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I. DESIGNATION OF CAS CAY AS A WILDLIFE SANCTUARY

Pursuant to Title 12, Chapter 1, Section 94, Virgin Islands Code, the islet known as Cas Cay is designated a wildlife sanctuary. Cas Cay is one of several islands and cays established as a sanctuary by the Department of Planning and Natural Resources for the purpose of preserving and restoring its conservational, education, scientific, ecological and aesthetic values. In its natural state, Cas Cay is an ecosystem which is rich in habitat diversity, serving as a multiple wildlife nursery. As a wildlife sanctuary, Cas Cay will receive the management and long-term protection required to safeguard its complex and fragile ecosystem.

Cas Cay was received as a gift from the estate of Mr. David Viallet to the Virgin Islands Government in 1987. The relevant portion of Mr. Viallet's will requires that the islet be designated "for the exclusive use as a bird sanctuary, and for the purpose of preserving the cay in its natural state for the purpose of preserving the cay in its natural state for the perpetual enjoyment of the people of the Virgin Islands." It also states that if the government attempts "to make use of it for other purposes, title to the property shall revert to my four children." The cay has been designated a wildlife sanctuary in order to preserve the wildlife habitat that exists on the island, fulfill the wishes of the estate, and to prevent forfeiture of this valuable resource.

The designation of this sanctuary ensures that a valuable ecosystem will be maintained for the continual enjoyment and benefit of society. Protective measures are taken to guarantee the integrity of the sanctuary while allowing maximum compatible use of the area. Research will be promoted to better understand this complex system and to efficiently manage its resources.

II. PHILOSOPHY OF USE

Respect for the natural environment and the enhancement of wilderness values are central to the purpose of a wildlife sanctuary. In a sanctuary, man's activities and impact are kept to a minimum. The values to man include aesthetic enjoyment and an increased understanding of the environment of which we are a part and on which we depend. In a community such as ours, an area of natural beauty and interest represents the values which attract visitors to our shores. It is important that we, who live and work here, understand and act to support
these values.

A sanctuary is dedicated to wildlife and to the development of the resource potential of an area, as opposed to facilitating human activities and enjoyment. The recreational values are potentially there, but must be restricted to scientific inquiry, education, and spiritual, contemplative enjoyment.

III. PURPOSE AND NEED FOR MANAGEMENT PLAN

The purpose of the management plan for the Cas Cay Wildlife Sanctuary is to fulfill David Vialet's objectives to maintain the cay in its natural condition for public benefit. The need is for a specific program to displace the perceived misuse with the highest and best uses consistent with preservation of its natural features; i.e., education and scientific research.

Cas Cay is a valuable natural resource having great potential of being negatively affected by human activities. To understand the complexity of the systems involved and what needs to be done, a management plan is developed to provide guidelines which will enable managers to maintain Cas Cay in a state as natural as possible while allowing for compatible uses.

IV. DESCRIPTION OF CAS CAY

Benner Bay and the Mangrove Lagoon are considered an Area of Particular Concern because of their value as a nursery area for many species of fish and crustaceans important to the fisheries of St. Thomas. This lagoon system is the largest remaining in the Virgin Islands and requires protection from coastal and upland development to maintain its value as a nursery area. Cas Cay, situated at the mouth of this lagoon system, is in an important location (Figure 1); as a barrier island, it protects the lagoon from wave energies that would otherwise have prevented the mangrove ecosystem from developing and thriving. Any development on Cas Cay could raise the level of runoff from the island and, coupled with any discharges of human origin, have a serious impact on the nursery value of this area.

The importance of protecting this system has been demonstrated by the impact on the bird fauna and the fishing industry on the south side of St. Croix, following the draining and destruction of Krouse Lagoon for an industrial complex.

Cas Cay is a good example of a small, xeric tropical island whose primary features are controlled by marine processes. Cas Cay is oriented east-west and is long and narrow. The eastern half (the east hill), approximately 6 acres, reaches a height of 99 feet. The
western half of the island, approximately 8 acres, is a flat, well-foliaged coral rubble and sand spit formed by the dominant westward moving swells that curve around the east hill from the north to the south to deposit sediment and reshape the shoreline toward the west.

