

THE FIELD GUIDE

THE SPICE ISLE

A naturalist's guide to the wildlife and wild beauty of Grenada, from the rainforest canopy to the reef and the garden wall

A WARM WELCOME

THE ISLAND, INTRODUCED

This is the guide I wish someone had pressed into my hands the first time I set foot on Grenada.

When I first visited, I wanted to understand the island: its topography, its fauna and flora, and above all the magnificent forest at the very peak of its season, green and alive and dripping with rain. I went looking for a small book that would tell me what I was seeing, and never quite found it.

Let me be honest about what this is. It is not a comprehensive guide, nor a record of all that is endemic to Grenada. It is a gathering of the birds, animals, reef life, spices, fruit and flowers you are most likely to meet here, each drawn as its own illustrated plate. More than anything, it is the magic of Grenada as I came to know it, and the reason I fell so deeply in love with this island.

At the back you will find a checklist, for the avid adventurers among you. Tick off what you spot as you go, and do share it with me. I love to hear what you found, and where. And if you would prefer photographs, the photographic edition lives at www.fieldguide.gd.

Carry it with you on a forest walk, a morning at sea, or a slow garden lunch. When you would like to see any of it properly, with someone who knows the right trail and the right hour, simply ask. The best advice I can give you about Grenada is to take your time. The fastest way to get there is slowly. You will see more.

JOY VAN NIEKERK
FOUNDER, GRENADA CONCIERGE

WHERE LIFE GATHERS

GRENADA'S HABITATS

A whole world of habitats sits within a short drive. Knowing them is the first step to knowing what you will see, and where.

1 RAINFOREST AND CLOUD FOREST

The cool, green heart of the island around Grand Etang and the Mt St Catherine range. Home to the mona monkey, hummingbirds, the tree boa, heliconia and giant silk cotton trees, all wrapped in birdsong and falling water.

2 DRY FOREST AND THORN SCRUB

The warm, low south west, all cactus and hardy deciduous trees. This threatened habitat is the last refuge of the Grenada dove and the Grenada hook-billed kite, an endemic subspecies.

3 COAST, BEACH AND REEF

Pale sand, sea grape and turquoise water giving way to coral. Pelicans and boobies fish the surface while turtles, rays, parrotfish and octopus go about their lives below.

4 MANGROVE AND WETLAND

The quiet nurseries of the sea, at Levera, Woburn and La Sagesse. Tangled red mangrove shelters young fish and crabs, while herons hunt the shallows and the manicou forages by night.

