

**A Hunter's Handbook
for
Game Birds in Jamaica**

3rd Edition

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GAME BIRD HUNTING IN JAMAICA

Historical Perspective

Game bird hunting in Jamaica has been recognised since the arrival of the Europeans in the fifteenth century, but it had also been a major source of food for the Tainos who inhabited the island at the time. It is the intervention of the gun that has seen this past-time evolve from a major source of food to become a major sport. The laws pertaining to regulating the sport at the time were adopted from England and had lengthy hunting seasons, as much as six months long. Fines and other penalties were levied against anyone caught hunting contrary to the law. Prior to 1834 for example, by an Act of the Colonial Legislature of the time, wild pigeons (and doves) were forbidden to be killed in the parishes of St. Catherine or St. John's or on any island or cay, in the months of May, June and July, under a penalty of forty shillings. However, with the abolition of slavery in 1834, this, as well as many other laws were repealed.

The Wild Life Protection Act (WLPA), enacted in 1945, and its regulations replaced the colonial laws which governed game bird hunting. In 1974, the hunting season was closed and this lasted for eight years to allow the game bird population to increase. The hunting season was re-opened in 1982 but by 1990 it became apparent that the game bird population was diminishing. This resulted in a comprehensive review of all regulations governing game bird hunting under the WLPA. The duration of the season, bag limits, declaration of Game Sanctuaries and Game Reserves and shooting times were reviewed, and where necessary, the regulations were amended. The duration of the season was reduced to six weeks, starting on the third weekend in August each year. Bag limits were reduced from 30 birds per session to 20 and then to 15 in 1997. Since 2000, the bag limit has increased to 20 birds per session, with a maximum of 15 White-crowned Pigeons per session allowed.

Today, there are approximately twelve recognized gun clubs operating in different sections of the island, the oldest of which is the PWD Gun Club, which started in 1937. Other clubs that followed include the Jamaica, Trelawny, Cornwall and Wanderers Gun Clubs and the Monymusk and Jackson Bay Gun, Rod and Tiller Clubs. The majority of the clubs now own or lease their shooting grounds. Over the years, the gun clubs have worked very closely with the Natural Resources Conservation Authority (NRCA) in enforcing the hunt-

ing season regulations which are declared under the WLPA while instilling their own club rules in the process.

Present Day Scenario

The Annual Game Bird Hunting Season is managed by the National Environment and Planning Agency (NEPA). This is done by means of the Game Birds Working Group of the Biodiversity and Game Birds Committee appointed by the NRCA. This working group comprises representatives from NEPA, the Ministry with responsibility for environment, Environment and Risk Management Division, the Caribbean Coastal Area Management (C-CAM) Foundation, the Forestry Department and the hunting fraternity.

The process of declaring a hunting season starts with an assessment of the game bird populations and breeding activities during the months of February to June. Based on the results of this assessment it is determined whether a hunting season should be declared as well as the dates, duration and bag limits for the season. The agreed recommendations are tabled as a submission to the NRCA and are subsequently sent to the Minister responsible for the Environment portfolio. The signed Order is then gazetted as Hunting Regulations of the WLPA for that specific year. The hunting fraternity and the general public are informed of the hunting dates and times through print and electronic media.

Monitoring of the hunting season is conducted by teams of Game Wardens, officers of the Jamaica Constabulary Force and NEPA officers. Monitoring continues outside of the hunting season to detect and deter illegal hunting activities. The public also plays a crucial role in monitoring and reporting possible cases of illegal hunting.

The Annual Hunting Season contributes positively to the economy, particularly those of several rural communities across Jamaica. It increases business activities for hotels, restaurants, bars, shops and gas stations and provides a temporary source of income for young men who work as field assistants in retrieving and cleaning the shot birds. The economic importance becomes more apparent when it is considered that the hunting season coincides with the start of a new academic year and so provides additional income for some rural communities.

GAME BIRDS

Introduction

There are four game bird species in Jamaica and these belong to the pigeons and doves family of birds called Columbidae. There are ten species of Columbids naturally occurring in Jamaica. These are the Crested Quail-Dove (endemic), Ruddy Quail-Dove, Ring-tailed Pigeon (endemic), Plain Pigeon, White-crowned Pigeon, White-winged Dove, Zenaida Dove, Mourning Dove, Common Ground-Dove and the Caribbean Dove. In addition, there is one introduced species, the Rock Pigeon, which is highly domesticated and found only around urban areas and dwellings.

Columbids are a highly successful group of fruit-eating birds. This success can be attributed to their quick reproductive rates; being multi-brooded; efficient escaping behaviours; hardiness and longevity; and the production of crop-milk by both sexes. It is this success that makes them ideal candidates as game bird species.

Description of the Game Birds

Under the Wild Life Protection Act (Amendment) Order, 1998 and the Wild Life Protection (Amendment of Second Schedule) Regulation, 2015 four game birds are designated. They are the White-winged Dove (*Zenaida asiatica*), White-crowned Pigeon (*Patagioenas leucocephala*), Mourning Dove (*Zenaida macroura*), and the Zenaida Dove (*Zenaida aurita*).

White-winged Dove



The White-winged Dove is often referred to as Lapwing or simply White-wing. It is grayish-brown in colour, with a large white patch on its wings and a white-tipped tail. The white patches on the wings can be seen when the bird is perched, but are more obvious when the bird is in flight. The eyes are a bright red-orange surrounded by a bright blue bare skin. They average 28 to 30cm in length. While this species prefers dry regions, it can also be seen in

cultivated fields, gardens, mangrove swamps and mountain forests.

White-crowned Pigeon



The White-crowned Pigeon is known locally as the Baldpate. The adult measures approximately 33 to 36cm in length and is dark grey in colour with a distinctive white crown atop its head and a velvety purplish-black iridescence at the hindneck (nape) to glossy-green at the sides of the neck. The male has a snow white crown while that of the female is brownish-white. The juvenile is very much like the adult female with a greyish-white crown nearly limited to the forehead.

The White-crowned Pigeon generally inhabits mangroves and wooded interior lands. They feed on a variety of berries including pimento, bulletwood, Black Mangrove and burnwood. The females nest from April to June. Primary nesting areas include mangrove forests and wooded areas near the coast, while in the mountainous areas nesting occurs in tall trees.

Mourning Dove



The Mourning Dove is commonly known as Paloma or Long-tailed Pea Dove. Adults average 28 to 33 cm in length, are slim bodied with a long tapering tails. They are light brown in colour with black spots on the wings and a tan coloured belly. The males have a purplish sheen on the nape and sides of neck, while in the females this is reduced. Juveniles are browner than the adults, lack irides-

cence and heavily spotted with black, giving it a scaly appearance unlike the adults. The long diamond-shaped tail tipped with white is diagnostic in flight. This dove is locally common in dry coastal areas and is often seen feeding in flocks.

Zenaida Dove



The Zenaida Dove is commonly referred to as the Pea Dove. They average 25 to 28 cm in length. They are stocky birds with an overall brown appearance. There are two dark iridescent streaks on the face, behind and below the eye. The upper sides of the neck are iridescent pinkish. Upperparts warm reddish brown with black. When perched, there is a conspicu-

ous white spot on the side of the wing which spreads in flight to show a white band on the tips of the secondaries.

Zenaida doves inhabit mostly open woodlands, scrubby areas, marshes, old fields and cultivated regions. They avoid dense forests and flourish in residential areas.

PROTECTED BIRDS

ALL BIRDS ARE PROTECTED UNDER THE WILD LIFE PROTECTION ACT, except those listed in part two of the second schedule which are all non-native species. However, only the prescribed pigeons and doves can be legally hunted in Jamaica when a hunting season is declared.

The Plain Pigeon and the Ring-tailed Pigeon are two native birds that are protected under the WLPA and should not be hunted. They are larger than the White-crowned Pigeon and have slightly different flight patterns. A knowledgeable and experienced hunter should be able to readily identify and avoid shooting these birds. In addition, the general location can also give the hunter an idea as to which pigeon to expect and avoid.

PLAIN PIGEON



The Plain Pigeon (*Patagioenas inornata*) is known locally as the Blue Pigeon. It is approximately 38 to 40 cm in total length, making it marginally smaller than a Ring-tailed Pigeon but still substantially bigger than a White-crowned Pigeon. It is reddish brown in colour, especially on the breast, belly head and shoulders. The back, wings and tail are more grey in colour. The eyes are pale yellow and the legs are red. There is a very subtle pale marking along the wing, similar in pattern to the White-

winged Dove but much more inconspicuous. Overall, it is paler than a White-crowned Pigeon.

The Plain Pigeon is a rare species in Jamaica with the largest population in the Cockpit Country. It normally remains deep in the forests but is known to move to the coasts certain times of the year to roost and feed in the mangroves and nearby forests. These coastal movements have been documented to occur mainly in the mangroves of Clarendon and Trelawny during the months of November to March.