Biologically, the island has been impacted by hurricanes, human harvest of wood, whelk and seabird eggs, and presently receives numbers of educational and recreational human users.

**White Cedar Flats:** White cedar, a local species of *Tabebuia* dominates the western flats of Cas Cay. On its shoreward perimeter the white cedar gives way to the species more typical of the territory’s shorelines: the mangroves, sea grape, red cedar, bay cedar, haiti-haiti, gumbo limbo and manchineel. The entire flats are marked by the storms that created the land and gradations of soil types that can be explained in terms of the island’s development. Snakes, lizards and a rich arthropod fauna were at one time abundant but have become rare in recent times due to the harvest of fallen *Tabebuia* trees that gave them their required cover (the wood was harvested to be made into candles, mobiles and “driftwood” ornaments by tourist-oriented gift shop craftsmen). With protection, the island may return to a normal terrestrial fauna.

**South Cliffs:** the south cliffs are the results of weathering from the dominant east tradewinds and swells that batter the coast. Geologically, the area is made up of a matrix of differentially weathered clays of every color and hardness, iron and copper deposits, and rich red jasper. The mid cliff region is the habitat of the red-billed tropicbirds which nest in small caves from October to May. White-tailed Tropicbirds nest in the same holes during summer. About 50 yards of cliff is reputed to have been dynamited during the filming of the movie, *The Guns of Navarone*.

Flotsam, jetsam and evidence of past oil spills are found in many areas of the windward cliffs near the water’s edge. Additionally, the dynamics of island erosion are easily observed by numerous natural landslides of various ages.

**The Ridge:** the ridge trail is easily walked and provides a broad vista of the lagoon area, the cliffs of Cas Cay and the surrounding uninhabited islands, in striking contrasts to the development on St. Thomas. The ridge walk has always been highlight of every school or adult group that has visited the island.

Although relatively barren and wind-swept, a variety of plants are found in this habitat. During spring the purple-white endemic orchids and white frangipani, as well as the wild
figs, island laurel, morning glory, lavender starburst, and white and red cedar put our a profusion of color and flower fragrance.

**Leeeward Dry Forest Slope:** the north slope of Cas Cay is relatively steep and covered by a dense canopy of trees dominated by wild fig, gumbo limbo, island laurel, sea grape and white and red cedar. The slope varies from 25 to 60 degrees but is not eroding. Numerous rock outcrops exist, one of which is naturally hollowed and shows evidence of recent human use (charred walls and roof, floor litter). Numerous bird species nest and roost in these trees. Antique bottles dating to 1880 have been found in this area.

**Windward Sedge Ridge Flats:** Consisting mostly of the grasslike sedge, the ridge flats are heavily windswept, with an occasional sea grape usually prostrated by the wind. This area, which is stable and composed of a coarse granite-like soil, faces the east and provides access to the east-facing cliffs. During the spring the sedge is taken over by the flowers of the indigenous orchid, moran, and many unidentified small flowering plants.

This area historically (Nichols, 1943) had colonies of nesting seabirds. With continued protection and rat control, this area of Cas Cay could support a number of colonial nesting species such as laughing gulls and terns.

The fauna of Cas Cay is very representative of small islands in the Virgin Islands. Appendix A gives a listing of the major species found on the island above the high-tide mark and provides the general status of the species as it is found on the Cay.

Cattle, goats, deer and chickens are known to have been released on the island (David Vialet, personal communication). Deer occasionally swim to and from Cas Cay. Rats probably reached the island first with the first St. Thomas settlers and with people gathering eggs who were wholly or in part responsible for the island's loss of colony nesting seabirds. The presence of rats (*Rattus rattus*) is undoubtedly the single most important limiting factor to the re-establishment of a more natural land fauna; nevertheless, many indigenous animals do survive on the island.

Cas Cay has on it examples of nearly every major small, xeric, tropical island habitat that is found in the U.S. Virgin Islands. Additionally, in the waters surrounding it are examples of most tropical marine ecosystems. However, the waters surrounding the cay are separate from the gift of Mr. Vialet and cannot be included in a management plan for the Cay. It is hoped that they will be included in a larger marine sanctuary plan.
The following is a list and brief description of the major littoral and terrestrial habitats found on Cas Cay (Figure 2).