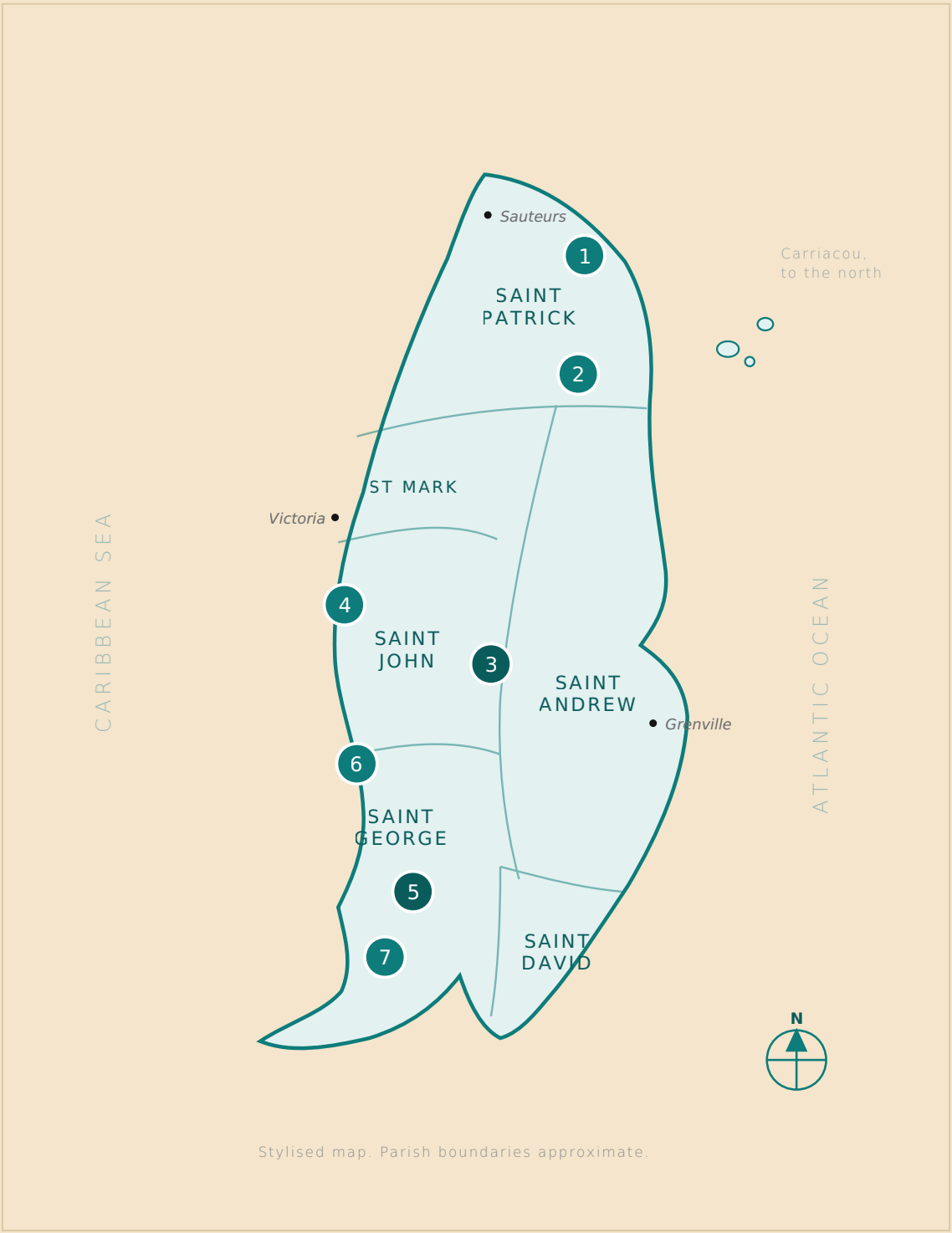
5 GARDENS, ESTATES AND SPICE GROVES

The lived-in landscape, and the easiest wildlife of all. Bananaquits, tanagers and grackles share the working estates of nutmeg, cocoa and fruit that give the Isle of Spice its name.

ORIENTATION

WHERE TO FIND IT

The six parishes of Grenada, and seven corners worth seeking out, each with its own wild reward. A guide, and the right hour, I can arrange.



1. Levera Beach, north east. Leatherback turtles nest by moonlight, April to July.
2. Belmont Estate, north east. Cocoa, and tree to bar Grenadian chocolate.
3. Grand Etang, central highlands. Mona monkeys, rainforest, heliconia and a crater lake.
4. Gouyave, west coast. The working nutmeg station, heart of the Isle of Spice.
5. Mt Hartman and Perseverance, south west. Dry forest refuge of the Grenada dove.
6. Molinere Bay, west coast. Sculpture park, reef fish and snorkelling.
7. Grand Anse and St George's, south west. Brown pelicans, the capital and the famous beach.

QUICK REFERENCE

YOUR FIELD CHECKLIST

Every species in this guide, at a glance. Tick them off as you go, a small souvenir of your Grenada and a gentle nudge to look a little closer.

BIRDS OF THE AIR

- Antillean Crested Hummingbird *Orthorhyncus cristatus*
- Bananaquit *Coereba flaveola*
- Brown Booby *Sula leucogaster*
- Brown Pelican *Pelecanus occidentalis*
- Carib Grackle *Quiscalus lugubris*
- Green Heron *Butorides virescens*
- Grenada Dove *Leptotila wellsi*
- Grenada Hook-billed Kite *Chondrohierax uncinatus mirus*
- Lesser Antillean Bullfinch *Loxigilla noctis*
- Lesser Antillean Tanager *Stilpnia cucullata*
- Magnificent Frigatebird *Fregata magnificens*
- Osprey *Pandion haliaetus*
- Purple-throated Carib *Eulampis jugularis*
- Tropical Mockingbird *Mimus gilvus*

CREATURES OF LAND AND SHORE

- Armadillo *Dasypus novemcinctus*
- Blue Land Crab *Cardisoma guanhumi*
- Caribbean Hermit Crab *Coenobita clypeatus*
- Common Opossum, Manicou *Didelphis marsupialis*
- Green Iguana *Iguana iguana*
- Grenada Tree Anole *Anolis richardii*
- Grenada Tree Boa *Corallus grenadensis*
- Mona Monkey *Cercopithecus mona*
- Small Indian Mongoose *Urva auropunctata*
- Whistling Frog *Eleutherodactylus johnstonei*
- Blue Snail *Family Bulimulidae*

BENEATH THE WAVES

- Atlantic Blue Tang *Acanthurus coeruleus*
- Caribbean Spiny Lobster *Panulirus argus*
- Common Octopus *Octopus americanus*
- Green Sea Turtle *Chelonia mydas*
- Hawksbill Turtle *Eretmochelys imbricata*
- Leatherback Turtle *Dermochelys coriacea*
- Spotted Eagle Ray *Aetobatus narinari*
- Stoplight Parrotfish *Sparisoma viride*

SPICES, FRUIT AND FLOWERS

- Allamanda *Allamanda cathartica*
- Anthurium *Anthurium andraeanum*
- Bird of Paradise *Strelitzia reginae*
- Bougainvillea *Bougainvillea glabra*
- Breadfruit *Artocarpus altilis*
- Cinnamon *Cinnamomum verum*
- Clove *Syzygium aromaticum*
- Cocoa *Theobroma cacao*
- Coconut Palm *Cocos nucifera*
- Flamboyant *Delonix regia*
- Frangipani *Plumeria rubra*
- Hanging Lobster Claw *Heliconia rostrata*
- Hibiscus *Hibiscus rosa-sinensis*
- Ixora *Ixora coccinea*
- Manchineel, do not touch *Hippomane mancinella*
- Mango *Mangifera indica*
- Nutmeg *Myristica fragrans*
- Pink Crab-claw Heliconia *Heliconia chartacea*
- Pride of Barbados *Caesalpinia pulcherrima*
- Red Ginger *Alpinia purpurata*
- Sea Grape *Coccoloba uvifera*
- Silk Cotton Tree *Ceiba pentandra*
- Soursop *Annona muricata*
- Torch Ginger *Etlingera elatior*

PART ONE

BIRDS OF THE AIR

Grenada sits on the southern edge of the Lesser Antilles, a stepping stone between the Caribbean and South America. The result is a bright, busy birdlife, from a hummingbird that fits in a teaspoon to a frigatebird with a wingspan of more than two metres.

PLATE 1.

GRENADA DOVE

Leptotila wellsi

FAMILY COLUMBIDAE
ORDER COLUMBIFORMES

Leptotila wellsi is endemic to the island of Grenada alone, and is the national bird. It inhabits dry scrub and deciduous woodland on the south and west coasts. A gentle and inconspicuous dove, it feeds mainly on seeds and fruits, foraging quietly on the ground.



