# Curriculum | ST. THOMAS

Celebrating the history and ecology of the U.S. Virgin Islands

# **Cultural & Environmental Vistas**

Enjoy the rich ecological and historical value of signature bays in the VI

# Virgin Islands Parks

Conserve essential coastal and marine habitats and species in Territorial and National Parks

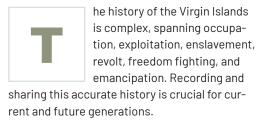
# Discover Historic Landmarks

Appreciate the complex and fascinating history of the VI



# Rich Coastal History

This Coastal Curriculum Guide celebrates the rich coastal history and ecology of the Virgin Islands.



The diverse coastal and marine natural resources of the Virgin Islands, including coral reefs, mangroves, seagrass beds, and associated fish and invertebrate species, define the beauty and productivity of our marine environment. These resources face threats from natural and anthropological sources such as climate change and associated impacts and poor water quality from land and marine-based sources of pollution.

Ongoing efforts in coral reef and mangrove restoration in the Virgin Islands aim to safeguard

these critical resources. Protecting and stewarding these natural resources is essential, as the sustainability and well-being of present and future Virgin Islanders hinge upon it.

The marine industry in the Virgin Islands is thriving and expanding. We encourage all Virgin Islanders, from professional and recreational mariners, to engage with this coastal information on cultural and natural resources.

The Department of Planning and Natural Resources extends gratitude to the Virgin Islands Professional Charter Association and the Virgin Islands Conservation Society for authoring this guide. Appreciation also goes to the historians, scientists, and mariners of the Virgin Islands whose valuable time, expertise, and local knowledge contributed significantly to its creation.



Two Women Chatting by the Sea, St. Thomas, 1856, Camille Pissarro



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The Virgin Islands Professional Charter Association (VIPCA) unifies, supports and furthers the capabilities of the marine charter industry within the U.S. Virgin Islands by providing compliance guidance, youth training, and one voice to assist in the development of industry standards for the continued growth and strength of the charter industry.

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Teal Earth Solutions helps organizations achieve their conservation and natural resources management goals.

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# On the cover

The St. Thomas East End Reserves, also referred to as STEER, comprises almost 10 km2 of significant coastal, marine, and fisheries resources including mangrove forests, seagrass beds, salt ponds, lagoons, reefs, and cays.



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# Charlotte Amalie

By the late 1600s, Charlotte Amalie had become one of the busiest ports in the Caribbean, shifting the island's economy from agriculture to trade.



harlotte Amalie, the capital and largest city of the U.S. Virgin Islands, was the first permanent European settlement on St. Thomas. Its strategic

deep-water harbor, once a haven for pirates prior to Danish control, now serves as a bustling hub for maritime activity. Today, the vibrant city is the primary port for numerous cruise ships, welcoming visitors with a blend of historic culture and contemporary allure. Along its streets, modern commerce and a diverse array of restaurants offer a taste of the city's dynamic commercial and culinary landscape.

Denmark's initial colonization attempts date back to around 1660. Initially, their focus was on agricultural development and plantations, with little attention given to the growth of Charlotte Amalie itself, aside from the establishment of Fort Christian. However, as the government recognized the natural harbor's potential, residents were granted licenses for development. At this time, the area that is now Charlotte Amalie was known as Taphus (meaning beer houses). This name hails from the establishment of many taverns catering to sailors that accompanied the surge in the town's growth. In 1691, the town was officially named Charlotte Amalie in honor of Queen Charlotte Amalie of Hesse-Kassel, the wife of King Christian V of Denmark.

By the late 1600s, Charlotte Amalie had become one of the busiest ports in the Caribbean,

shifting the island's economy from agriculture to trade. The Brandenburger Company, in collaboration with the Danish West India Company, established the slave trade, kidnapping African people and human trafficking them into enslavement throughout the Caribbean. The Danish treaty permitting these crimes and the governor's lenient attitude toward piracy contributed to its bustling maritime activity. In 1815, St. Thomas became a free port, attracting importing houses from various European nations due to the absence of customs duties and taxes. Many formerly enslaved individuals worked as clerks and shopkeepers in Charlotte Amalie during this time.

At the end of the 19th Century, technological advances allowed ships to bypass Charlotte Amalie, diminishing its significance as a refueling point for vessels traveling between South and North America. Natural disasters, including hurricanes, fires, and a tsunami, further halted the harbor's development.

Negotiations between the United States and Denmark regarding the ownership of the U.S. Virgin Islands occurred multiple times between 1865 and 1917. The final agreement, in 1917, involved the United States purchasing the islands for \$25 million in gold coin. After gaining control, the U.S. promoted the development of a tourism economy, which flourished in the 1960s and continues to shape the economy of modern-day Charlotte Amalie.



### **Fort Christian**

Fort Christian was the first and largest fort in the U.S. Virgin Islands, constructed between 1672 and 1678 by the Danes on a peninsula in the bay of Charlotte Amalie. The original fort featured four high bastions, balcony-like structures protruding outward along the fort wall, allowing for defensive fire, surrounding a tall tower named Trygborg. This was known as the "safe castle," built to protect government officials and church members during attacks, with facilities including a chapel, kitchen, guardrooms, offices, prison cells, and dormitories. Cacti were strategically planted around the fort to deter potential attackers.

The construction was overseen by an enslaved, highly qualified mason who was promised personal freedom after seven years of service to the West India and Guinea Company. At the beginning of construction, the workforce consisted of enslaved Africans and indentured servants, often contracted poor European workers trying to establish themselves in the new colony. By the first half of the 1700s, the labor force had shifted to become predominantly enslaved individuals. The cost of building the fort was accounted for in barrels of sugar to measure the output needed to offset the construction expenses.

In 1874, a Gothic gate and clock tower were added to Fort Christian. Designated a historic landmark in 1971, it later became a museum. Over the years, restoration work has been carried out to address damage from hurricanes and ensure historical accuracy, preserving the fort's presence in the landscape of the Charlotte Amalie.

### Catherineberg

Catherineberg is a historic estate perched atop Denmark Hill, built in 1830. Originally under the ownership of a prominent Danish public official and distinguished landholder in the Danish West Indies, it later became the residence of



# **Cultural Corner**

Camille Pissarro, born on July 10, 1830, in a Main Street residence in Charlotte Amalie, comes from a diverse Virgin Island heritage. His father hailed from Portuguese-Jewish ancestry, while his mother was a native Virgin Islander with roots in a French-Jewish family. St. Thomas inspired much of his work with the culture and landscape of the island featured in many paintings. Today, Pissarro is revered as a pioneering figure in both Impressionism and Post-Impressionism painting, with his work on display in esteemed museums worldwide.