**Beaches:** numerous small beaches exist around the island. The beaches are examples of the various methods of natural beach production. The only beach for swimming is at the far west end where the bottom is sand and the adjoining water is deep enough to swim. All the other beaches border shallow marine habitats not suitable for swimming or wading.

A. The mangrove-bordered sand beaches at the west end are primarily derived of coarsely eroded *Halimeda*. These beaches exist only between cuts made in recent times through the red mangroves.

B. The central southside beaches consist of wave eroded rock and coral. The gradation of sand particle size and composition from the mangroves to these beaches is a good demonstration of the formation of beaches in general, since most of the complex physical factors of beach production and maintenance are easily observed.

C. Three small cliff beaches on the south cliffs exist in small guts that receive violent wave surge. These beaches consist of well-worn cobbles and pebbles. Only one is easily accessible.

D. The north beaches are derived primarily from *Halimeda* on the west grading to rock on the east. Most of them are adjacent to the grass beds which exist up to the shore. The relative magnitude and directions of the storms that made the berms behind these beaches are evident.

**Mangroves:** red, black, white and buttonwood mangroves are present and typify their respective "preferred" habitats. The "building of islands" by these mangroves is readily apparent. Each forms a habitat that is inhabited by some specific fauna.

**Tidepools:** tidepools exist midway along the southern coast of Cas Cay and in some areas form relatively extensive flats at low tide. Two distinct tidepool areas exist; one just inside the east back reef area of the False Entrance Reef and the other along the south cliff. Both areas are rich in fish (including eels), anemones, brittle starfish, feather duster worms, octopi, gastropods and a diversity of algae. The Blow Hole separates these two areas. The Blow Hole Rock is undercut with tunnels and is an excellent example of the sea's power to carve rock. Significant quartz crystals are locate in a vein atop this huge formation.
Salt pond: the salt pond on Cas Cay is located in the middle of the island. Storms have gradually filled it in, but occasionally it has standing water. This pond is a habitat for several crab species including Cardisoma and Uca. The borders of the pond have a mature stand of black mangroves. This pond may be visited by migrant shorebirds feeding on the crabs.

V. GOALS AND OBJECTIVES FOR CAS CAY MANAGEMENT

The goals and objectives identified for the Cas Cay Wildlife Sanctuary are responsive to (1) the resource use capacity of the island; (2) anticipated needs and demands to be placed on the resources; (3) potential threats to resource quality; (4) the need to conserve and protect natural resources; (5) the desire to allow both management-related and generic research; and (6) the desire to enhance, through interpretive program efforts, public awareness of the significance of the natural resources on Cas Cay and to convey information on their wise use.

GOAL 1: To conserve Cas Cay in a manner to maintain, protect and enhance the quality of the area’s biological and aesthetic resources.

Objectives

Identify and implement an enforcement and surveillance system to protect the sanctuary.

Enhance wildlife resources through activities such as habitat restoration.

Establish a coordinating mechanism to insure cooperation among all agencies with management responsibilities for Cas Cay.

GOAL 2: To enhance local awareness of the significance of the natural resources and ecosystems on Cas Cay and to encourage wise use of these resources.

Objectives

Develop appropriate educational tools, such as brochures, slides, and films, to effectively communicate the significance of the ecosystems and resources to the public.
Establish access whereby school and other groups may visit the island and experience its resources.

Establish a trail system on the island with appropriate interpretive information.

**GOAL 3:** To optimize compatible public uses within the sanctuary in a manner which provides the greatest education and research benefits for all and yet conserves the resources and values for which the sanctuary is established.

**Objectives**

Establish a Cas Cay Wildlife Sanctuary Committee consisting of representatives from various agencies and user groups.

Monitor effects of public usage and modify access/usage as needed.

Designate public access areas and other special management zones.

**GOAL 4:** To encourage scientific research within the sanctuary.

**Objectives**

Update the resource inventory and habitat descriptions as information becomes available through research and surveys.

Design research and assessment focused on information gaps and management needs.