RING-TAILED PIGEON



The Ring-tailed Pigeon (*Patagioenas caribaea*) is an endemic species to the island of Jamaica. It is a large pigeon, averaging 41 cm in length, making it about 15% larger than a White-crowned Pigeon. It is a pale brownish-grey colour on the body with darker grey wings. The hind neck shows a brilliant iridescent green. It has red eyes and red legs. Overall, it is paler than a White-crowned Pigeon. The tail is quite unique and distinctive among the pigeons in Jamaica by having a dark band towards the base and a paler beige tip about 6 cm broad. In flight, it often fans out its tail showing this pattern.

The Ring-tailed Pigeon inhabits the dense interior forests of the Blue and John Crow Mountains, Cockpit Country and the Dolphin Head Mountains. However, they may move towards the coasts at different times of the year to take advantage of available food resources. As such they may be encountered in coastal areas of Portland and St. Thomas as well as sections of St. Andrew.



HUNTING LAWS

Introduction

The National Environment and Planning Agency is responsible for ensuring the conservation, protection and sustainable use of Jamaica's natural resources. This mandate is achieved partly through the administration of various legislations, one of which is the Wild Life Protection Act.

Wild Life Protection Act (WLPA)

The Wild Life Protection Act was promulgated in 1945 and has undergone several amendments, the most recent in 1998. The Act provides legislative protection for a number of animals, including birds. The Act also regulates game bird hunting on the island.

In general, the Act speaks to:

- the types of animals that may be hunted
- the prohibition of hunting or possessing protected animals and protected birds (unless a season is declared)
- the punishment of persons who cause or attempt to cause direct harm to protected animals or protected birds
- the prescribed areas in which hunting and fishing activities are prohibited
- the regulation of the hunting of game birds, through the declaration of a bird shooting season.

WLPA Regulations for Bird Shooting Season

The regulations specify the conditions under which the shooting season shall be conducted are as follows:

Hunter's Licence

All hunters must have a valid Hunter's Licence and must have it in their possession while undertaking bird shooting activities. The licence must be shown upon request by a Game Warden or police officer.

Game Birds

Game Birds listed under the WLPA include the Mourning Dove, White-winged Dove, White-crowned Pigeon and Zenaida Dove.

Shooting Days and Times

During the shooting season, usually mid-August to September of each year, shooting sessions are on Saturday sunrise to 9:00 a.m. and 2:30 p.m. to sunset and Sunday sunrise to 9:00 a.m.

Bag Limits

- The overall bag limit per shooting session is 20 with the exception of the White-crowned Pigeon.
- Where the only game bird hunted is the White-crowned Pigeon 30 may be shot, that is, 15 during the morning shoot and 15 in the afternoon shoot on Saturday and 15 on a Sunday.
- Where the only game bird being hunted is the Mourning Dove or Zenaida Dove or White-wing Dove, only 40 can be shot on a Saturday, that is, 20 during the morning shoot and 20 in the afternoon shoot and 20 on Sunday.
- Where the game birds being hunted are Mourning Dove, Zenaida Dove and White-winged Dove, a total of 40 can be shot on Saturday, that is, 20 during the morning shoot and 20 during the afternoon shoot and 20 on Sunday.
- Where the game birds being hunted are the White-crowned Pigeon and Mourning Dove or the White-crowned Pigeon and White-wing Dove or the White-crowned Pigeon and Zenaida Dove or the White-crowned Pigeon, Mourning Dove, Zenaida Dove and White-wing, a total of 20 each period from sunrise to 9:00 a.m. and from 2:30 p.m. to sunset on a Saturday and from sunrise to 9:00 a.m. on a Sunday of which the maximum number of White-crowned Pigeon shot shall not exceed 15.

Bird Shooting Report Form

At the close of the season, all hunters must complete and return their report form by registered mail or by hand to NRCA c/o 10 Caledonia Avenue, Kingston 5 or P.O. Box 207, Kingston 5, on or before December 31. Hunters may also submit their report electronically using the Hunting Returns Portal on the website of the National Environment and Planning Agency. After December 31 of that hunting year, a late processing fee of \$5000 becomes applicable. No subsequent Hunter's Licence will be granted for up to 5 years until the requisite late processing fee is paid.

Head Evidence

The head of each bird shot should be left on the bird for inspection by Game Wardens.

Game Wardens

Under section 13 of the WLPA, provision is made for the appointment of Game Wardens by the Governor General. The powers of a Game Warden are as follows:

- Enter, remain upon and traverse any lands at any time if there is reason to suspect that an offence may have been committed against the Act (Section 15, Subsection 2, WLPA).
- Search any person who may have been suspected of having contravened any provision of the Act on Crown Lands, Game Sanctuary and Fish Sanctuary (Section 16, WLPA).
- Stop and search any vehicle or boat for any animal, fish, bird, bird's nest and/or eggs, as well as any weaponry used to trap or kill animals (Section 16, WLPA).
- Stop and detain any person violating the Act without a warrant. If such a person fails to give his name and address, a Game Warden has the power to apprehend and deliver such person into custody at the nearest police station to be dealt with according to the law (Section 17, WLPA).
- It is an offence to assault, obstruct, hinder, resist, aid, abet or incite any assault against a Game Warden (Section 19, WLPA).

Breaches of the WLPA

Under the Act, there are three offenses in relation to the hunting of game birds:-

- The hunting of any game bird during the Close Season, where “hunt” includes kill, capture or willfully molest by any method and any attempt to kill, capture or molest any animal or bird.
- The hunting of game birds, during the shooting season, on any day or time other than that stated in the Regulations.
- The transfer or storage of any game bird for commercial purposes.

Penalties under the WLPA

A resident magistrate may award a maximum fine of \$100,000 or imprisonment for a term not exceeding 12 months for breaches of any of the aforementioned offences (Section 20). In addition, where a person is found with game birds in cold storage and there is evidence to support the suspicion that it is for commercial purposes, the game birds may be seized.

GAME SANCTUARIES/GAME RESERVES

Introduction

Sections 3 and 5 of the WLPA makes provisions for the establishment of Game Sanctuaries and Game Reserves respectively. Game Sanctuaries and Game Reserves are very similar in their definition with the main difference being the ownership status of the land. A Game Sanctuary / Game Reserve is a parcel of land, body of water or area comprising both land and water within which, the hunting of animals (including birds) removal of eggs or the nest of any bird and the use or possession of any dog, gun, catapult or any other weapon which could be used to hunt any animals or birds is prohibited. Jamaica has nineteen areas declared as Game Sanctuaries/Game Reserves. In addition, all Forest Reserves are also designated as Game Reserves and form part of the Protected Areas System of Jamaica. It is important to note however, that not all protected areas prohibit hunting.

Any person found in a Game Sanctuary /Game Reserve in possession of any wild animal, bird, bird's eggs or nests, will be presumed to be in violation of the WLPA. This can attract a maximum fine of \$100,000, 12 months imprisonment or both if convicted by a Resident Magistrate.

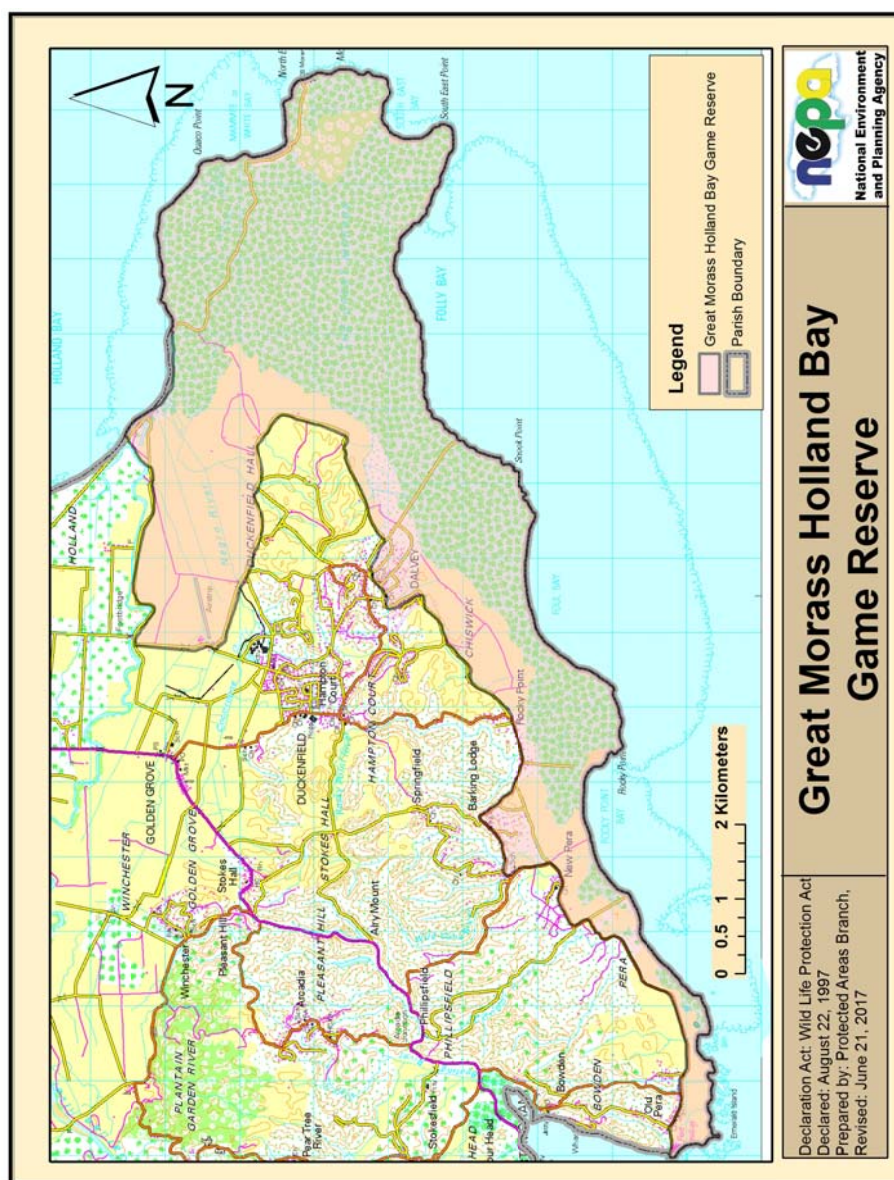
It is also important to note that for each Game Sanctuaries/Game Reserve, there is a 50 meter distance from the boundary. This is called a protective zone. Hunters are required to recognize this zone and refrain from all shooting activities within such zones.