RANGE

Endemic to Grenada only.



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Foot (lateral view)



E. Eggs



HABITAT



Dry scrub and deciduous woodland near the south and west coasts, mainly Mount Hartman and Beausejour. Feeds on the ground.

F. Flower



G. Fruit (berry)



H. Seed



I. Foraging



Feeds on seeds, fallen grains and fruits on the ground.

J. Nest



A simple platform of twigs. Only one wild nest recorded, in a palm.

K. Young



Two buff-coloured eggs are laid. Both parents share incubation and care.

SIZE

Length: 28 to 31 cm



IDENTIFICATION

Warm brown above, buffy neck and breast, whitish belly, white bar at side of breast, chestnut underwing.



VOICE

A single descending note, repeated every 7 to 8 seconds.



BEHAVIOUR

Peaceful and wary. Forages on the ground or low branches.



DIET

Seeds, fallen grains, berries and small fruits.



CONSERVATION

Critically Endangered. About 160 birds estimated in 2013. Threatened by habitat loss.



RANGE

Endemic to Grenada only.



NOTE: Maintain wooded areas, native fruiting trees and shrubs. Avoid overhunting and excessive use of pesticides.

PLATE 2.

GRENADA HOOK-BILLED KITE

Chondrohierax uncinatus mirus

FAMILY ACCIPITRIDAE
ORDER ACCIPITRIFORMES

Chondrohierax uncinatus mirus is endemic to Grenada. It inhabits dry woodland in the south of the island.

It is recognised by its strongly hooked bill, grey (male) or brown (female) upperparts and barred underparts.

It feeds almost entirely on tree and land snails.



A. Brown, barred plumage



RANGE
Endemic to Grenada.

Grenada only.

D. Foot (lateral view)



E. Bill

Strongly hooked, for pulling snails from their shells.

HABITAT



Dry woodland in southern Grenada, where land snails are common.

F. Food

Mainly snails; occasionally frogs, lizards, crabs and insects.

J. Flight



Soars and glides high above the forest.

K. Nest



A flimsy, shallow cup of twigs in a tree fork.

L. Young



SIZE
Length: 39–51 cm
Wingspan: 78–98 cm
Weight: 215–360 g

IDENTIFICATION
Male grey with pale barred breast; female brown, rusty barred below.



BILL
The hooked bill is the tool it uses to pull snails from their shells.

BEHAVIOUR
Searches foliage for snails and extracts them with its hooked bill.

DIET
Mainly tree and land snails.

CONSERVATION
Grenada race thought Endangered; fewer than 50 birds estimated in 2007.



RANGE
Endemic to Grenada.

N

NOTE: Protect forests and large trees. Maintain healthy ecosystems and reduce disturbance to nesting sites.

PLATE 3.

Brown Pelican

Pelecanus occidentalis

FAMILY PELECANIDAE
ORDER PELECANIFORMES



A. Head *(profile)*



B. Wing *(extended)*



C. Tail *(dorsal view)*



The Brown Pelican is a large coastal seabird found on the Pacific coast from British Columbia to Peru, the Atlantic from New Jersey to the Amazon, and the Caribbean.

It is known for its spectacular diving hunts, plunging from heights to catch fish. It feeds mainly on small schooling fish, but also takes prawns and other crustaceans.

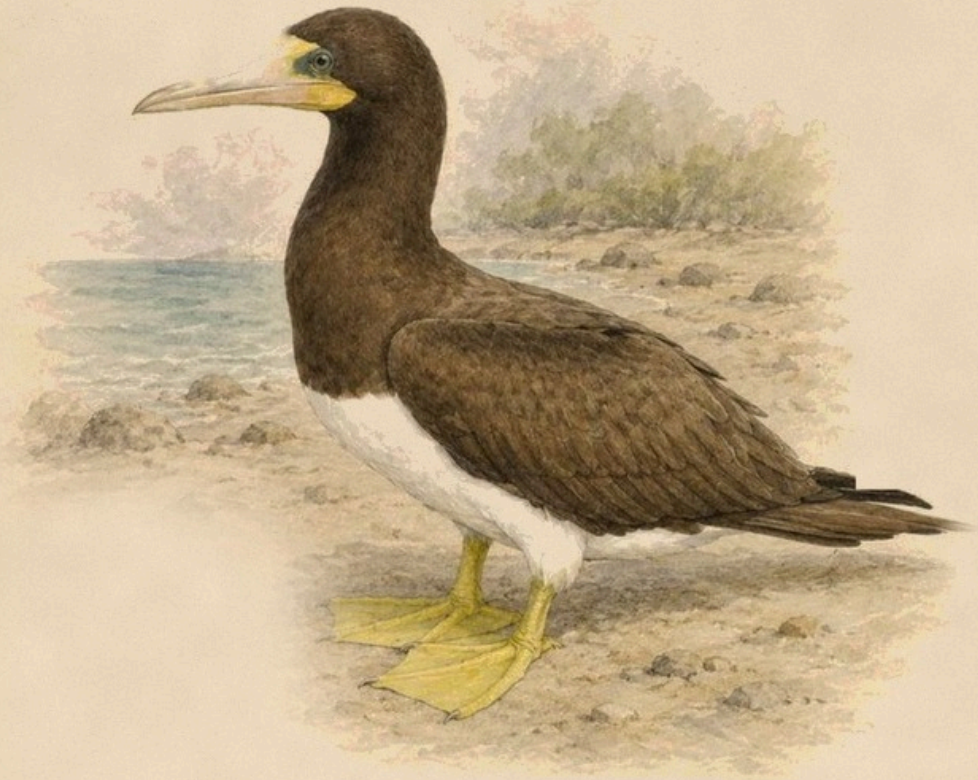
It often roosts and nests in colonies on islands and cliffs. Caribbean birds have a dark pouch, a white head and a dark maroon-brown hindneck, as shown here.