Governor Hans Henrik Berg in 1862. The Gov Hans Henrik Berg house represented only a fraction of Berg's extensive holdings, which included two plantations on St. John—Annaberg and Lemsterbay. Strategically positioned just beyond the boundaries of Charlotte Amalie, the estate served as a clever tax maneuver for the Governor. Due to the estates' position outside of the town lines, the property was taxed based on cultivated acres rather than the expanse of the building itself, significantly reducing the taxes levied on the property.

# **Legislature Building**

Constructed in 1828 for Danish police barracks, the Legislature Building holds historical significance as the site of the official ceremonial transfer of the U.S. Virgin Islands to the United States. Following this transfer, the building served as barracks for U.S. Marines from 1917 to 1930, subsequently repurposed as a public school.

In 1956, the Legislature Building underwent restoration efforts, reclaiming its historical prominence. Since then, the Legislature has occupied it, signifying its enduring role as a center for governance and administration in the U.S. Virgin Islands.

# **Blackbeard's Castle**

Originally constructed as a Danish watchtower for the harbor in 1679, Blackbeard's Castle, initially named Skytsborg or "protection castle," served as a crucial element in the defensive network of St. Thomas. Contrary to its popular association with piracy, the tower has no direct ties to Blackbeard, also known as Edward Teach. Strategically situated on Government Hill, the highest point in the area, it was built as the first line of protection against potential attacks. This high position of elevation allowed for potential threats to be monitored on both the north and south sides of St. Thomas, watching over both Magens Bay and Charlotte Amalie.





Blackbeard's Castle is the only unmodified 17th-century fortified tower in the Caribbean. The site includes a fountain dedicated to the organizers of the Fireburn rebellion—Queens Mary, Agnes, and Mathilda.

### **Bluebeard's Castle**

Also known as Frederiksfort, Bluebeard's Castle is a simple 17th-century fortified tower and one of the earliest fortifications on St. Thomas. Despite local lore attributing its construction to the infamous pirate Bluebeard, similar to the legends of Blackbeard's Castle, none of these stories have been substantiated.

Bluebeard's Castle initially served as a watchtower and functioned as a fort until 1735. In the 1820s, it was sold to a merchant who integrated the tower into the Frederiksberg Estate—a residence constructed on the property. The tower's

historical significance persisted through various uses.

In 1938, as part of a U.S. program to develop a tourist economy on the island, Bluebeard's Castle was renovated into a hotel that President Franklin Roosevelt visited. Today, Bluebeard's Castle still operates as an entire hotel and restaurant, with the original tower remaining a functional part of the establishment.

# **Environmental Impact**

On November 18, 1867, a powerful 7.5 magnitude earthquake in the Anegada Trough, located between the islands of St. Croix and St. Thomas, reverberated through the region. The repercussions were devastating, particularly for the significant waterfront areas of both islands, which bore the brunt of the impact. The tsunami commenced with a striking recession of water from the harbor in Charlotte Amalie, swiftly succeeded by a towering wavefront that surged to a staggering height of 20 feet. The onslaught of destruction extended further to Fredriksted and Christiansted on St. Croix, where substantial wave-related damage compounded the catastrophe. It is the only major tsunami recorded in the U.S. Virgin Islands.



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# Hassel Island

Hassel Island was an ideal location for ship repair; the cove provided protected anchorage for lengths of time close to Charlotte Amalie's main harbor.

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ocated approximately 500 yards off the south side of St. Thomas, Hassel Island spans roughly 136 acres. It is presently under the joint

ownership of the National Park Service and the Virgin Islands Government, whose portion of land is managed by the St. Thomas Historical Trust. An excellent resource and friend to Hassel Island, the St. Thomas Historical Trust provides tours by request. Unfortunately, the portion maintained by the National Park Service remains temporarily closed to visitors, still recovering from the extensive trail damage inflicted by the hurricanes

of 2017.

Archeological evidence from the Saladoid culture was found on Hassel Island. Saladoid does not reference specific people; it is an

archeological classification based on a unique pottery style. The Saladoid culture includes the Arawak people, whose presence in the U.S. Virgin Islands has also been recorded on St. Croix and on St. John.

Hassel Island was initially connected to the mainland of St. Thomas by an isthmus of land called Haulover. The stretch of land was 30 yards long and 8 feet tall. This name was derived from the fact that it was often faster for small vessels and crafts to be hauled over the small isthmus of land than circumnavigating Hassel Island. The peninsula was disconnect-

ed in 1864 by the Danish government in an attempt to control

Cholera and Malaria outbreaks. This increased harbor circulation, preventing diseases from festering in still water,

in still water, and marked the official creation of Hassel Island.





# **Creque Marine Railway**

The Creque Marine Railway, situated on the north end of Hassel Island, played a pivotal role in the region's maritime history. This railway featured a wooden boat cradle set on an incline leading into

# **Cultural Corner**

Hassel Island boasts a rich cultural tapestry shaped by its strategic maritime significance and diverse historical influences. The island reflects a blend of indigenous Caribbean, European colonial, and African heritage, which is evident in its architecture and past activities.

the water, allowing vessels to be floated into the cradle and then drawn up using a winch. This innovation greatly facilitated the maintenance and repair of the hulls of large ships engaged in maritime trade. However, by the 1960s, the railway was ultimately abandoned.

# **Prince Frederick's Battery**

Perched on the southeastern tip of Hassel Island, Prince Frederick's Battery has long stood watch over the entrance to the harbor, overseeing maritime traffic. The battery was erected in 1778, a testament to the strategic significance Hassel Island had in safeguarding the surrounding waters. After the British briefly seized control of St. Thomas in 1801, the battery underwent a name change to Fort Willoughby, but the British hold on the island

proved fleeting. By 1815, Denmark had reasserted its authority, and the battery reverted to its original name. Prince Frederick's Battery boasted an impressive arsenal, housing six cannons and essential facilities, including a small kitchen, a latrine, quarters for officers, and a secure magazine for ammunition storage.

### **The Garrison House**

The Garrison House was an addition to Hassel Island during Britain's second occupation from 1807 to 1815. Due to the parallels in architecture and history to a similar structure in Barbados, it is widely believed to have served as the Board of Ordnance storage facility. Such structures are characterized by their stout construction, featuring thick walls that provided secure storage and



**Saladoid Pottery** 

Saladoid people are characterized by agriculture, ceramic production, and sedentary settlements. Their unique and highly decorated pottery has enabled archaeologists to recognize their sites and to determine their places of origin.