Entry points to all Game Sanctuaries / Game Reserves are furnished with signs which clearly state that the area is a Game Reserve and no bird shooting or other form of hunting is allowed at the site.

The following pages provide maps and or descriptions of the nineteen Game Sanctuary/Game Reserves declared under the WLPA. The boundary descriptions may be obtained from the respective gazetted orders for the nineteen Game Sanctuaries/Game Reserves.

The Great Morass Holland Bay Game Reserve, St. Thomas [The Wild Life Protection (Amendment of First Schedule) Order, 1997]

The game reserve includes all the wetlands, mangroves and cane fields bounded by the sea and the motorable road joining the villages of Old Pera, New Pera, Rocky Point, Chiswick, Dalvey, and passing just west of the airstrip to the Plantain Garden River. It then follows the motorable track easterly alongside the river to the sea.



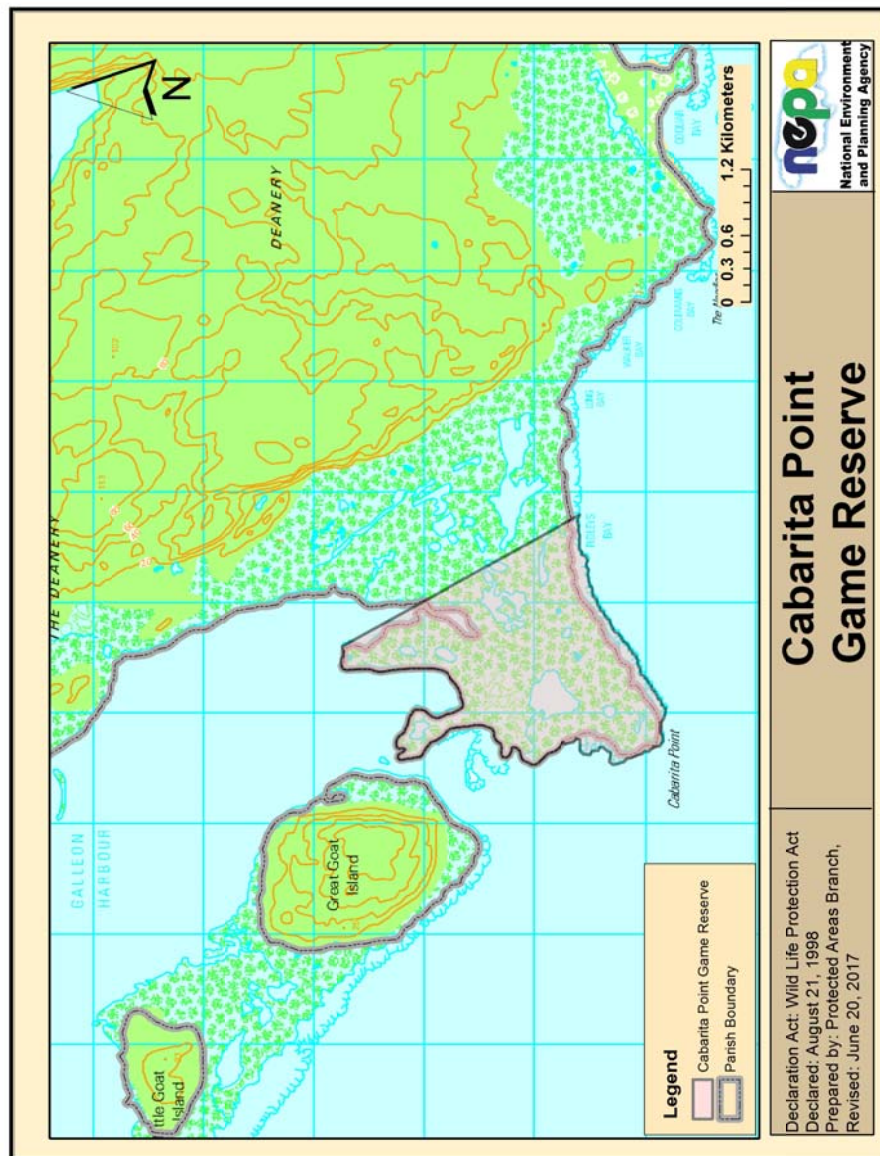
Portmore and Greater Portmore Game Reserve, St. Catherine [The Wild Life Protection (Amendment of First Schedule) Order, 2004; amended in 2017]

Starting at the round-about where the Dyke Road meets I95 the boundary follows the Dyke Road south-easterly to the Portmore Toll Plaza, then due south to the coastline. It then follows this coastline to Port Henderson Road and to Port Henderson Hill. It then follows the main road around and excluding the Port Henderson Hill to the Great Salt Pond. It includes the Greater Portmore Sewage Ponds and the area known as the Flashes. The southern boundary is marked by the footpath leading into the Flashes opposite the Great Salt Pond. The boundary then follows the canal just west of Old Braeton and back to I95 and to the start.



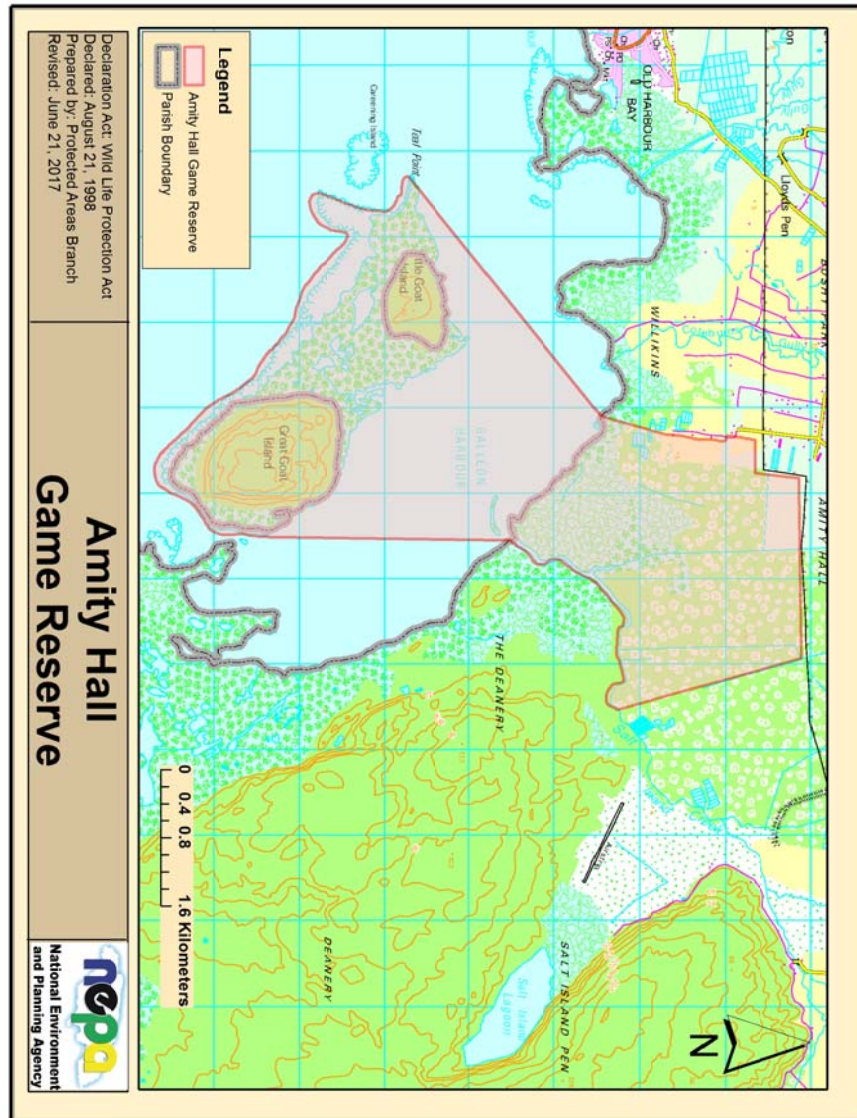
Cabarita Point, Game Reserve, St. Catherine [The Wild Life Protection Act (Amendment of First Schedule) Order 1998]

The Cabarita Point Game Reserve is a mangrove peninsula on the south westerly coast of Hellshire Hills, St. Catherine. It is also immediately southeast of the Great Goat Island and covers approximately 320 hectares.