PLATE 4.

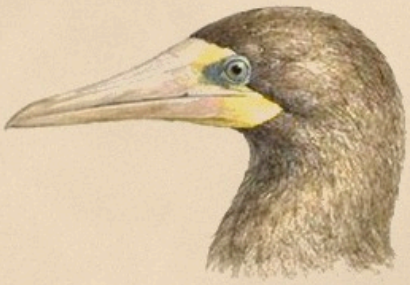
Brown Booby

Sula leucogaster

FAMILY SULIDAE
ORDER SULIFORMES



A. Head *(profile)*



B. Wing *(extended)*



C. Tail *(dorsal view)*



The Brown Booby is a medium-sized seabird found in tropical and subtropical oceans worldwide. It is commonly seen along coasts, on offshore islands, and around coral reefs.

Adults have a brown head, neck and breast, and a white belly, with yellow facial skin and feet. They plunge-dive into the sea to catch fish and squid.

Colonial breeders, they nest only on the ground, on islands and cliffs, laying two chalky blue eggs.

PLATE 5.

MAGNIFICENT FRIGATEBIRD

Fregata magnificens

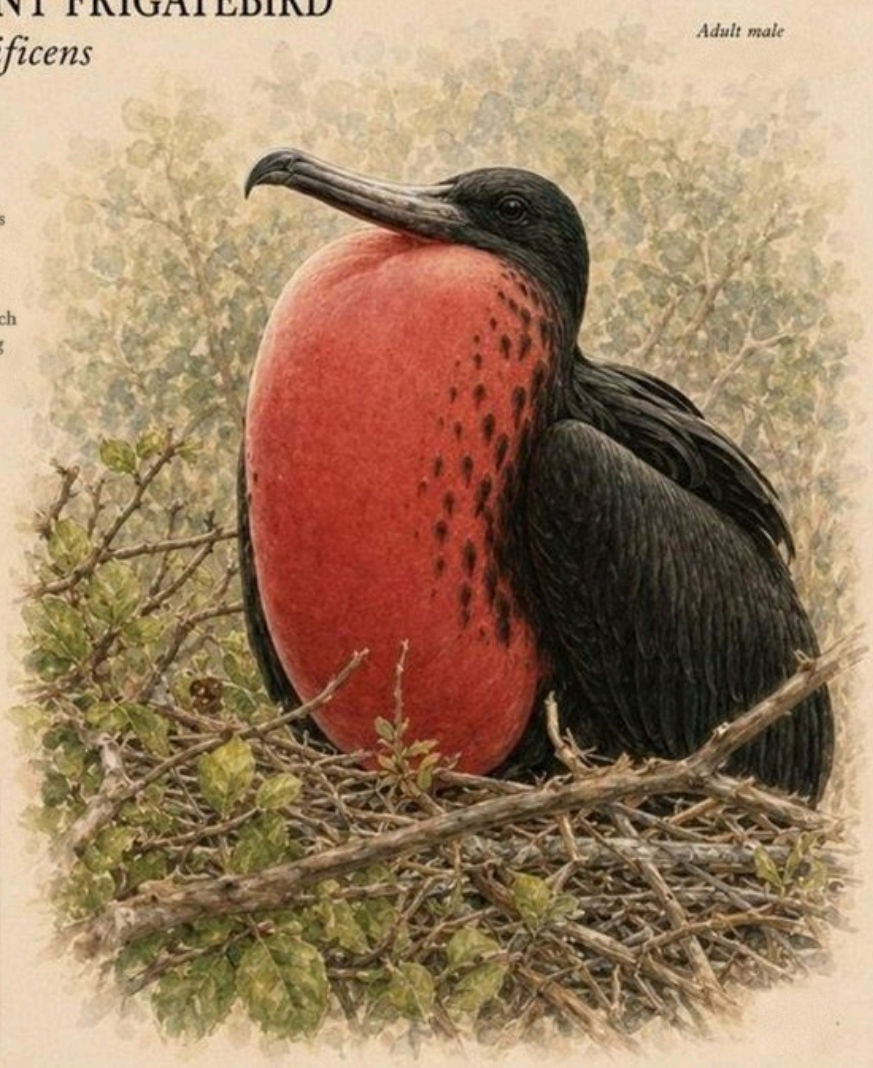
FAMILY FREGATIDAE
ORDER SULIFORMES

Fregata magnificens is a large seabird found in tropical waters of the Americas, including the Caribbean Sea. It is easily recognised by the male's inflatable red gular pouch, which is used to attract females during the breeding season.

It soars for hours over the sea, riding the winds in search of flying fish, squid, and other prey. It is also a kleptoparasite, often stealing food from other seabirds.

It nests in colonies on trees, shrubs, or mangroves, usually near the coast or on low islands.

Adult male



A. Head (profile)



B. Wing (*open*)



C. Tail (top view)



D. Foot (lateral view)



E. Gular pouch (*male*)



F. Egg



RANGE
Tropical Atlantic and eastern Pacific coasts of the Americas.



HABITAT



Coastal islands, cays, mangroves, and shorelines. Nests in trees or shrubs, often in colonies near the sea.

G. Soaring



Soars high over the ocean for hours or days, resting on the wing.

H. Fishing



Catches flying fish, squid, and other prey from the surface of the sea.

I. Kleptoparasitism



Often steals food from other seabirds by chasing them until they drop it.