**VI. CAS CAY WILDLIFE SANCTUARY COMMITTEE**

A Cas Cay Wildlife Sanctuary Committee will be established immediately following approval of the management plan and transfer of the Cay to the Government. The Committee will be composed of representatives from agencies having management authority over Cas Cay (DPNR), agencies with special interest in Cas Cay and representatives of user groups. The initial Committee will include representatives from the Division of Coastal Zone Management, the Division of Fish and Wildlife, the Bureau of Environmental Enforcement, the Department of Housing, Parks and Recreation, the Department of Education, the League of Women Voters, the V.I. Conservation Society and the V.I.
Marine Advisory Service. Additional user groups will be identified as interest in use of Cas Cay for educational and research purposes increases.

The representative from the Division of Fish and Wildlife will act as chairperson during the first year of implementation of the management plan. Thereafter, the chairperson will be elected by the Committee on an annual basis.

The Committee will review any actions related to the sanctuary and advise the Commissioner of the Department of Planning and Natural Resources on establishment of rules and regulations or proposed management actions. This forum will be the primary avenue for identification of needs, funding, and development of facilities.

The Committee will monitor the implementation of the plan for a period of 180 days after its initiation in order to make any necessary modifications. Thereafter, the program will be evaluated annually to determine if short and long-term goals are being achieved. Any modification of the plan will be decided by the majority of a quorum.

VII. ACCOMPLISHMENT OF RESOURCE MANAGEMENT OBJECTIVES

A. Initial Activities

Cas Cay has been the site of boat construction and repair, temporary habitation, parties and refuse disposal. All of these activities have resulted in an accumulation of refuse, primarily at the west end of the Cay. This refuse will be completely removed by a joint effort of members of the Advisory Committee. Signs will be posted designating the island as a wildlife sanctuary and prohibiting activities contrary to the goals and objectives of the sanctuary.

To provide for safe access to various parts of the island, the existing trail system will be cleared, improved and marked to prevent users from straying off the trail and disturbing areas protected for wildlife usage. A trail will also be established up to the ridge. This will require construction of steps using a cut and fill method with inlaid stones to reinforce the soil.

B. Habitat Restoration

The natural population of nesting birds and ground fauna have suffered as a result of
the introduction of exotic species (rats) and the collection of dead wood for fires and the craft trade. A reaccumulation of dead wood and leaf litter may allow the ground fauna to reestablish themselves to previous levels. Prohibition of fires and collection of any plant materials (dead or alive) should accomplish this. A rat control program would also aid the ground fauna as well as nesting birds. An attempt to eradicate rats on this Cay would not be feasible due to its proximity to the Bovoni landfill and the ability of rats to cross the reef flats from Patricia Cay. A control program will be initiated whereby rodent-specific multiple dose anticoagulants will be broadcast over the island in bait blocks once a year prior to the seabird nesting season (March). This type of poison will eliminate chances of secondary toxicity, is relatively low in labor requirement and will annually reduce the rat population to low levels. This should allow nesting birds (mainly seabirds) to gradually reestablish themselves on Cas Cay. Prohibition of egg collection and enforcement will prevent recruits to the island from leaving to nest elsewhere.

C. **Restricted Access**

Portions of the island may be restricted to public access at times of the year when nesting seabirds could be disturbed. The east hill is the present location of tropicbird and laughing gull nesting. As nesting seasons cover the whole year (red-billed tropicbirds: October to May; white-tailed tropicbirds: June to September; seagulls: April to September), this part of the island will be restricted to all users except scientists doing authorized research and surveys, authorized groups led by a Division of Fish and Wildlife biologists or a tour guide authorized by the Cas Cay Wildlife Sanctuary Committee.

Access to this portion of the island is naturally limited due to a narrow, steep ridge that has to be traversed. The east hill is easily viewed using binoculars from the western end of this ridge. This activity will not disturb birds nesting there.

D. **Maintenance**

The Department of Housing, Parks and Recreation (DHPR) and/or volunteer groups will need to clear access trails once a year. Any accumulated refuse will be removed once a month by the DHPR. Any facilities constructed on the island will be maintained by DHPR and/or volunteer groups.

The Division of Fish and Wildlife (DFW) will replace signs on Cas Cay as needed.
The DFW will also conduct rat control measures in March of every year in order to facilitate the restoration of wildlife habitats.