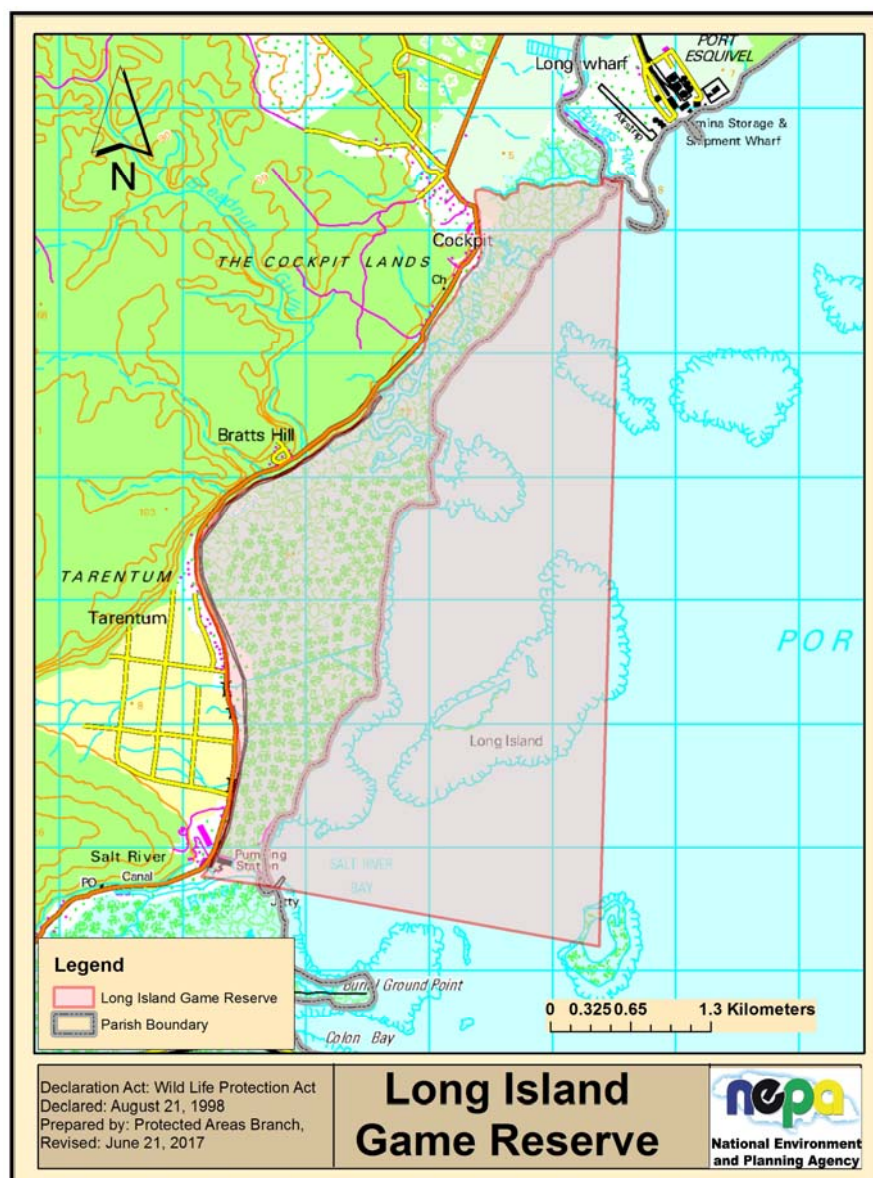
Amity Hall Game Reserve, St. Catherine [The Wild Life Protection (Amendment of the First Schedule) Order, 1997; amended in 2004]

This game reserve includes the Little and Great Goat Islands and their associated mangroves. It also extends across the Galleon Harbour to the mainland with the eastern boundary running for 2.2 km before turning due north 900 m to the high tension power line. Then going westerly along the power line, to the point where it crosses the canal on Agriculture Development Company property; then south along this canal until it enters the sea at Galleon Harbour.



The Long Island Game Reserve, Clarendon [The Wild Life Protection (Amendment of First Schedule) Order, 1998]

This game reserve includes all the mangroves to the east of the Freetown to Salt River main road starting at the community of Cockpit and bounded by the tributary to the mouth of the Bowers River and ending at the Salt River bridge at the south. It extends to the jetty at the mouth of the Salt River and continues to the centre of the Salt Island.



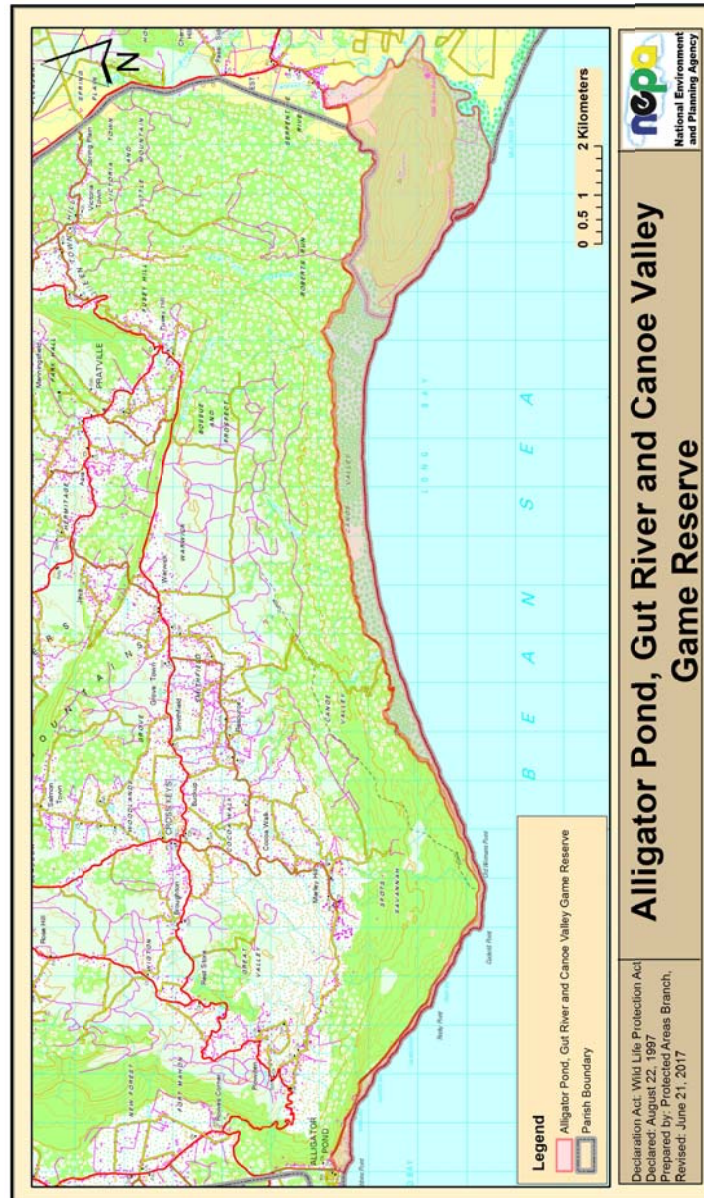
West Harbour-Peake Bay Game Reserve, Clarendon [The Wild Life Protection (Amendment of First Schedule) Order, 1997; amended in 1998]

This game reserve includes the mangroves and wetlands south of the train line from Rocky Point to where the Freetown to Mitchell Town main road crosses it. It then follows this road south for 1.5 km then along a track that goes south east to the coast-line just before entering Mitchell Town. It also includes the mangroves from the jetty at the start of the hill to the Portland Lighthouse westward for 5 km.