Photo of Saladoid Pottery

# Cowell's Battery & Signal Station

Built during the initial British occupation of 1801, Cowell's Battery and Signal Station was a vital defensive vantage point. Positioned on the southernmost peak of Hassel Island, its strategic placement with Prince Frederick's Battery ensured comprehensive protection of the harbor entrance. Transitioning in the latter part of the 1800s, the site became a signal station. A towering mast was installed within the battery, from which balls and squares were suspended in specific configurations, offering a means to relay essential information about marine traffic and the nationality of approaching vessels to the shoreline.

As St. Thomas became an essential party in the Caribbean mercantile trade, the cove relied heavily on ensuring proper ship function and hull integrity after long voyages. With the transition to steam and coal engines, Hassel Island provided fresh water and coal to the shipping industry well into the 1900s.



# Economy

With poor soil cover and mountainous terrain, Hassle Island was never used for agricultural purposes; instead, the driving economic source for the small island was ship repair in Careening Cove. This was an ideal location for ship repair; the cove provided protected anchorage for lengths of time and was close to Charlotte Amalie's main harbor. Careening Cove is located in the middle of the island on the eastern side, facing St. Thomas.

safeguarding for weapons, munitions, and military paraphernalia. Since 2012, the dedicated efforts of the St. Thomas Historical Trust have been instrumental in the meticulous restoration and upkeep of this valuable piece of Hassel Island's heritage.



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# Water Island

Cradled within the heart of the Charlotte Amalie Harbor, south of St. Thomas, lies Water Island. Spanning 492 acres, it claims the title as the smallest of the main U.S. Virgin Islands.



radled within the heart of the Charlotte Amalie Harbor, south of St. Thomas, lies Water Island. Spanning 492 acres, it claims the title as the smallest of the

main U.S. Virgin Islands. This idyllic retreat is primarily residential, home to a close-knit community of 182 residents. Water Island is accessible through a reliable ferry service from Crown Bay, St. Thomas, to Phillips Landing on Water Island. The island's upkeep is overseen by the efforts of the Water Island Civic Association in collaboration with the Virgin Islands government. For exploration, visitors can opt for golf cart rentals or navigate the island's walkable paths on foot, leading to historic fortifications and various pristine beaches.

The Europeans appointed Water Island's name to reflect the presence of natural freshwater ponds, a rare and vital resource in the Lesser Antilles. Other islands often lacked potable water, making Water Island a popular stopping point to replenish supply during long journeys.

Water Island was historically owned by a collective of free African and West Indian proprietors who oversaw cotton cultivation and raised livestock. Danish claims to the area trace back to 1769, until 1905, when the Danish East Asiatic Company purchased it from the government. Because of this, Water Island was notably

excluded from the initial land acquisition agreement between Denmark and the United States in 1917. The Danish East Asiatic Company continued to own the land via proxy of the Danish Kingdom until the United States purchased the land in 1944 for strategic defense purposes during World War II.

Under the management of the Department of Defense, Water Island became a chemical munitions evaluation and storage site as part of a tropical testing program. Extensive environmental assessments have since been conducted, confirming the island's safety and well-being for residents and visitors. The only toxic agent found was asbestos, which was properly removed and disposed of.

After the war's conclusion in 1950, the land was transferred to the Department of the Interior for oversight. The land was leased to a private developer, who began a residential and hospitality construction period that ceased after Hurricane Hugo's impact in 1989. It wasn't until 1996 that Water Island officially integrated into the U.S. Virgin Islands, marking a new chapter in its enduring history.

### **Fort Segarra**

Fort Segarra, situated at the southernmost point of Water Island, is a significant underground fortification. Its construction was initiated during World War II to safeguard the submarine base on St. Thomas. However, the war concluded before the fort's completion, and the Department of Defense abandoned the project. The fort encompassed two gun emplacements, watchtowers, underground bunkers, and other military facilities. It is advised to exercise caution when exploring the fort's remains due to potentially unstable floorboards and other structural elements. An observation deck atop the fort offers panoramic views, providing visitors with a striking 360-degree perspective of the surrounding area.



# **Honeymoon Beach**

Located in Druiff Bay on the island's west end, Honeymoon Beach is one of the most popular attractions on Water Island. Its extremely sandy shores and calm, clear waters make it ideal for swimming, relaxing, and playing on shore. Food and beverages are available for purchase, with facilities, making it a busy anchorage for boats looking for an excursion.

### **Limestone Bay**

Tucked away in seclusion on the island's south side, Limestone Bay is known for its pebbled shores and privacy. While lacking in traditional conveniences, it offers a unique beach experience, with calm shallow waters and plenty of exploring opportunities on land. Limestone Bay is also the location of the Supermarket Reef, a unique dive site. What sets this reef apart is the growth pattern of its coral, which veers perpendicular to the island rather than parallel. This distinctive trait creates a spur and groove coral formation, which some say resembles the aisles of a supermarket.



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# Frenchtown St. Thomas

Settled in the late 19th century by French immigrants from the island of St. Barthélemy, Frenchtown retains a distinct identity characterized by its unique blend of French-Caribbean traditions.

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ettled primarily between the 1800s and mid-1900s, Frenchtown was established by immigrants from St. Barthelemy, commonly known as St. Barths—a French Caribbe-

an island approximately 139 miles to the east of St. Thomas. Motivated by the prospect of better employment opportunities, these individuals found their niche in the fishing industry, transforming Frenchtown into a vibrant fishing village. This community has preserved its cultural identity, celebrated in the French Heritage Museum, dedicated to sharing and celebrating their unique story.

St. Anne's Church, also known as St. Anne's Chapel and Saints Peter & Paul Cathedral, is one of the oldest religious structures in the Virgin Islands. Built in 1921, it has undergone renovations over the past decade. Antique French Gothic furnishings sourced from the church in Pennsylvania inspired the Catholic

congregation to embark on a comprehensive remodel, restoring the bell tower, needed exterior maintenance, and the replacement of pews and pulpit.

Villa Olga, historically known as Careening Hole, South Side Quarter, Honduras Estate, was established in the 1670s by Jürgen Ivensen, the first Danish governor of St. Thomas. At its inception, the estate primarily focused on sugar cultivation and livestock farming. In the 18th century, Russian developers added enormous above-ground cisterns to store millions of gallons of water for resupplying ships on neighboring Hassel Island. The estate house was repurposed by the Rus-

sians and named Villa Olga after an aristocratic lady in their court.