J. Display (*male*)



Inflates bright red pouch and utters low rattling calls to attract females.

K. Nest



Nest is a platform of twigs and sticks in trees or shrubs.

L. Egg



One white egg. Incubation by both parents; 50 to 60 days.

M. Chick



Chick is white and downy; leaves the nest at about 150 to 185 days.

SIZE
Length: 89–114 cm
Wingspan: 217–244 cm
Weight: 1.1–1.59 kg
Oldest known bird at least 19 years 9 months



IDENTIFICATION
Large black seabird with long, narrow wings and deeply forked tail. Male has red inflatable gular pouch during breeding season. Female has white chest and lacks pouch. Bill long, hooked.



VOICE
Low, harsh, rattling calls, grunts, and croaks. Calls used in courtship and during colony interactions.



BEHAVIOUR
Excellent flier; rarely lands on water, as its plumage is not waterproof. Feeds on the wing and often steals food. Colonial nester; both parents share duties.



DIET
Flying fish, squid, and other fish. Also steals food from terns, boobies, gulls, and pelicans.



CONSERVATION
Least Concern. Widespread and abundant in many areas. Threats include disturbance, pollution, and entanglement in marine debris.



RANGE
Tropical seas of the Americas.



NOTE: Protect nesting colonies and coastal habitats. Reduce plastic pollution and fishing bycatch. Keep a respectful distance.

PLATE 6.

PURPLE-THROATED CARIB

Eulampis jugularis

FAMILY TROCHILIDAE
ORDER APODIFORMES

Eulampis jugularis is found in the mountainous Lesser Antilles, Saba to St Vincent; in Grenada it has been recorded only as a vagrant. Both sexes are black with a deep purple throat, emerald-green wings and a slender, decurved bill.

It feeds on nectar from a wide variety of flowers and plays an important role in pollination. It is an active, territorial species often seen darting swiftly among flowering trees and shrubs.



RANGE
Lesser Antilles, Saba to St Vincent.

Recorded in Grenada only as a vagrant.

A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Bill (lateral view)



E. Foot (lateral view)



F. Egg



HABITAT



Interior and edges of rainforest, mostly at 800 to 1,200 m.

G. Feeding



Feeds on nectar from flowers using its long, curved bill.

H. Pollination



Transfers pollen while visiting flowers, aiding in plant reproduction.

I. Perching



Often perches upright on exposed branches, vigilant and territorial.

J. Flight



Fast, agile flyer. Wings beat rapidly, producing a humming sound.

K. Nest



Small cup nest made of plant down, lichen and spider silk.

L. Young



Young are altricial, fed nectar and small insects by the female.

SIZE
Length: 11–12 cm
Weight: males 9–12 g, females 7–10 g



IDENTIFICATION
Both sexes black with a purple throat. Sexes alike in plumage; the female has a longer, more curved bill.



VOICE
A strident 'tsip' and a sharp 'chewp'.



BEHAVIOUR
Territorial, especially around flowering trees. Performs display flights, climbing and diving while vocalizing.



DIET
Nectar from a wide range of flowers. Also takes small insects and spiders for protein.



CONSERVATION
Least Concern. Widespread and adaptable. Protection of forests and flowering plants supports healthy populations.



RANGE
Saba to St Vincent. Recorded in Grenada only as a vagrant.



NOTE: Protect flowering plants and native forests. Avoid use of pesticides. Maintain healthy habitats.

PLATE 7.

ANTILLEAN CRESTED HUMMINGBIRD

Orthorhyncus cristatus

FAMILY TROCHILIDAE
ORDER APODIFORMES

The Antillean crested hummingbird is one of the smallest birds in the Caribbean, found from eastern Puerto Rico through the Lesser Antilles. Grenada and the Grenadines have their own subspecies, emigrans.

The male carries a pointed green crest tipped with blue, above sooty underparts. The female has no crest and is pale grey below. Both have a short, straight bill.

It feeds on nectar and small insects in gardens, forest edges and dry scrub.



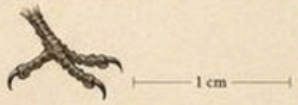
A. Male, perched



B. In flight



D. Foot (lateral view)



E. Bill

Short and straight, suited to small flowers.

F. Egg



RANGE

Eastern Puerto Rico through the Lesser Antilles. In Grenada, the subspecies emigrans.



HABITAT



Forests, woodland edges, gardens, plantations, and mountainous regions from sea level to about 1,200 m. Prefers areas with flowering plants and perches.

G. Feeding



Feeds on nectar from tubular flowers, hovering in front of blooms.

H. Pollination



Transfers pollen while feeding, playing a vital role in plant reproduction.

I. Perching



Perches upright on branches to rest and keep watch.

J. Flight



Wings beat rapidly in a figure-eight pattern, producing a hum.

K. Nest



Small cup nest made of plant down, lichen and spider silk.

L. Young



Chicks are fed nectar and small insects by both parents.

SIZE

Length: 8 to 9.5 cm

Weight: about 3 g



IDENTIFICATION

Male: green above, pointed green crest tipped blue, sooty underparts. Female: no crest, pale grey below. Short straight bill.

VOICE

High-pitched, thin "tsip" or "tsee", often repeated. Also makes a soft chattering sound during courtship and territorial displays.

BEHAVIOUR

Territorial and active. Defends nectar sources and perches. Displays include crest-raising, diving loops and positioning above rivals.

DIET

Mainly nectar from a wide variety of flowers. Also takes small insects and spiders for protein.