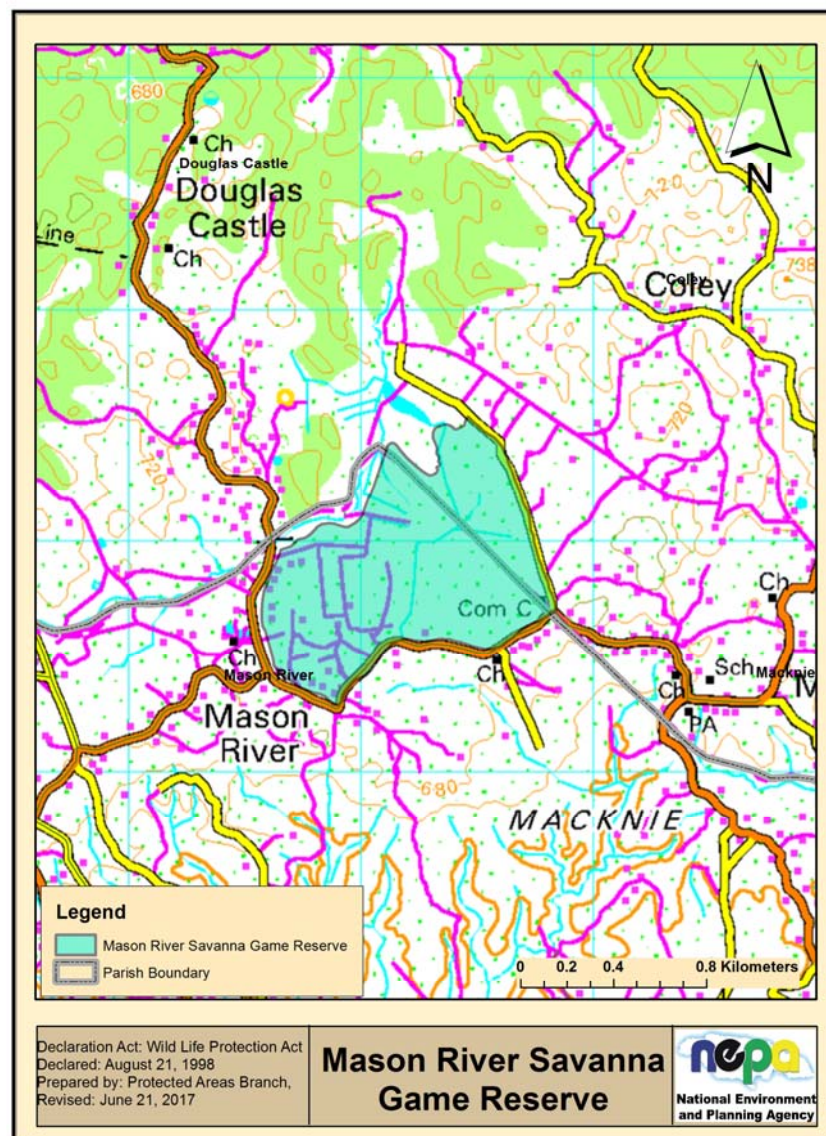
Alligator Pond, Gut River and Canoe Valley Game Reserve Manchester [The Wild Life Protection (Amendment of First Schedule) Order, 1997]

This game reserve is bounded by the sea and the coast road running easterly from Alligator Pond to the Milk River main road at the bridge to the Serpentine River then following this river southerly to the Milk River. Then following the Milk River to the sea.



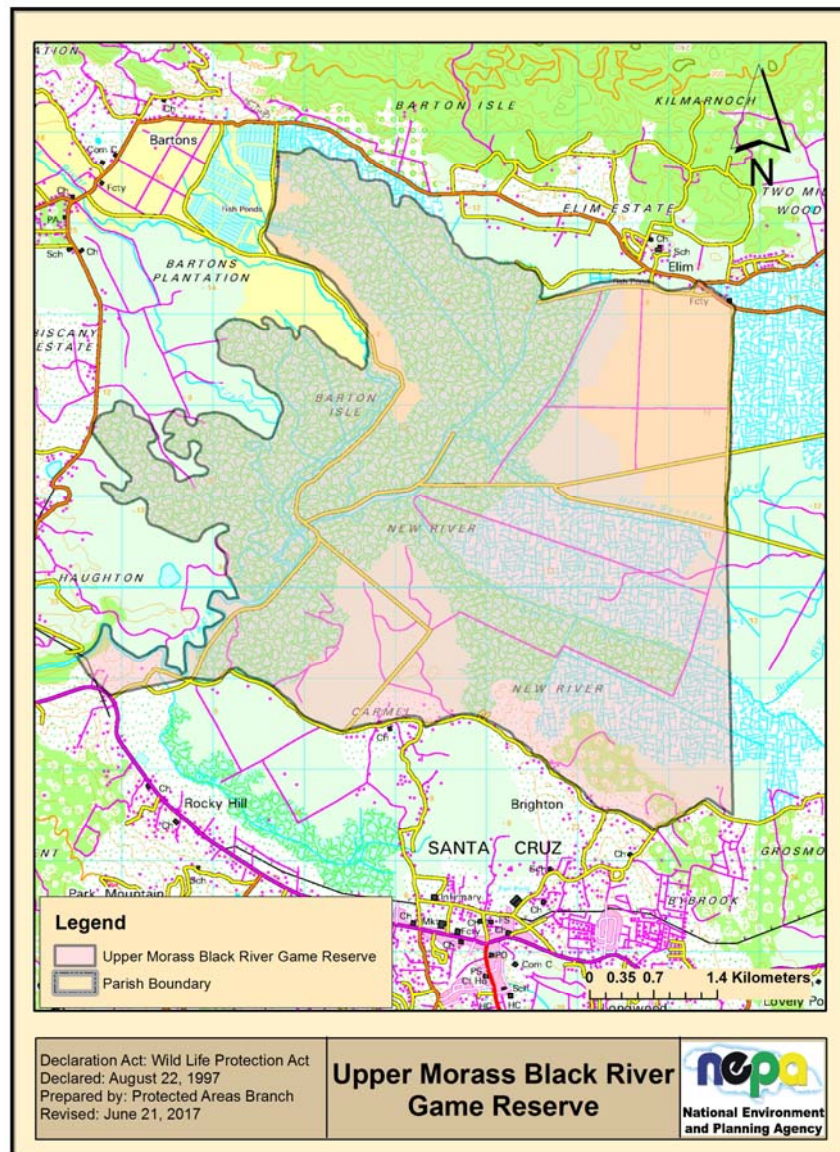
Mason River Savanna Game Reserve, Clarendon [The Wild Life Protection Act (Amendment of First Schedule) Order, 1998]

Starting at the Mason River square and heading north towards Douglas Castle for 600 m to the Blue River bridge then north-easterly along the river for 800 m then easterly to the motorable track. The boundary then follows the motorable track south for 1km to Mason River to Macknie main road, then along the main road west to the start. The game reserve is approximately 100 hectares.



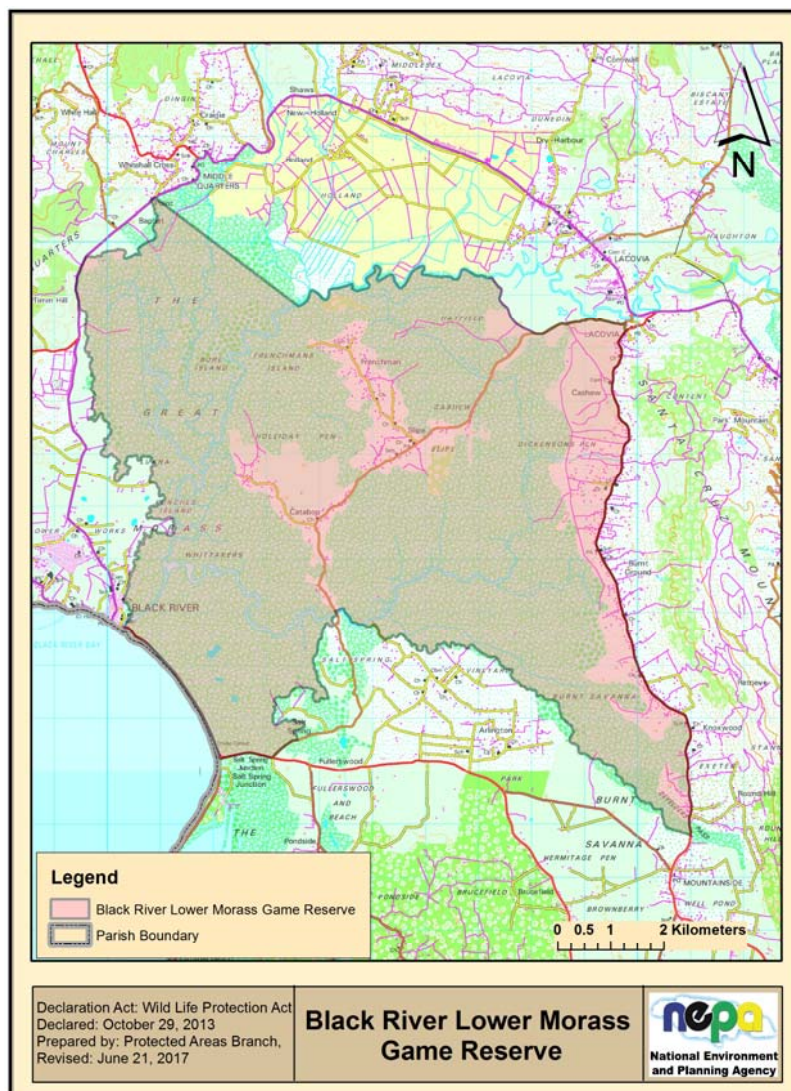
The Upper Morass Black River Game Reserve, St. Elizabeth [The Wild Life Protection (Amendment of First Schedule) Order, 1997]

This includes all the wetlands at Elim, Barton and New River. The eastern boundary travels due south, 300 m east of the intersection at Elim to the motorable track joining the villages of Caramel, Brighton and Grosmond. This motorable track is the southern boundary. The western boundary follows the edge of the wetlands at Haughton to the fish ponds at Barton.



The Black River Lower Morass Game Reserve, St. Elizabeth [The Wild Life Protection (Amendment of First Schedule) Order, 1997 amended in 2013]

Starting at the Black River bridge in the town of Black River, the boundary follows the wetlands west of the river to the main road at Baptiste then easterly along the edge of the wetlands avoiding the Holland Sugar Estate then onto the road leading from Slipe to Lacovia. The eastern boundary runs southerly along the main road from Lacovia to Mountainside for 10 km before following the edge of the wetlands westward crossing the Broad River bridge and eventually to the intersection at Crane Corner then back to the Black River bridge.