It served as the Russian Embassy for 9 years, starting in 1894. During World War II, it functioned as a gambling house. Today, the estate hosts multiple restaurants and an inn, showcasing a diverse history that spans centuries.



# Subbase St. Thomas

Officially known as the Submarine Base, this site played a crucial role in the defense and operations of the U.S. Navy during the war, serving as a logistical hub for submarine operations in the Caribbean.



his area of St. Thomas is known as Subbase, hailing its name from the submarine base located here during World War II. The base was established to play a crucial

role in training the Navy Underwater Demolition Team (UDT). This team was considered a precursor to the modern Navy SEALs, created to conduct targeted stealth attacks on underwater enemy forces. Tasked with surveying beaches and offshore waters, the UDT created maps identifying key reef and rock formations. These maps were then utilized to eliminate underwater obstacles like cables and nets in enemy harbors and planting underwater mines on enemy ships.

Crown Bay, characterized by clear and calm waters with minimal currents, provided an ideal training ground for these techniques. Divers honed their skills in free-diving, enabling them to enter and exit submarines underwater, as this team was completely operational without the use of scuba equipment.

In the present day, the Subbase area has transformed and now accommodates cruise ships and freight cargo due to the deep nature of the harbor and dock. The historical significance of Subbase as a wartime training ground has evolved into a versatile harbor facility focused on tourism and commerce.

Acquired during the transfer of the Danish West Indies to the United States in 1917, Subbase played a crucial role during both World War I and World War II, serving as a vital logistical and operational hub for naval activities in the Caribbean. The area was equipped with submarine pens, barracks, and other military infrastructure that supported the U.S. Navy's presence in the region. Over the decades, Subbase has transitioned from its military roots to become an integral part of St. Thomas's maritime and commercial landscape, housing a mix of government facilities, businesses, and residential areas, while retaining echoes of its storied past through preserved historical structures and landmarks.



# Lindbergh Bay

Named in honor of the aviator Charles Lindbergh, celebrating his victory tour after completing the first solo non-stop flight across the Atlantic Ocean in 1927.



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Lindbergh visited St. Thomas, at the invitation of the governor, along with his victory tour from Caracas, Venezuela, to San Juan, Puerto Rico. The only suitable landing spot on St. Thomas at the time to land Lindbergh's plane, a single-engine propeller, was a golf course on Mosquito Point, the peninsula marking the entrance to the West Gregerie Channel and the Subbase area. Lindbergh later became an avid and vocal supporter of the Nazi movement, tarnishing his legacy.

The bay was originally known as Mosquito Bay; the excitement surrounding Lindbergh's arrival prompted the property owner to change the name to Lindbergh Bay Estate. Notably, the estate served as a naval hospital during World War II and was converted into a hotel eight years later. Lindbergh Bay is now home to businesses, hotels, the airport, and a beautiful beach.

Emerald Beach holds prestigious Blue Flag status, an international eco-label promoting sustainability in the tourism sector. To be awarded as a Blue Flag site, the area undergoes rigorous annual reviews to ensure high water quality standards and responsible environmental management. Along the beachfront, hotels, a restaurant, food trucks, and vendors offer various amenities and recreational opportunities.



Photo of Charles Lindbergh



# Brewers Bay

The bay offers very protected and calm waters, fostering a beachscape adorned with vegetation that plays a crucial role in natural erosion prevention



rewers Bay, is renowned for being a habitat for Green Sea Turtles, due to the seagrass habitat on the east side of the bay. The bay offers very protected and calm waters,

fostering a beachscape adorned with vegetation that plays a crucial role in natural erosion prevention. The shoreline runs from Black Rock Point to the west and ends at the airport. The area is a popular spot for roadside food trucks and vans offering local cuisine, such as johnny cake and pate. Brewers Bay is also an excellent location to watch the sunset as it faces directly west and observe planes landing at the airport.

Estate Brewers Bay was once a sugar plantation owned by John Brewer; records of the estate begin in 1856. There are ruins of both the residence and an animal-powered mill, and are registered with the National Parks Service, however are unmaintained.

The property was deeded to the University of the Virgin Islands in 1968 by the U.S. Federal Government. The school was founded originally as the College of the Virgin Islands in 1962 and thrives today as a public, co-ed, land grant Historically Black College and University (HBCU). The University of the Virgin Islands is the first HBCU to offer free tuition to eligible students, providing increased access to post-secondary education for all local high school students.

Brewers Bay Trail, also known as Brewers Rock, is a challenging hike offering

rewarding scenic views of the bay looking south. This is an outand-back path estimated

to be around two miles.
The trail is marked by
blue and red paint, however, hike with caution
as it is difficult to follow
and potentially dangerous due to minimal
maintenance.



# Northside Beaches

The bays along the north side feature a beach landscape with coastal vegetation that plays a crucial role in natural erosion prevention.



he Preserve at Botany Bay spans 367 protected acres, forming a neighborhood accessible only by walking from the gate, as driving is not permitted for non-residents.

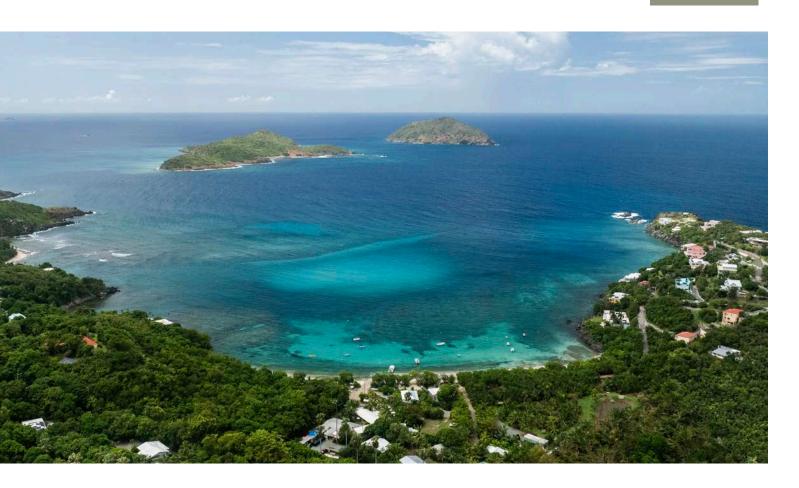
Above Botany Bay, there are remnants of a 19th-century sugar cane processing factory constructed with red brick, stone rubble, and local brain coral.