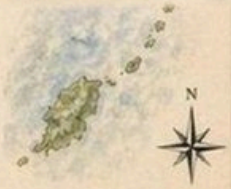
CONSERVATION

Least Concern. Widespread and adaptable within its range. Habitat protection, native plant conservation and reduced pesticide use are important.



RANGE

Puerto Rico through the Lesser Antilles; emigrans in Grenada and the Grenadines.



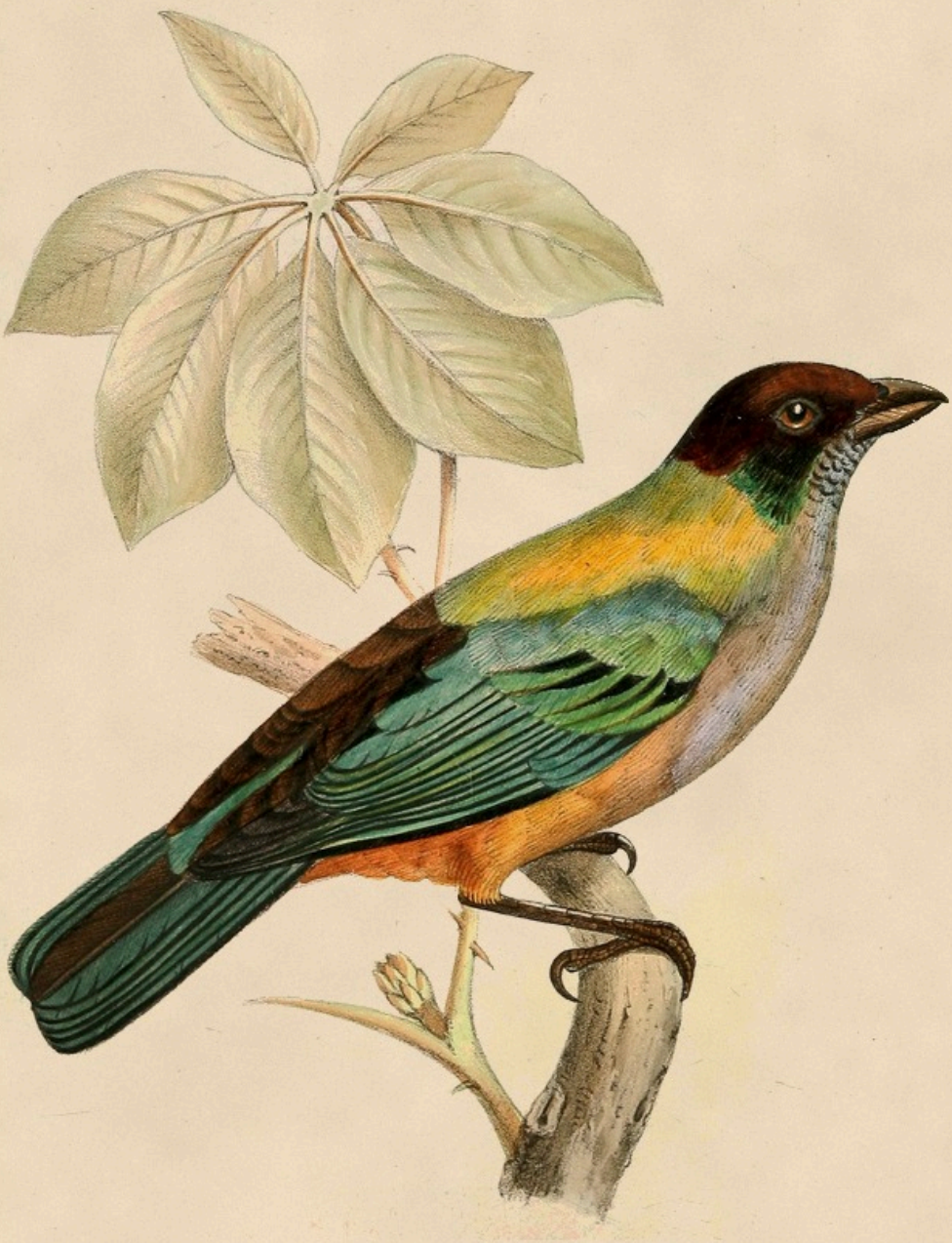
NOTE: Protect forests and native flowering plants. Avoid pesticides and maintain healthy ecosystems.

PLATE 8.

Lesser Antillean Tanager

Stilpnia cucullata

FAMILY THRAUPIDAE
ORDER PASSERIFORMES



A. Head *(profile)*



B. Wing *(extended)*



C. Tail *(dorsal view)*



Found only on Grenada and St Vincent, the Lesser Antillean Tanager inhabits tropical and subtropical moist forests, woodlands and shaded plantations.

It forages in the mid- to upper-storey, often in small groups, feeding mainly on fruits and berries, as well as insects and other small arthropods.

The male has a purplish-chestnut crown with a blackish mask, buff underparts and dark mottling on the throat, as shown here.

PLATE 9.

LESSER ANTILLEAN BULLFINCH

Loxigilla noctis

FAMILY THRAUPIDAE
ORDER PASSERIFORMES

Loxigilla noctis is an endemic bird of the Lesser Antilles, found throughout the island chain from the Virgin Islands south to Grenada.

It is a small, robust finch with mostly glossy black plumage and a rich red throat and upper chest in males; females are warm brown above and grey below, with no red. Only males have the red brow.

It feeds primarily on seeds and fruits, but also consumes small insects. Often seen in pairs or small groups in gardens, woodlands and secondary growth.

Adult male



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Bill (lateral view)



E. Foot (lateral view)



F. Fruit (favourite food)



RANGE
Endemic to the Lesser Antilles.



HABITAT



Forests, woodland edges, gardens, plantations and secondary growth from sea level up to mid-elevation. Frequently visits fruiting trees and shrubs.