VIII. ACCOMPLISHMENT OF VISITOR MANAGEMENT OBJECTIVES

One of the goals of the Cas Cay management plan is to optimize compatible public uses within the sanctuary in a manner which provides the greatest educational and research benefits for all and yet conserves the values for which the sanctuary is established. To accomplish this goal in terms of visitor management, a number of activities shall be regulated to ensure the health and well-being of the different habitats.

A. Authority

The relevant agency divisions to handle visitor management include the Department of Housing, Parks and Recreation, and the Division of Fish and Wildlife, the Bureau of Environmental Enforcement, and the Division of Coastal Zone Management of the Department of Planning and Natural Resources (DPNR). Overall management is the responsibility of the DPNR.

The Cas Cay Wildlife Sanctuary Committee will act in an advisory capacity to the appropriate divisions of DPNR. They are to be consulted on visitor management matters including permitting, visitor access, and modification of the Cas Cay management plan.

B. Activities

Certain activities which do not harm or deplete the resources at Cas cay are allowed. Many of these activities are limited to designated public access points, the coastline and trail system as indicated on the Cas Cay Map (Figure 2). These include the following:

- land visitors
- snorkeling
- swimming
- hiking
- fishing
- educational visits
- bird watching
- photography
- scientific visits
- food incidental to field trips
- spontaneous visits by individuals

Activities and objects which are not permitted unless authorized by special permit or the
Commissioner of Planning and Natural Resources include the following:

- picnicking
- camping
- erecting structures
- trash receptacle
- littering
- removing vegetation/plants
- parties
- straying off trails
- moving/destroying habitats
- signs
- electric charges, explosives
- chemicals (e.g., paints, solvents, fuels)
- collecting (e.g., animals, plants, shells, eggs, rocks)
- killing, wounding, capturing, feeding, touching, harassing or intentionally disturbing game or birds
- any other such activities as may be deemed harmful to the Sanctuary

A sign will be posted at the access site commemorating the Cay as a sanctuary bequeathed by David Vialet. This sign will contain lists of permitted and disallowed activities.

C. Monitoring/Impact of Visitor Management

Because human activities can bring about sufficient stress to have both long and short-term effects on the Cas Cay ecosystem, the responsible agencies and the Sanctuary Committee will monitor the effects of public usage and modify access/usage on an annual basis or as needed. An annual report of these findings will be submitted to DPNR and other responsible agencies.

D. Cas Cay As An Educational Resource

Historically, Cas Cay has been a valuable educational resource. For many years, educators have taken Virgin Islands classes--from primary school through college level--to Cas Cay to take advantage of the educational benefits which it provides. In addition, it has been utilized for these purposes by visiting scientists and college classes. The coastal waters contain every kind of marine environment we have in the Virgin Islands. There are thousands of species of marine organisms that spend at least
part of their cycle in the Lagoon. Cas Cay has good examples of living coral reefs, mangrove root habitats and grass beds. The Cay provides visible evidence of geological activity, land-building of mangroves and beach sculpturing activities of hurricanes. Cas Cay consists of volcanic and storm beach formations which provide insights into the ways that vegetation adapts to environmental constraints. An example of this is the zonation of mangroves, and the wind shear effect. From the heights of the cay, the behavior of wave action and energy dispersal are dramatic.

In order to maximize Cas Cay’s utility as an educational resource, interpretive programs will be developed to enhance public awareness and understanding of the significance of the sanctuary and the need to protect its resources. Initially, such programs for Cas Cay will be designed to complement territorial education goals and objectives. Small-scale programs are recommended which can be built upon in the future. These can include the development of an interpretive pamphlet, on-site guided and self-guided nature tours, and off-site activities such as an educational slide show.

E. Public Involvement

Public involvement in the operation of the Cas Cay Wildlife Sanctuary shall be encouraged and appreciated. Workshops, citizen advisory groups, field trips, and knowledgeable on-site guides will help develop an understanding of the environment and the need to preserve off-shore cays such as Cas Cay. Scientific research that focuses on both improvement of management decision making and increasing knowledge of the natural systems within the sanctuary will be encouraged, provided all reports and outcomes are shared with the people of the Virgin Islands through the Cas Cay Sanctuary Committee or the Department of Planning and Natural Resources. It is recommended that, where feasible, and the adequate supervision, interested individuals and community groups assist in activities to enhance the sanctuary and its educational potential.