Mermaids Chair is owned by The Nature Conservancy and open to all. The hike from the gate is 3 miles out-andback, incorporating both paved roads and sidewalks within the Botany Bay neighborhood. This hike leads to the westernmost point of St. Thomas and leads to the celebrated point where the Atlantic Ocean and the Caribbean Sea meet. Visitors have the unique opportunity to walk along this small section of beach, witnessing the convergence of the

Caribbean Sea and Atlantic Ocean.



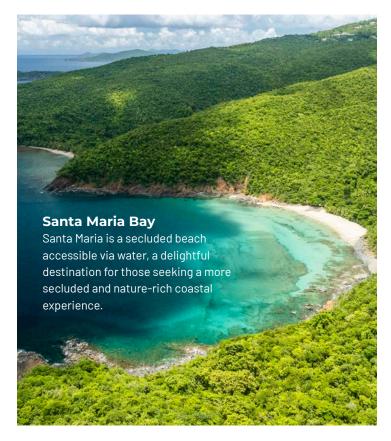


# **Hull Bay**

Hull Bay, situated in a residential area on the Northside of St. Thomas, is a laid-back and crowd-free destination cherished by visitors and locals. Two outdoor restaurant bars cater to visitors, offering a relaxed atmosphere. Renowned as one of the few surfing spots on the island, Hull Bay features a reef break, with the surf season extending from November through March. The tree-lined shore showcases a variety of species, including the Seaside Mahoe, Seagrape, Genip, and Coconut Palm, providing shade and a natural barrier between the beach, restaurants, and parking lot.

The bay is a popular location for snorkeling and scuba diving, offering an interesting underwater landscape with a seafloor comprising sandstone, rocks, and coral. Although not ideal for wading, the left side of the beach provides a more sandy entry into the water. Hull Bay is home to a local fishing community with many small fishing boats often moored in the bay, accompanied by a boat launch.

The shoreline offers views of Inner and Outer Brass, situated about half a mile offshore. Outer Brass, a wildlife sanctuary owned by the U.S. Virgin Islands government, allows fishing, lobster, and conch harvesting during the appropriate seasons. Hull Bay's diverse offerings make it a multifaceted destination for both water sports enthusiasts and those seeking a tranquil beach experience.



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# Magens Bay

The pristine, white sandy beach extends nearly three-quarters of a mile and is accompanied by calm waters protected by the Peterborg Peninsula



anaged under the stewardship of the Magens Bay Authority, this beach is considered to be one of the most serene in the territory. The pristine, white sandy

beach extends nearly three-quarters of a mile and is accompanied by calm waters protected by the Peterborg Peninsula. Amenities include well-maintained bathrooms and showers, water equipment rentals, and concessions. Pavilions are available for rent, complete with picnic tables, grills, and electrical outlets, which have hosted numerous birthday parties, family gatherings, and even weddings. A modest parking and entry

fee is charged to sustain the beachfront.

One of the natural highlights of Magens Bay is the Discovery Nature Trail, a 1.5-mile hike that offers a rewarding yet moderately challenging trek. With occasional steep

sections, the trail leads hikers through mixeddry forest and a lush, tropical ecosystem. The trail, accessible from either the Magens Bay Road or the west side of the beach, opened in 2004 following a partnership between the Nature Conservancy and the Virgin Islands Department of Planning and Natural Resources. This area, encompassing 319 acres of land, is now preserved to protect the Magens Bay watershed and is a testament to conservation efforts on St. Thomas. Formerly known as Estate Canaan, a sugar plantation dating back to 1733, the trail's history adds an enriching layer to the journey.

> Along the route, captivating points of interest include Guavaberry

trees aged between 200 to 300 years. This captivating blend of history and natural beauty enriches the Magens Bay experience for all who embark on this path.





Although not entirely substantiated, local legend tells a tale of Sir Francis Drake utilizing the bay as a covert harbor, allegedly for keeping a watchful eye on passing vessels for pillaging. However, the integrity of this tale remains a topic of debate. Initially labeled as "Great Northside Bay" on the earliest maps of St. Thomas, this coastal haven's namesake is Jacob Jorgenson Magens, the territory governor whose family owned the land for generations. Arthur Fairchild generously donated the land in 1946, stipulating that Magens Bay be "maintained as a public park, for use by the people of the Virgin Islands in perpetuity without discrimination of any kind as to race, creed, color, or national origin." The legacy of Arthur Fairchild's vision also endures environmentally, as the small arboretum he envisioned behind Magens Bay still thrives, featuring a rare and unique selection of

trees. This enduring commitment to inclusivity and preservation adds another layer of significance to the history of Magens Bay.

# Fairchild Day Dec. 27

This event commemorates the day in 1946 during which Arthur S. Fairchild, a Wall Street financier, donated 56 acres of his private property (including Magens Bay beach and surrounding grove and grasslands) to the municipalities of St. Thomas and St. John for use "as a public park by the people of the Virgin Islands in perpetuity without discrimination of any kind as to race, creed, color or national origin."

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# Mandahl Bay

Mandahl Bay is a vital mangrove wetland, serving as a nursery, food source, and shelter for numerous commercially significant fish species, sea turtles, and sea birds.



andahl Bay is a vital mangrove wetland, serving as a nursery, food source, and shelter for numerous commercially significant fish species, sea turtles, and sea

birds. The mangrove forest not only supports these diverse species but also plays a crucial role in trapping sediment, preventing it from suffocating nearshore coral species, particularly the threatened Elkhorn Coral, Acropora palmata.



The area includes a salt pond, which functions as a natural retention area between the terrestrial and marine ecosystems. Salt ponds act as effec-

tive filters, removing harmful contaminants such as sediment, nitrates, and phosphates before they reach the ocean. Furthermore, salt ponds serve as popular resting points for migratory birds and function as productive nurseries for specific fish species, enhancing the overall ecological significance of Mandahl Bay.



# Coki Beach

Renowned for excellent snorkeling and diving towards the end of the peninsula, allowing for a close encounter with various reef fish.



ater Bay, located around the east side of the Coki Point Peninsula, is frequently utilized by guests from the surrounding waterfront resorts. This bay offers a shallow and

calm environment.

Coki Beach is laid-back and frequented by locals and visitors alike. Renowned for excellent snorkeling and diving towards the end of the peninsula, allowing for a close encounter with various reef fish. Coki is a favorite spot amongst local scuba divers for a shore dive! Snorkelers are advised to use fins if exploring farther out along the peninsula due to potential strong currents. Despite occasional crowding, the beach provides various

amenities for guests, including rental chairs and umbrellas and is a great spot to sample local cuisine. Coki Beach looks out directly at Thatch Cay, only a half mile offshore.