The Great Morass Parrotree Game Reserve, St. Elizabeth [The Wild Life Protection (Amendment of First Schedule) Order, 1997]

This game reserve incorporates all the mangroves and wetlands around the Parrotree Ponds starting at Crane Corner and extends to where the parochial road at Thatchfield meets the coast at Starve Gut Bay.



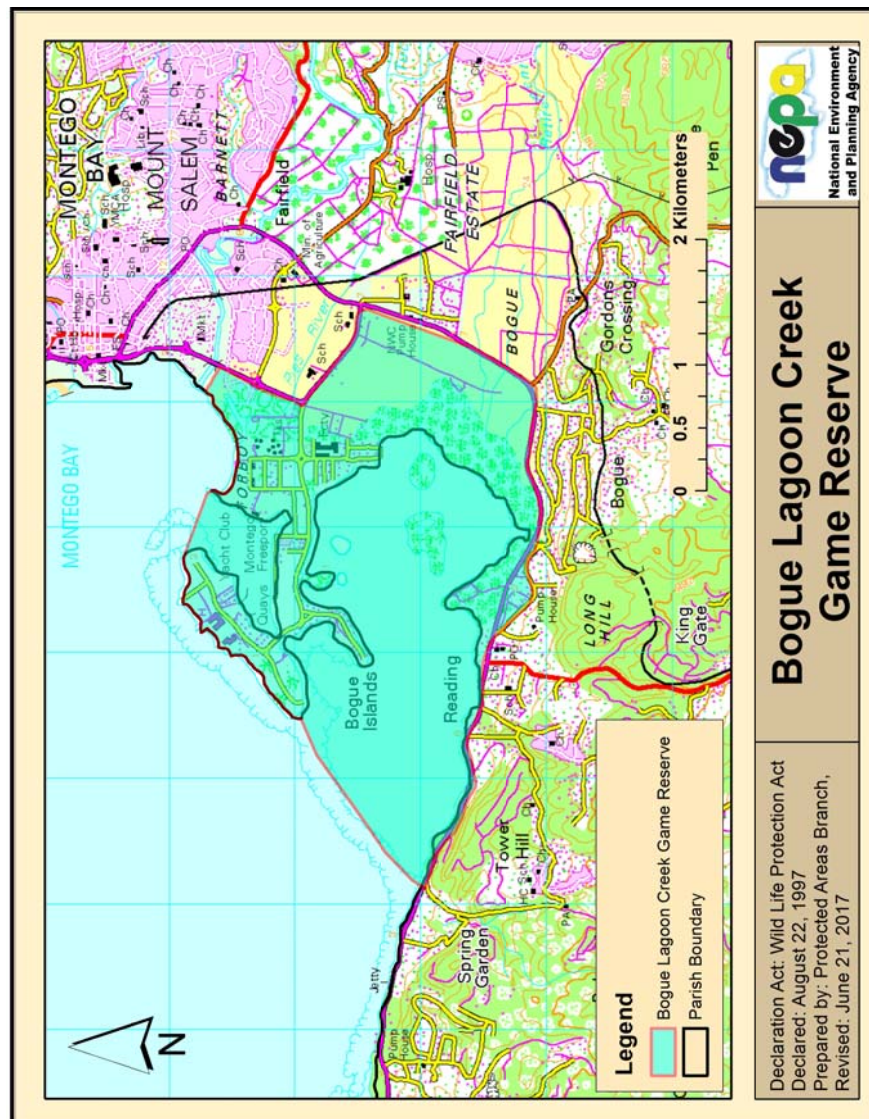
The Great Morass, Negril Game Reserve, Westmoreland and Hanover [The Wild Life Protection (Amendment of First Schedule) Order, 1997]

This includes all the wetlands of the Negril Great Morass to as far north as Rhodes Hall. The eastern boundary follows the minor road from Rhodes Hall through Mount Pleasant, Logwood and south to Sheffield. It then follows the Savanna-la-Mar to Negril main road back to the town of Negril. The boundary then follows the Negril coastline back to Rhodes Hall.



Bogue Lagoon Creek Game Reserve, St James [The Wild Life Protection (Amendment of First Schedule) Order, 1997]

It includes the Bogue Lagoons, Bogue Islands, Montego Bay Sewage Ponds and is bounded on the south by the North Coast Highway heading westerly pass Reading to where the Spring Gardens road meets the North Coast Highway. The north-eastern boundary follows Alice Eldemire Drive and on to Howard Cooke Boulevard to the bridge at Montego River.



Glistening Waters Game Reserve, Trelawny [The Wild Life Protection (Amendment of First Schedule) Order, 1997

This incorporates the Glistening Waters Bay and the mangrove peninsula to the east extending as far as east as the Time and Place establishment. The western boundary is as far as the market in the town of Falmouth.

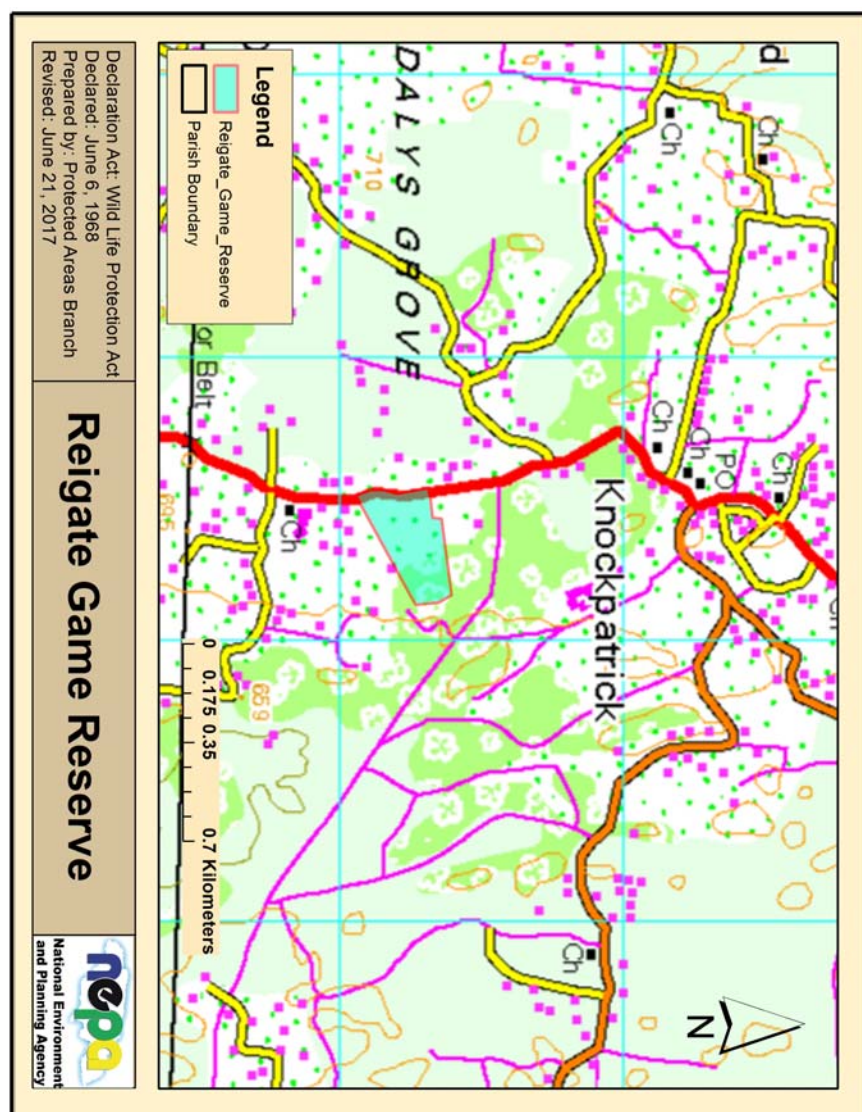


The eastern boundary starts at Fairy Hill and goes north along the minor road to the coast and south along the road leading from Sherwood Forest. It then goes westward along the road to Cambridge, Lookout, Nonsuch and to Breastworks. It then goes across the hill in a straight line to the school at Spring Bank. It then goes west then north along the minor road to Norwich Halt at the coast. The game reserve includes all the bays and islands along the coast back to Fairy Hill.