F. Access

The safest route to Cay Cay is from Benner Bay through the Mangrove Lagoon. There are several marinas and private docks from which tours can be launched. Arrangements between the Department of Planning and Natural Resources and the V.I. Marine Industries Association or a similar organization to provide for the use of existing docking facilities in the area should be initiated upon the acceptance of the
Violet gift.

The problem of providing parking for groups and individuals utilizing the Cas Cay Sanctuary will be addressed as the demand is realized.

G. Facilities

Since the emphasis is on maintaining a natural environment, facilities on the Cay will be kept to a minimum. The Committee will determine if additional facilities are necessary as use patterns of the Sanctuary become evident.

IX. FUNDING SOURCES

Funding is necessary to provide facilities and management for the sanctuary. Two sources of public funding are identified: (1) the Fish and Game Fund and (2) the 306A Coastal Zone Management Fund.

The Fish and Game Fund is an account controlled by the Department of Planning and Natural Resources. In order to receive monies from this fund, a request for a specific amount must be tendered to the Commissioner. If approved, the request is forwarded to the Governor and then to the Legislature to raise the ceiling on the fund so that the request can be accommodated.

The 306A CZM Fund is the federal grant which allows the Virgin Islands CZM Program to function. To utilize funding from this grant, CZM must present to the National Oceanic and Atmospheric Administration a request for program implementation, detailing the specific tasks which require funding. Upon approval of this request, monies are then available to CZM for that purpose.

Other funding sources (private and otherwise) will be pursued by the Cas Cay Sanctuary Committee.

X. RELEVANT TERRITORIAL LAWS AND REGULATIONS

A. Legislation transferring Cas Cay from the Vialet estate to the V.I. Government with short analysis (Act 5294, Bill 17-0133, approved December 31, 1987).

B. Title 12, Chapter 1, sub chapter VII, Section 94, Virgin Islands Code, as amended (Act 5294, Bill 17-0133, approved December 31, 1987), entitled "Wildlife and Marine
Sanctuaries and Game Reserves

As a sanctuary owned by the Government of the Virgin Islands, Cas Cay is subject to Title 12 VIC, Sections 94-99 entitled "Wildlife and Marine Sanctuaries and Game Reserves". This law gives the Department of Planning and Natural Resources (DPNR) the authority and responsibility for the management, control, and use of marine and wildlife sanctuaries owned by the government.

Among other things, sections 94-98 authorize the Commissioner of DPNR to issue regulations for management, control, and use of government-owned sanctuaries, including the designation of wildlife sanctuaries. It allows him to declare which acts are prohibited in sanctuaries, to establish sanctuaries for conservation of marine organisms and wildlife, and to provide for the posting of signs designating allowable activities.

Violators of any of the regulations issued regarding the management, control, or use of Cas Cay are subject to civil penalties for each violation, pursuant to 12 VIC, section 99. Penalties include fines of not more than $5,000.00 and/or imprisonment for not more than 30 days.

For the full text of the above citations, see Appendix B.

C. Area of Particular Concern: Cas Cay is within the Lagoon area which has been proposed as an "Area of Particular Concern" (APC) pursuant to "The Virgin Islands Coastal Zone Management Act of 1978", Title 12, Chapter 1, Section 909, V.I. Code. The APC plan was completed, reviewed by the public, approved by the CZM Commission, and sent to the Legislature in 1993.

XI. PROPOSED REGULATIONS FOR CAS CAY

It is proposed that the following regulations be issued to apply within the Cas Cay Wildlife Sanctuary boundaries, pursuant to Title 12, Chapter 1, Section 94-99, Virgin Islands Code.

The small islet known as Cas Cay, located at the mouth of the Mangrove Lagoon on St. Thomas is designated a wildlife sanctuary and an Area of Particular Concern and is subject to the regulations of Title 12, Chapter 1, Sections 94-99 and 909, Virgin Islands Code.
In addition, a management plan, approved by the Commissioner of DPNR, shall be implemented to provide Cas Cay with the management and long-term protection required to safeguard the integrity of the sanctuary while at the same time allowing the maximum compatible uses of the area.

To assist the Commissioner of DPNR, a Cas Cay Sanctuary Committee shall be established, composed of representatives from agencies having management authority over Cas Cay and selected representatives of user groups.