Thatch Cay is a small, undeveloped private island. Named for its abundant groves of Tyre Palms, also known as "Thatch Palms," historically used for brooms, mats, baskets, and as fire-resistant material used for roofs. The island witnessed habitation during the 1800s as part of a plantation known as The Hope. Cultivation included cotton and potato cropping, Tyre palm harvesting, and fishing. In the early 1900s, there was a record of six stone structures forming a small fishing community on the cay.



# Lindquist Beach

Lindquist Beach, situated on the northeastern coast of St. Thomas in the U.S. Virgin Islands, is a pristine and serene tropical paradise. Known for its soft, powdery white sand and crystal-clear turquoise waters, Lindquist Beach offers visitors a tranquil escape surrounded by natural beauty.



Located within Smith Bay Park, Lindquist Beach is a protected 21-acre nature preserve managed by the Magens Bay Authority. Accessible with a small entry fee, the funds contribute to the maintenance of roads and facilities. The beach features

picnic tables and pavilions for shade, and a short walk from the parking lot leads visitors to a soft sand bay. For added comfort, rental chairs are available. Although the preserve lacks walking trails, Lindquist Beach offers a serene environment for leisurely strolls along the shoreline.



The west side of the beach has a shallow rock shelf on the ocean floor, making swimming challenging but contributing to the protection of the seagrass habitat vital for marine life. Snorkeling enthusiasts

will find rays and turtles in the offshore waters to the east, providing an exciting opportunity to explore the underwater habitat of Lindquist Beach.





# Sapphire Bay

This crescent-shaped beach boasts soft, powdery white sand and shallow, clear turquoise waters that are perfect for swimming and snorkeling

S

apphire Beach, situated in Saint John Bay, earns its name from the captivating view it offers of the Island of St. John. Facing east, the beach experiences varying

wind conditions throughout the year due to the strong tradewinds blowing from east to west. The main development in the vicinity comprises a sizable resort, marina, and condo neighborhood, all conveniently within walking distance of the beach, contributing to high traffic in the area.

Sapphire Beach is a hub for recreational water activities, offering rentals for windsurfing, kayaking, paddleboarding, jet skis, and even parasailing. The waters near the beach are shallow, providing a welcoming environment for a variety of aquatic adventures.

This idyllic beach features soft, powdery white sand and shallow, clear turquoise waters, perfect for swimming and snorkeling. The beach is framed by swaying palm trees and offers stunning views of nearby islands and sailboats drifting across the horizon. Sapphire Beach is

popular among both tourists and locals, offering amenities such as

beachside bars, water sports rentals, and opportunities for relaxing under the Caribbean sun. Snorkelers can explore the colorful coral reefs just off the shore, teeming with tropical fish and marine life. Whether lounging on the beach, enjoying water activ-

ities, or simply soaking in the tropical ambiance, Sapphire Beach promises a memorable and picturesque experience on St. Thomas.



# Vessup Bay

Bordering Vessup to the left, the town of Red Hook holds numerous restaurants offering scenic views of the bay, while Vessup Beach occupies the right side of the bay.



essup Bay operates as a transportation hub for numerous boat charters and inter-island car and passenger ferries. Bordering Vessup to the left, the town of Red

Hook holds numerous restaurants offering scenic views of the bay, while Vessup Beach occupies the right side of the bay. The high boat traffic, coupled with its proximity to a vibrant hospitality area, results in marine debris accumulation in the mangrove forests.

The community actively works to remove these pollutants through annual beach clean-ups, where partners and volunteers

from across the island collaborate during Coastweeks to remove waste and record debris categories. This concerted effort not only addresses the immediate concern but also helps gather crucial data about marine and land-based sources of pollution and

potential solutions. Government agencies and non-profit organizations are actively involved in implementing preventative measures, advocating for the reduction of single-use plastics and styrofoam to alleviate the marine debris polluting Vessup Bay and threatening the health of the mangroves.

VI Clean Coasts (VICC) is a public-non-profit partnership between the Virgin Islands
Conservation Society and the VI Department
of Planning and Natural Resources that
helps local businesses, schools, marinas,
and residents improve their environmental
impact. Many local businesses participate in

the VICC Eco-certification program, all of which are committed to

the elimination of styrofoam in the territory. Multiple businesses located within Vessup Bay are VICC participants. All program initiatives are free to VI community members, please reach out if you are interested in participating or

learning more!





VI Clean Coasts helps businesses, schools, residents, and marinas in the USVI improve their impact on the environment. For more info click the website below or scan the QR code.

https://viconservationsociety.org/programs/vi-clean-coasts/







# East End Reserves

The St. Thomas East End Reserves, also referred to as STEER, comprises almost 10 km2 of significant coastal, marine, and fisheries resources including mangrove forests, seagrass beds, salt ponds, lagoons, reefs, and cays.



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Reserves, also referred to as
STEER, comprises almost 10
km2 of significant coastal,
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including mangrove forests, seagrass beds, salt ponds, lagoons, reefs, and cays. STEER contains one of the most valuable fish nurseries remaining on St. Thomas. Many species of fish and shellfish, including important commercial and sport fisheries resources like grouper, snapper, conch, and lobster, spend a portion of their life protected in the shallow mangroves and seagrass beds while feeding and growing before populating other marine habitats in the area.

Comprised of three connected protected areas – Cas Cay / Mangrove Lagoon, St. James, and Compass Point Salt Pond – STEER is one of two Marine Protected Areas (MPAs) managed locally by the Government of the U.S. Virgin Islands, the other being the St. Croix East End Marine Park (STXEEMP). As part of a larger, territory-wide Virgin Islands Marine Protected Area Network (VIMPAN), STEER (like STXEEMP) is designed to protect the ecological value of critical coastal and marine habitats and fisheries, support scientific research, and maintain recreational opportunities.