G. Feeding *(seed)*



Feeds on seeds from grasses, shrubs and herbaceous plants.

H. Feeding *(fruit)*



Eats a variety of fruits, including small berries and drupes.

I. Foraging *(insect)*



Also forages for small insects and other invertebrates.

J. Perching



Often perches in open spots, singing from exposed branches.

K. Pair



Seen in pairs or small groups, especially during the non-breeding season.

L. Nest

Domed nest with a side entrance.

Two to four eggs, bluish white with red or brown flecks.

N. Young



Chicks are fed seeds, fruits and insects by both parents.

SIZE
Length: 14–15.5 cm
Weight: 13.1–23.4 g



IDENTIFICATION
Male glossy black with red throat and upper chest; small rufous brow patch. Female warm brown, grey below, rusty undertail, no red. Bill short, thick and black.



VOICE
A short crisp trill, a harsh 'chuk' and a thin 'tseep'.



BEHAVIOUR
Active and alert. Forages in foliage and on the ground. Often seen hopping through bushes or taking short flights between perches.



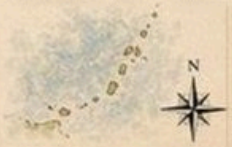
DIET
Mainly seeds and fruits; also small insects and other invertebrates. Important seed disperser in many native plants.



CONSERVATION
Least Concern. Widespread and adaptable within its range. Habitat preservation and native vegetation maintain healthy populations.



RANGE
Native to the Lesser Antilles including the Virgin Islands and the islands south through the chain to Grenada.



NOTE: Protect native forests and fruiting trees. Avoid pesticides. Maintain gardens with native plants.

PLATE 10.

BANANAQUIT

Coereba flaveola

FAMILY THRAUPIDAE
ORDER PASSERIFORMES

Coereba flaveola is a small, active tanager found from southern Mexico and the Caribbean to South America. It is easily recognised by its bright yellow underparts, slate-grey upperparts, white supercilium and dark eyemask. Sexes are similar.

It feeds on nectar from flowers, especially of native plants and ornamentals, but also takes small fruits and insects, often gleaned from foliage.

'Quit' is an old word for small tropical American birds. In Grenada many are all black.



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Bill (lateral view)



E. Foot (lateral view)



F. Fruit (banana)



RANGE

Southern Mexico to South America, and the Caribbean except Cuba.



HABITAT



Gardens, forest edges, plantations, coastal thickets and open woodlands. Common around human habitation where flowering plants and fruit trees are abundant.

G. Feeding (nectar)



Probes flowers with curved bill to sip nectar.

H. Feeding (fruit)



Eats ripe fruits such as banana, guava and papaya.

I. Feeding (insects)



Gleans small insects and spiders from leaves and twigs.

J. Perching



Often perches upright on exposed twigs or small branches.

K. Nest

Round, domed nest with a side entrance.

L. Egg



Up to three eggs. Creamy white with reddish-brown spots.

M. Young



Chicks are fed nectar, soft fruits and small insects by both parents.

SIZE

Length: 10–13 cm
Weight: 5.5–19 g



IDENTIFICATION

Small tanager with yellow underparts, grey upperparts, white supercilium and dark eye line. Long, slender, down-curved bill. Sexes similar; females slightly duller.



VOICE

High, sweet, thin "tsiip" or "tsee", often given in short repeated notes while feeding or moving through foliage.



BEHAVIOUR

Energetic and acrobatic. Moves actively through foliage, perching to feed, often piercing flowers at the base. Often in pairs or small groups.



DIET

Nectar from a wide variety of flowers, soft fruits, berries and small insects and spiders.



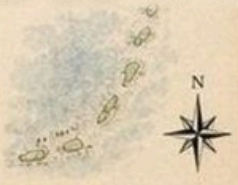
CONSERVATION

Least Concern. Common and adaptable across its range, but depends on healthy native gardens, forest edges and the availability of flowering plants and fruit trees.



RANGE

Native from southern Mexico through the Caribbean to South America.



NOTE: Protect native flowering plants and fruiting trees. Avoid pesticides and preserve natural habitats.

PLATE 11.