The Cas Cay Sanctuary Committee shall assist in the evaluation of the management plan on a yearly basis or as the need arises in order to determine whether the short and long-term goals are being achieved.

**Regulated Activities**

No person shall engage in any of the following activities or use any of the following objects within the boundaries of the Sanctuary except under a special permit or the authority of the Commissioner of Planning and Natural Resources:

- picnicking
- camping
- erecting structures
- trash receptacle
- littering
- removing vegetation/plants
- parties
- straying off trails
- moving/destroying habitats
- signs
- electric charges, explosives
- chemicals (e.g., paints, solvents, fuels)
- collecting (e.g., animals, plants, shells, eggs, rocks)
- killing, wounding, capturing, feeding, touching, harassing or intentionally disturbing game or birds

**Violations and Penalties**

Violation of these sections shall subject the violator to fines and/or imprisonment pursuant
to Title 12, Chapter 1, Section 99, Virgin Islands Code.

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Appendix A

Animal Species List of the Cas Cay Management Area

Status Key:  
N: Nesting or Breeding  
R: Roosting or Feeding  
I: Introduced Species  
FE: Federally Endangered  
LE: Locally Endangered  
M: Migrant  
P: Present status unknown

Species - Common

Phaethon aethereus - Red-billed tropicbird (N,LE)  
Phaethon lepturus - White-tailed tropicbird (N,LE)  
Pelecanus occidentalis - Brown pelican (R,FE)  
Sula dactylatra - Brown booby (R)  
Fregata magnificens - Frigatebird (P)  
Ardea herodias - Great blue heron (R,LE)  
Butorides virescens - Green heron (R,LE)  
Florida caerulea - Little blue heron (R,LE)  
Casmerodius albus - Common egret (R,LE)  
Hydranassa tricolor - Louisiana heron (R,LE)  
Nycticorax nycticorax - Black-crown night heron (R,LE)  
Anas bahamensis - Bahama duck (N,LE)  
Anas crecca - Green-winged teal (R,M)  
Buteo jamaicensis - Red-tail hawk (P)  
Pendion haliaetus - Osprey (R,M)  
Falco peregrinus - Peregrine falcon (FE,M)  
Falco sparverius - American kestrel (P)
Rallus longirostrus - Clapper rail (LE,P)
Haematopus palliatus - American oystercatcher (R)
Charadrius wilsonia - Wilson's plover (R,M)
Actitis macularia- Spotted sandpiper (R,M)
Tringa melanoleuca - Greater yellowlegs (R,M)
Himantopus mexicanus - Black-necked stilt (R,M)
Larus atricilla - Laughing gull (N,M)
Sternal maxima - Royal tern (LE,P)
Columba leucocephala - White-crowned pigeon (LE,P)
Zenaida aurita - Zenaida dove (N)
Coccyzus minor - Mangrove cuckoo (N)
Sericotes holosericeus - Green-throated Carib (N)
Megacerylealcyon - Belted kingfisher (R,M)
Tyrannus dominicensis - Gray kingbird (R,M)
Elaenia martinica - Caribbean Elaenia (R,M)
Hirundo rustica - Barn swallow (P)
Margarops fuscatus - Pearly-eyed thrasher (P)
Dendroica petechia - Yellow warbler (N)
Wood warblers - many species (M)

**Mammals**
Several bat species (P)
Rattus rattus - Roof rat (N,I)
Mus musculus - House mouse (N,I)
Odocoileus virginianus - White-tailed deer (I,P)
Feral cats (I,P)

**Reptiles**
Sphaerodactylus - geckos (N)
Iguana iguana - Common iguana (P)
Anolis stratus - Salmon lizard (N)
Anolis cristatellus - Man lizard (N)
Ameiva exsul - Ground lizard (N)
Alsophis portoricensis - Ground snake (N)

**Arthropods**
Coenobita clypeatus - Soldier crab (N)
Uca sp. - Fiddler or mud crab (N)
Ocypode *quadratus* - Ghost crab (N)

*Grapsus* sp. - Sally lightfoot (R)

*Cradisoma* - Land crab (N)

Scorpions, spiders, centipedes and other insects (P)
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<th>Month</th>
<th>Species</th>
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