Recreational opportunities abound in STEER, including sailing, boating, snorkeling, and diving, among others. Popular dive sites, including

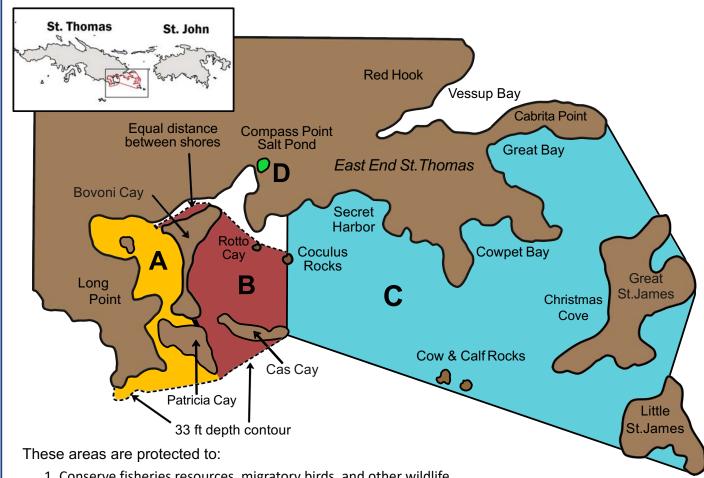
Cow and Calf Rocks and the Ledges on Little St. James, offer diverse and colorful diving opportunities.

The subsequent bays – Great, Cowpet, Secret Harbour, Benner – Christmas Cove, Mangrove Lagoon, and Cas Cay all lie within the protection of STEER.

Mangrove Lagoon hosts the largest mangrove forest in the Virgin Islands. In the face of sea level rise, mangroves stand to lose viable habitat. Pushed inward by rising seas, but without the ability to migrate inland due to roads and buildings, mangroves won't have any place to go. Restoration and Ecosystem-Based Adaptation (EBA) helps mangroves and other habitats adapt in the face of climate change. Severe storms, erosion, flooding, and drought threaten local economies and ecosystems. Restoration and EBA help marine and coastal habitats to combat threats from climate change. Restoration strategies can include planting and planning for the inland migration of mangroves, removing derelict vessels that threaten mangroves, restoring coral reefs to reduce wave energy, and planning for anticipated increases in rainfall or droughts. Coastal and marine habitats in the U.S. Virgin Islands provide essential ecosystem services - protecting and bolstering these habitats can reduce the impacts of climate change on the U.S. Virgin Islands.

# St. Thomas East End Reserves (STEER)

Cas Cay/Mangrove Lagoon, St. James, and Compass Point Marine Reserves and Wildlife Sanctuaries



- 1. Conserve fisheries resources, migratory birds, and other wildlife.
- 2. Preserve habitat for larval and juvenile fish, including coral reefs, mangroves, and seagrass.
- 3. Provide marine viewing and recreation areas.

It is illegal to hunt or take any fish, birds or other wildlife in any marine reserve or wildlife sanctuary.





For more information, contact the USVI Department of Planning and Natural Resources at (3) To obtain permits to engage in authorized fishing activities, contact the Division of Enviro Enforcementat (340)774-3320 or at https://dpnr.vi.gov/environmental-enforcement Scan the QR code to download the USVI DPNR Hotline App and report any violate

# REGULATIONS

For areas A, B, C, and D:







**NO FISHING** 

**NO HUNTING** 

**NO LITTERING** 







NO TAKE OF CONCH, LOBSTER OR WHELK In addition, the following are prohibited:

### A. Inner Mangrove Lagoon No internal combustion engines.

# B. Cas Cay / Mangrove Lagoon

No anchoring beyond 7 days. No anchoring boats without functioning sewage holding tanks. No operating any powered vessel in excess of 5 mph. No mooring of vessels without a permit.

Use of a cast net to capture baitfish is permitted within 50 feet of the north and west shorelines of Cas Cay, with a permit from DPNR (340-774-3320).

# C. St. James

Use of a cast net to capture baitfish is permitted within 50 feet of the shoreline, except for Cow and Calf Rocks, with a permit from DPNR. Fishing with hook and line is permitted with a permit from DPNR (340-774-3320).

### D. Compass Point Salt Pond

No livestock, dogs, motor vehicles, or loud music.

For complete regulations: V.I. Code Title 12, Chapter 1, §96

**40) 774 - 3320**. onmental /**forms-2**/ ions.





SCAN ME

# St. Thomas East End Reserves (STEER) Management Plan A comprehensive review and update of the 2011 STEER Management Plan US Virgin Islands, 2023



https://dpnr.vi.gov/wp-content/ uploads/2023/05/2023-STEER-Mgmt-Plan-with-Appendices.pdf



Scan QR code to view PDF

### **Great Bay**

Great Bay, situated between Cabrita Point, the easternmost part of St. Thomas, and Water Point, shares its shoreline with a large luxury hotel. The bay often experiences high winds, making it a favored spot for kiteboarding and windsurfing enthusiasts. From an environmental perspective, the bay's water can take on a dark appearance due to substantial amounts of seagrass, which plays a crucial role in the local ecosystem. Serving as a vital food source for many aquatic animals and organisms, the seagrass also functions as a habitat, offering refuge from predators and serving as an effective nursery for fish before they mature. Additionally, seagrass serves to prevent erosion in high-current areas and safeguards mangroves from strong waves. Its contribution extends to supporting coral reefs by stabilizing sediment and filtering harmful particles.

Great Bay is the second area on St.

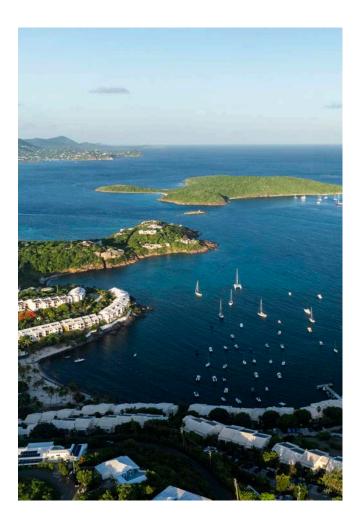
Thomas to receive the prestigious Blue
Flag award, attesting to its environmental
quality and sustainability.

# **Christmas Cove**

Christmas Cove, located in the St. Thomas East End Reserves (STEER) just west of Great St. James Island, is a favored mooring spot for mariners. While anchoring is permitted, mooring is preferred to protect the cove's corals and seagrass beds. A 7-night stay limit is in place. Harvesting lobster, conch, and welk is strictly forbidden, but handline and bait fishing are allowed with a permit.

Previously, Little St. James was owned by convicted criminal Jeffery Epstein and was the site where many of his crimes took place. Now the island is under the ownership of the founder of a private equity firm, along with the neighboring island of Great St. James.

Christmas Cove has hosted a recurring music festival featuring a unique floating





performance venue that attracts boats for a one-of-a-kind experience. Additionally, a floating pizza restaurant, creatively constructed on a converted sailboat, adds to the cove's enjoyable culture. Within the cove is a small sunken boat, providing unique snorkeling opportunities. The small island in the middle of the cove is Fish Cay.