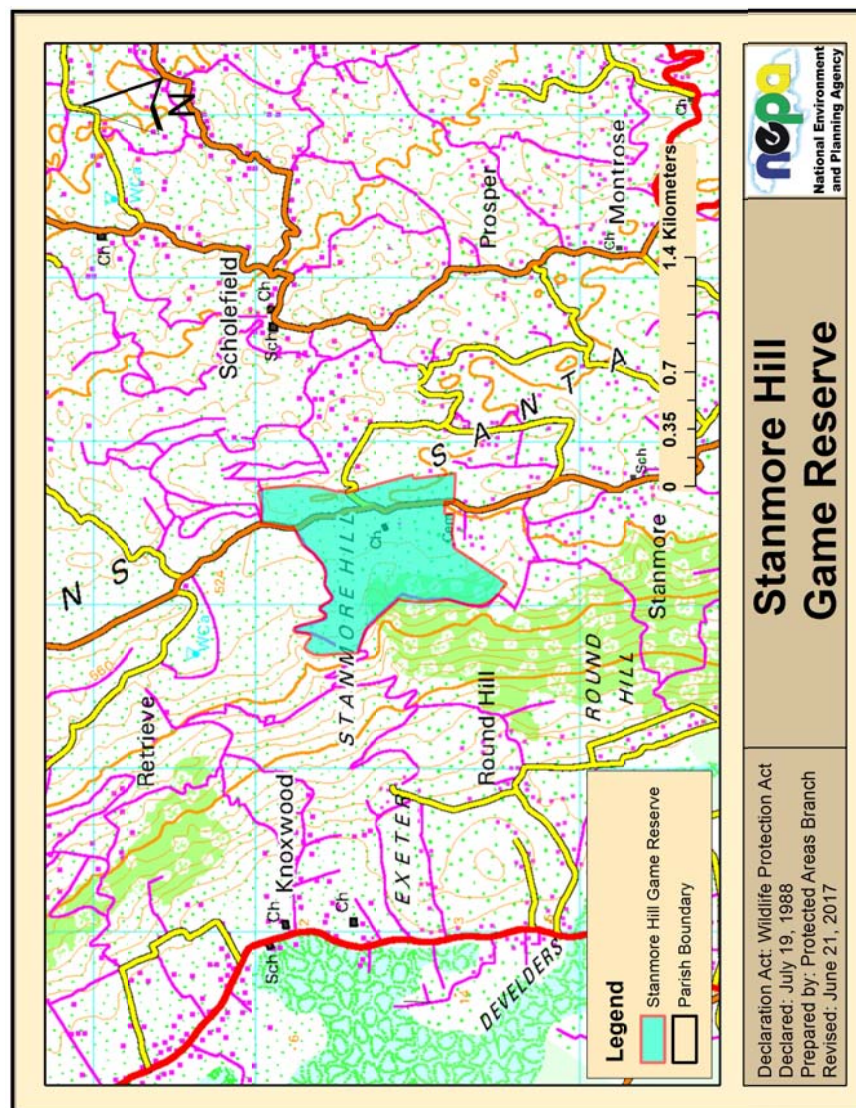
Reigate Game Reserve, Manchester [The Wild Life Protection (Reigate Game Reserve) Order, 1968]

All that parcel of land known as Reigate being part of Knockpatrick in the parish of Manchester, containing by survey 22 acres 0 road 38 perches and registered at Volume 382 Folio 11, in the Register Book of Titles, Titles Office, in the parish of Kingston.



Stanmore Hill Game Reserve, St. Elizabeth [The Wild Life Protection (Stanmore Hill Game Reserve) Order 1988]

All that parcel of land known as part of Stanmore Hill situated in the parish of St. Elizabeth containing approximately 209 acres be the same more or less registered at Volume 993 Folio 390 of the Register Book of Titles butting and bounding as follows: To the north part of Stanmore Hill (V. 126 F 40), and bounded by The Round Hill to Santa Cruz road, on the east partly by Mount Oliver and Prosper partly by Prospect; on the west by Round Hill; within the boundary of this property.



Knapdale Game Reserve, St. Ann [The Wild Life Protection (Knapdale Game Reserve) Order, 1963]

All that piece or parcel of land known as Knapdale situate in the parish of St. Ann, containing by estimation approximately 1,112 acres be the same more or less, butting and bounding as follows: -

ON THE NORTH – By Penhurst, Small Settlers and Thatchfield Land Settlement;

ON THE EAST – By Thatchfield Land Settlement;

ON THE SOUTH – Partly on the Main Road leading from Browns Town to Bamboo, partly on various small holdings and partly on Parochial Road, No. 194 leading from Knapdale to Browns Town;

[**NOTE:** At the time of declaration of this game reserve no map accompanied the description]

Kingston and St. Andrew Game Reserve The Wild Life Protection (Kingston and Saint Andrew Game Reserve) Order, 1971)

Starting at a point on the eastern bank of the Chalky River where it enters the sea; thence along its eastern bank to a point 1,000 feet north of the centre line of the main road leading from Kingston to Morant Bay; thence generally westerly along a line parallel to and 1,000 feet from the centre line of the said main road to intersect a point on the eastern boundary of Harbour View Housing Estate; thence due north for a distance of 2,000 feet; thence due west to intersect a line parallel to and 300 feet from the eastern bank of the Hope River; thence generally northerly along the last mentioned parallel line to its intersection with the centre line of Kintyre Road; thence generally north-easterly and generally north-westerly along the centre line of Kintyre Road to its intersection with the centre line of the main road leading from Gordon Town to Papine; thence westerly along the centre line of the last mentioned main road to intersect a line on the eastern side of Skyline Drive paralleled to and 300 feet from the centre line of Skyline Drive; thence generally north-westerly along the last mentioned parallel line to its intersection with a line parallel to and 300 feet from the centre line of the Jacks Hill Road on the eastern side of the last name road; thence generally north-westerly along a line 300 feet from and parallel to the centre line of the last mentioned road to a point 300 feet due east of the intersection of the centre lines of Jacks Hill Road and the road leading to Cherry Gardens; thence due west to the last mentioned intersection; thence north-westerly in a straight line across country to the intersection of the centre lines of Hermitage Dam and Seaview Roads; thence due east to intersect a line parallel to and 300 feet from the centre line of Seaview Road; thence generally westerly along the last mentioned parallel line to intersect at Stony Hill the centre line on the northern side of the main road leading from Stony Hill to Cavaliers; thence generally north-westerly and generally south-

westerly along the last mentioned parallel line to a point due north of the intersection of the centre lines of the last mentioned main road and Mannings Hill Road; thence due west to intersect a line parallel to and 300 feet from the centre line of Mannings Hill Road; thence generally southerly along the last mentioned parallel line to intersect a line parallel to and 300 feet from the centre line on the northern side of the main road leading from Mannings Hill to Rock Hall by way of Mt. Salus, Bean Junction and Red Hills; thence generally south-westerly and generally north-westerly along the last mentioned parallel line to a point due east of the boundary between Woodlands and Belvedere properties approximately 650 feet from the junction of the last mentioned main road and the main road leading to Belvedere; thence due west to the said boundary; thence westerly along the southern boundary of Woodlands property to its intersection with the eastern boundary of Carhampton property; thence southerly along the last mentioned boundary to its intersection with the northern side of the parochial road leading from Belvedere to the parochial road leading from glade to Ferry; thence generally westerly and generally southerly along the northern side of the first mentioned parochial road to its intersection with the northern side of the last mentioned parochial road; thence due south to intersect the parish boundary between St. Catherine and St. Andrew along the Ferry or Fresh River; thence generally south-easterly along the said parish boundary to intersect the high water-mark at Hunts Bay; thence due south to intersect a line off-shore parallel to and 300 feet from the high water-mark along the coastline; thence generally easterly along the last mentioned parallel line but not including the Palisadoes Peninsula to a point due south of the starting point; thence due north back to the starting point.

[**NOTE:** At the time of declaration of this game reserve no map accompanied the description]

FOREST RESERVES

ALL FOREST RESERVES ARE GAME RESERVES. Therefore all regulations of the Wild Life Protection Act that relates to Game Reserves also apply to Forest Reserves.

Forest Reserves are declared under the Forest Act, 1996 of Jamaica. The Forest Reserves, together with the Game Sanctuaries/Game Reserves and other protected marine and terrestrial areas comprise the Protected Areas System of Jamaica.

Detailed information on Forest Reserves may be sourced from the Forestry Department, 173 Constant Spring Road, Kingston 8.

National Parks
These are lands and/or sea managed mainly for the conservation of the ecological integrity of ecosystems. They are also managed for scientific research, education and recreation.

Protected Areas
An area of land and/or sea dedicated to the protection and maintenance of nature and cultural values, and managed through legal or other effective means. These areas do not necessarily exclude industrial or any other type of economic activity.



HUNTING STATISTICS

Age Distribution Assessment of the Game Bird Population

Introduction

In an effort to study the age distribution of game birds in Jamaica, wings of collected birds were assessed over a four year period starting in 2000. The programme was conducted in collaboration with The University of the West Indies, Department of Life Sciences, BirdLife Jamaica, protected areas management entities, gun clubs and individual hunters.

Methods

Juvenile pigeons and doves replace their ten primary wing feathers sequentially starting from the inner feather outwards to the wing tip during their first six months. The replaced feathers can be distinguished from the juvenile feathers by colour and shape. It is therefore possible to calculate the approximate age of juvenile birds up to six months based solely on their wing feathers. In all four years of the study, this method was used to assess the birds shot in the parishes of Portland, St. Catherine, St. Elizabeth, St. James and Trelawny.

Results

For the four year period a number of consistent patterns were observed:

- Over 95% of the hunted birds were less than 6 month old.
- The age of the hunted birds suggests a strong breeding peak from April to May.
- Reproduction at lower intensity occurs over an extended period including the hunting season.
- Secondary peaks may occur but vary between bird species, region and year.

