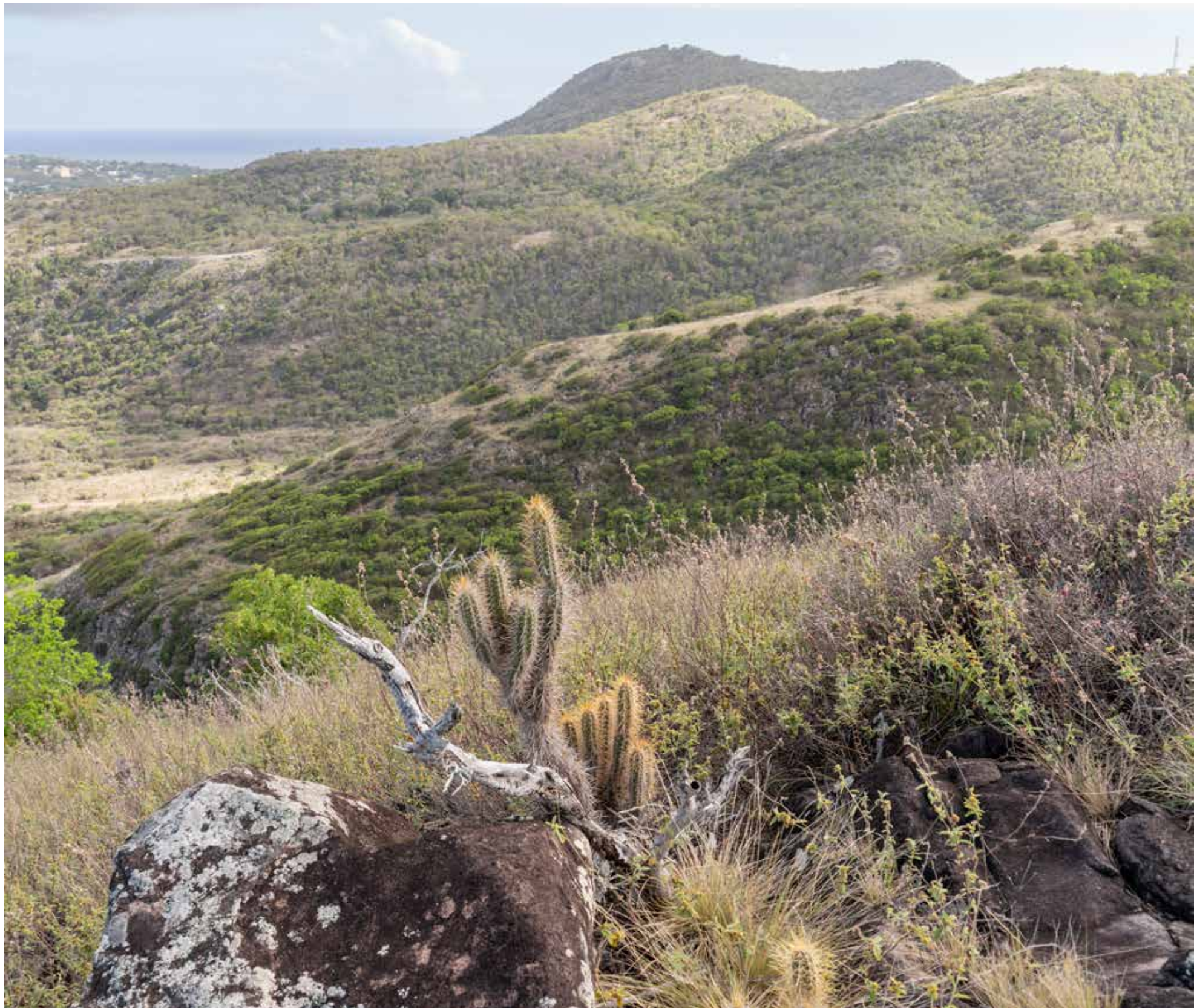
Caribbean Dutch communities have brought their festive traditions and commemorations with them to the European Netherlands. Since 1984, for example, the Summer Carnival in Rotterdam has been organized – a celebration that has steadily grown and has now been adopted by several other cities. Summer Carnival Rotterdam is a vibrant form of intangible heritage that engages a growing group of participants in the carnival tradition. In 2024, it was inscribed by UNESCO on the Representative List of the Intangible Cultural Heritage of Humanity because of the cultural diversity expressed in the annual street parade.

Emancipation Day, on July 1, is also celebrated in the Netherlands under the name *Keti Koti, Sranantongo* for “breaking the chains”. This combined commemoration and celebration began in Amsterdam but is now observed in several cities. Many Surinamese people wear traditional Surinamese clothing during the festivities: the *koto*. This ensemble includes the *angisa* (a specially folded headscarf), the *yaki* (jacket), and the *koto* (skirt), worn to honor the ancestors. Both the mayor of Amsterdam, Femke Halsema (in 2021), and King Willem-Alexander (in 2023) used this

day to formally apologize for the history of slavery.

[Fig] European Netherlands Summer Carnival. (photo: Rotterdam Unlimited Zomercarnaval)





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Persoonlijke communicatie

Albertus J. Courtar (Oranjestad, Statia, 16 april 2025).

Raimie Richardson (Oranjestad, Statia, april 2025).

Cedric Lijfrock, voormalig directeur Kadaster (Statia, april 2025).

Hazel Durand (Windwardside, Statia, april 2025).

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Protected areas




-  Statia Marine Park
-  Marine Park Reserve
-  Boven National Park
-  Quill National Park

Heritage objects




-  Fortifications
-  Cemeteries

Topography

Maritime locations

-  Light major
-  Light minor
-  Wreck

Roads

-  Public road
-  Private road
-  Dirt roads and trails




Airport taxiways

-  Runway
-  Taxiway
-  Apron
-  Grass apron

Special landuse

-  Airport
-  Playground
-  Solar power plan
-  Sports centre
-  Swimmingpool
-  Waste disposal
-  Built-up areas

Geology

-  Gullies
- Contour lines**
-  50m line
-  100m line