### **Cowpet Bay**

Cowpet Bay, lodged within the neighborhood of Nazareth, is renowned for its combination of recreation and scenic delights. Along the rocks, snorkeling enthusiasts can explore the underwater wonders of the bay. The mooring field and dock are managed by the St. Thomas Yacht Club and Sailing Center, offering adult and youth sailing opportunities and instruction. Home to the annual St.

Thomas International Regatta, STIR, and International Optimist Regatta, Cowpet Bay is an international sailing destination. Despite its relatively undeveloped status until the 1960s, Cowpet Bay has seen significant residential development. The bay and its surrounding neighborhood have evolved into a sought-after destination, offering a blend of coastal activities and residential charm.

### **Secret Harbor**

Secret Harbour is a picturesque beachfront known for its marine and recreational offerings. It provides an ideal setting for swimming, snorkeling, and relaxation. The bay is teeming with marine life, including juvenile sea turtles, octopus, and marine fish, creating a captivating underwater world for snorkelers. The on-site dive shop caters to diving enthusiasts,



offering guided tours to explore the vibrant marine ecosystem. Regrettably, the coral reefs within the bay have suffered high mortality due to coral bleaching and warming waters, which are attributed to climate change and minimal current. Visitors can enjoy beachside amenities, including loungers and umbrellas for a comfortable and leisurely experience. The beachfront restaurant and bar provide a delightful culinary experience with breathtaking sunset views.

### **Benner Bay**

Benner Bay stands out as one of the top hurricane holes in St. Thomas due to its excellent protection, shielded by a chain of small islands, including Cas Cay and Rotto Cay. Lined by mangrove forests, Benner Bay provides significant habitat for birds and recreationally and

commercially important fish and invertebrate species, such as queen conch. The bay is also home to many marinas, commonly known as marina row, offering services to mariners and contributing to the area's attraction as a safe haven during hurricane seasons. When approaching the area, it is crucial to avoid the False Entrance situated between Cas Cay and Patricia Cay.

### Mangrove Lagoon & Cas Cay

Mangrove Lagoon, the largest remaining mangrove forest in the U.S. Virgin Islands (680 acres) provides essential ecosystem services. Red, black, and white mangroves provide valuable retention and filtering services adjacent to two

significant pollution sources, the Bovoni landfill and the outlet of the Turpentine Run Ghut that drains the largest watershed on St. Thomas.

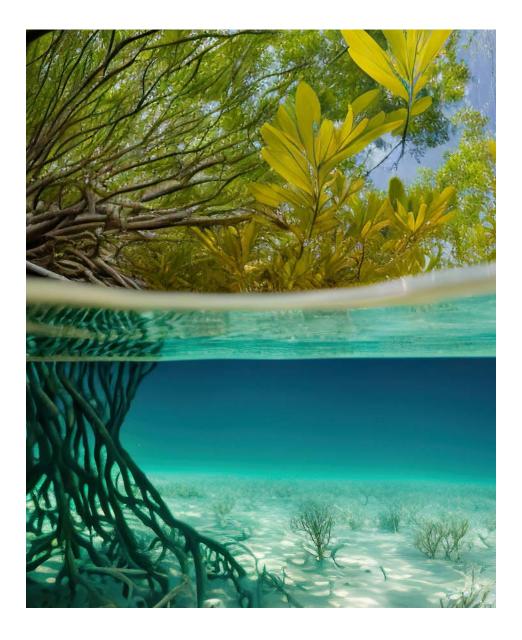
The mangrove canopy provides significant bird roosting habitat and the prop roots support juvenile and invertebrate species.

Cas Cay is undeveloped with an easy hiking trail to access volcanic cliffs and a geological blowhole.

Kayak tours are available to experience Mangrove Lagoon and Cas Cay. To protect this beautiful and important area, no combustion engines are allowed, making for a peaceful kayaking opportunity.

Coastal Curriculum | September 2024

# Mangroves & Restoration Caribbean mangroves play crucial ecological roles, providing habitats for diverse marine and terrestrial species, protecting coastlines from erosion and storm damage, and serving as nurseries for juvenile fish and other marine organisms. They are also important for carbon sequestration and helping to maintain water quality in coastal areas. move during storms, leaking pollutants angrove trees have adapted to thrive in salt water, where most and oils and harming prop roots and tree growth; and land-based sources of pollution other plants can't even survive. Providing essential services, the three including sediments and pollutants in surprimary species of mangrove in the U.S. face runoff. Climate change also impacts Virgin Islands, the red mangrove (Rhizophomangroves. Stronger Category 5 hurricanes ra mangle); the black mangrove (Avicennia like Irma and Maria caused significant germinans), and the white mangrove (Lamangrove mortality on St. Thomas, and guncularia racemosa); support biodiversity; rising sea levels will cause erosion and loss provide habitat for birds, juvenile fish and of suitable mangrove habitat. Conservamarine animals; trap sediment and debris; tion efforts include mangrove restoration, improve water quality; stabilize shorelines; limiting land and marine-based sources of buffer coastlines from wind and wave enerpollution, conserving mangrove habitat, and gy; and store atmospheric carbon dioxide. outreach to students and the community Threats to mangroves come from human regarding the vast services of mangroves. causes including mangrove habitat loss Have you snorkeled or kayaked a thriving due to residential, commercial, and marina mangrove prop root community? Try it - the development; marine-based sources of diversity of colorful fish and sponges is astounding! pollution including abandoned boats that



Let's talk about connectivity. The proximity of seagrass beds to coral reefs to mangrove forests in STEER makes it an extremely valuable ecological area. Recreationally and commercially significant reef fish and invertebrates (think of your favorites – snapper, queen conch) spend different parts of their life stages in these habitats. For example, some fish species grow and develop as juveniles in mangrove prop roots before migrating to coral reefs as adults. Other fish species may live in coral reefs, migrate to seagrass beds to mate and lay eggs, and return back to coral reefs. Reef fish also use seagrass beds as nurseries. Twenty-five percent of all life in the oceans depends on a tropical coral reef at some point in its lifecycle. The interconnectedness of these marine habitats is essential, making STEER an extremely valuable ecological area.



# **Quick Links**

- Reef Responsible VI
  www.facebook.com/
  reefresponsiblevi
- Mangroves

  www.facebook.com/
  people/GRR0E-US-Virgin-Island-Mangroves/100083008188768/
- 3 Fishing & Boating Rules
  DPNR's website
  https://dpnr.vi.gov/fish-and-wildlife/

# 25%

of all life in the oceans depends on a tropical coral reef at some point in its lifecycle



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