The most likely explanation for the vast preponderance of young birds is that juvenile birds tend to form flocks and accumulate in certain feeding areas that are targeted by hunters. This hypothesis is supported by observations of large number of birds appearing in shooting areas 1-2 months before the hunting season.

The timing of the hunting season appears adequate. It occurs several months after the main nesting season. Even though some birds continue to nest during the hunting season, the impact is not believed to be significant. The consistency of the wing assessment data over the four years meant that new research could instead be focused on relative and absolute abundance and distribution of the game bird species.

Summary of the 2015 Bird Shooting Season

The island was affected by two years of severe drought. However, game bird surveys showed that the bird populations were coping relatively well. Nevertheless, a precautionary approach was taken for the 2015 and the hunting season was subsequently reduced from 6 to 5 weekends. A total of 1,567 licences were sold and the following analysis of the data compiled from the hunters' reports.

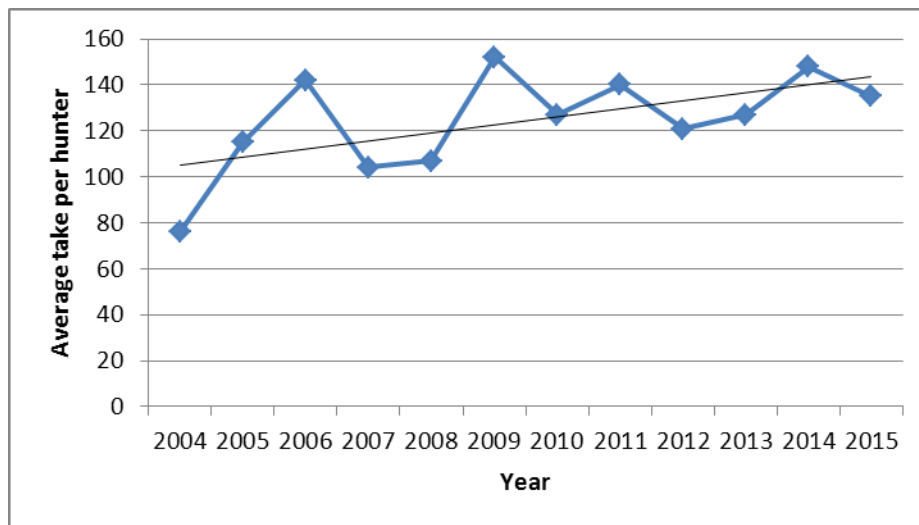
- 234,525 birds were shot:
 - * 93,171 (40%) White-crowned Pigeon
 - * 96,196 (41%) White-winged Dove
 - * 16,581 (7%) Zenaida Dove
 - * 28,578 (12%) Mourning Dove
- Birds recorded shot in the four vegetation types:
 - * 36% in inland woodland
 - * 25% in field
 - * 8% in coastal woodland
 - * 2% in mangroves
 - * 29% did not indicate
- Percentage of birds shot per parish
 - * 15% in St. Elizabeth
 - * 10% in St. Catherine
 - * 8% in Clarendon
 - * 8% in St. James
 - * 7% in Trelawny
 - * 28% did not indicate

All other parishes accounted for the remaining 24%

Table 1. Summary Statistics of hunting licences sold and estimated total birds shot during the 2006 to 2015 Hunting Seasons

Year	Hunting licences	White-crowned Pigeon	White-winged Dove	Zenaida Dove	Mourning Dove	Total Birds
2006	1,354	82,485	86,715	12,685	29,610	211,495
2007	900	22,304	61,854	6,046	11,154	101,358
2008	1,122	43,540	53,785	10,243	20,490	128,058
2009	1,218	76,623	82,672	14,118	28,230	201,643
2010	1,295	64,668	73,100	13,022	31,412	182,202
2011	1,252	83,208	72,033	10,580	28,678	194,499
2012	1,284	61,063	72,755	11,937	26,312	172,067
2013	1,416	83,087	66,972	17,358	32,436	199,854
2014	1,464	88,687	103,916	17,315	31,082	241,000
2015	1,567	93,171	96,196	16,581	28,578	234,525

The average number of birds shot by each hunter over the years has been steadily increasing. In 2015 each hunter on average harvested approximately 135 game birds during the 5 weeks of hunting.



Graph 1. Average number of birds harvested per hunter for the 2004 – 2015 Hunting Seasons

HUNTERS CODE OF CONDUCT

AS A RESPONSIBLE HUNTER, I WILL:

- Not let peer pressure or the excitement of the sport prevent good judgment.
- Learn and practice safe hunting techniques.
- Know the capabilities and limitations of my gun and use it safely.
- Hunt only the prescribed game birds.
- Obey and support all regulations relating to wildlife protection and report all violations.
- Respect all landowners and always obtain permission before hunting.
- Avoid deliberate interference with another hunter and respect the right of others to lawfully share the common resources.
- Value the hunting experience and appreciate the beauty of the wild birds.
- Positively identify my target as the prescribed game bird.
- Be sensitive to and respect the feelings of those who choose not to hunt.
- Have my Firearm's Licence/User's Permit and Hunter's Licence in my possession when hunting or transporting game birds.
- Shoot only during the specified days and times of the bird shooting season.
- Co-operate with NEPA Officers, Police Officers and Game Wardens at all times.
- Leave the head attached to each bird I have hunted.
- Have in my possession a First-Aid Kit and the name, address and telephone number of a nearby doctor or health facility as part of my emergency plan in the event of an accident.
- Maintain a minimum distance of 64 meters between shooting stands.
- Maintain a minimum distance of 50 meters from the boundaries of all Game Sanctuaries/Game Reserves.

- Exercise caution and consideration when shooting near populated areas.
- Submit my properly completed report form, whether or not I have shot, to the NRCA, c/o 10 Caledonia Avenue, Kingston 5, either by registered mail or hand delivery on or before December 31 of that shooting year.

IMPORTANT BIOSECURITY INFORMATION

Hunted wild birds are capable of introducing diseases into domestic poultry populations and hence capable of threatening our poultry industry and food security. Additionally, there are diseases that can be transmitted between animals and humans. These include salmonellosis, West Nile Virus, and Avian Influenza viruses (bird flu), among others.

You can protect yourself from the possibility of becoming infected with these diseases by practicing good biosecurity. This is important as infected birds may not look sick. Therefore, care must be taken by all hunters and their field assistants when handling the birds or coming in contact with their blood, secretions or excrement. These measures include:

- Wear rubber gloves when cleaning game birds
- Clean hands with soap and water and then sanitize them, before and after handling game birds
- Wash tools and working surfaces with soap and clean water and then disinfect
- Keep uncooked game birds in a separate cooler, away from cooked or ready-to-eat foods
- Cook game meat thoroughly, ensuring internal temperatures reach 74°C (165°F) to kill disease organisms and parasites
- Clean and sanitize inside and outside of vehicles, hunting gears and clothings used during the hunting session
- Check your health and seek medical attention if you get sick soon after hunting

HUNTING SAFETY RULES

- Always keep the muzzle of your firearm pointed in a safe direction at all times.
- Treat every shotgun as though it were loaded.
- Always make sure your firearm is unloaded and kept on safety when transporting or storing.
- Be sure that the barrel is clear of obstructions and that you have the proper ammunition for the firearm you are using.
- Be sure of your target before you pull the trigger.
- Never point your firearm at anything you do not want to shoot.
- Avoid all horseplay or mishandling of any firearm.
- Never climb a fence, tree or jump a ditch with a loaded firearm.
- Never shoot at a hard or flat surface such as rocks or water.
- Store all firearms and ammunition separately.
- Avoid alcohol and other drugs before or during hunting activities.
- Keep ammunition in a locked container and keep in your possession at all times.



REFERENCES

Bond J. Birds of the West Indies, Fifth Edition, 1995

The Wild Life Protection Act, 1945

Orders

Wild Life Protection (Amendment of First Schedule) Order, 2013

Wild Life Protection Act (Amendment) Order, 2004

Wild Life Protection Act (Amendment) Order, 1998

Wild Life Protection (Amendment of First Schedule) Order, 1998

Wild Life Protection (Stanmore Hill Game Reserve) Order, 1988

Wild Life Protection (Amendment of First Schedule) Order, 1997

Wild Life Protection (Kingston and St. Andrew Game Reserve) Order, 1971

Wild Life Protection (Reigate Game Reserve) Order, 1968

Wild Life Protection (Knapdale Game Reserve) Order, 1963

Regulations

Wild Life Protection (Amendment of Second and Third Schedules) Regulations, 2016

Wild Life Protection (Game Bird Hunting Limit) (Amendment) Regulations, 2008

Wild Life Protection (Amendment of Second Schedule) Regulations, 2002

Wild Life Protection (Hunter's Returns) (Amendment) Regulations, 2001

Wild Life Protection (Game Bird Hunting Limit) (Amendment) Regulations, 2000

Wild Life Protection (Hunters' Returns) Regulations, 1999

Wild Life Protection Act (Hunter's Licences) Regulations, 1998

Wild Life Protection Act (Protective Zone) Regulations, 1998

Wild Life Protection (Hunters' Licences) Regulations, 1973