TROPICAL MOCKINGBIRD

Mimus gilvus

FAMILY MIMIDAE
ORDER PASSERIFORMES

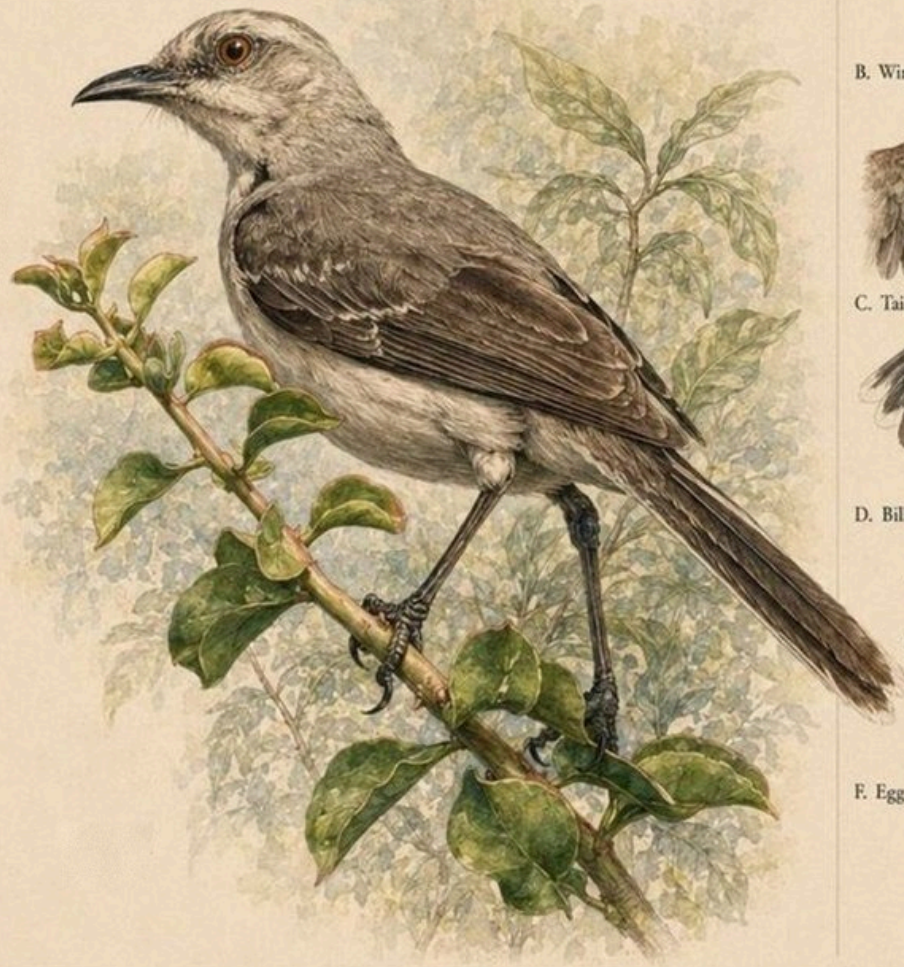
Mimus gilvus is a widespread resident from southern Mexico to northern South America and the Lesser Antilles. It is a highly adaptable and intelligent bird, known for its long, varied song, often sung at night.

It is grey above, with a dark eye stripe and white wing bars, paler underparts and a long tail with white outer feathers. The bill is black, the eye yellow to orange.

It forages on the ground and in shrubs and trees, feeding on fruits, insects, and other small invertebrates. It is often seen in pairs or family groups.

RANGE
Southern Mexico to northern South America and the Lesser Antilles.

Adult



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Bill (lateral view)



E. Foot (lateral view)



F. Egg



HABITAT



Open woodlands, gardens, agricultural areas, coastal scrub, mangroves and urban areas.

G. Feeding *(fruit)*



Eats a variety of fruits, berries and small seeds from trees and shrubs.

H. Feeding *(insect)*



Captures insects and other invertebrates on the ground, in foliage and in the air.

I. Perching



Often perches upright in open places, on exposed branches, fences or wires.

J. Song



A gifted songster. Rarely mimics other species.

K. Nest



Nest is a bulky cup of twigs, roots, grass and other plant fibres.

L. Eggs



Usually 3 eggs, 2 to 4. Pale bluish or greenish white with brown spots.

M. Young



Chicks are fed insects and soft fruits by both parents.

SIZE
Length: 23–25.5 cm



IDENTIFICATION
Grey mockingbird. Long tail with white outer feathers. Pale underparts, blackish wings with two white bars. Slightly decurved black bill. Yellow to orange eye. Sexes similar.



VOICE
Loud, complex and varied song. Rarely imitates other species.



BEHAVIOUR
Curious, bold and intelligent. Territorial during the breeding season.

DIET
Omnivorous. Fruits, seeds, berries and a wide range of insects, spiders and other invertebrates.



CONSERVATION
Least Concern. Very adaptable and thrives in modified habitats. Protection of trees and shrubs helps maintain nesting and food sources.



RANGE
Southern Mexico to northern South America and the Lesser Antilles.



NOTE: Protect native forests and fruiting trees. Avoid pesticides and preserve natural habitats.

PLATE 12.

CARIB GRACKLE

Quiscalus lugubris

FAMILY ICTERIDAE
ORDER PASSERIFORMES

Quiscalus lugubris is a resident bird in the Lesser Antilles and northern South America. It is common in coastal areas, towns, gardens, mangroves and open woodlands.

It is an intelligent and adaptable bird, often seen in flocks, especially in the non-breeding season. It feeds on a wide variety of foods and is known for its bold, inquisitive nature and loud, varied calls.

It plays an important ecological role in seed dispersal and invertebrate control.

RANGE

Lesser Antilles, Montserrat to Grenada, and Trinidad.

Adult male



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Bill (lateral view)



E. Foot (lateral view)



F. Egg

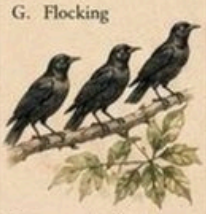


HABITAT



Coasts, beaches, parks, gardens, mangroves, open woodlands, and urban areas.

G. Flocking



Often seen in flocks, especially outside the breeding season.

H. Feeding *(omnivore)*



Eats insects, fruits, seeds, berries, small animals, and human food scraps.

I. Calling



Loud, harsh calls and a variety of other vocalizations.

J. Nest



Cup nest made of twigs, grass, and other plant material.

K. Eggs



Usually 2–4 eggs. Pale blue with dark brown or black speckles.

L. Young



Chicks are fed insects and other small foods by both parents.

SIZE

Length: males about 26 cm, females 22 cm
Weight: males 66–80 g, females 49–58 g



IDENTIFICATION

Large, slender icterid. Glossy black with iridescent blue, green and purple sheen. Long tail, yellow eye and long, slightly curved black bill. Female dull brown, paler below.
Young are duller.



VOICE

Loud, ringing "*kree!*," "krak!," "churr," and a variety of whistles, rattles, and squeaky notes.



BEHAVIOUR

Bold, social, and intelligent. Walks confidently on the ground, often hopping and probing for food. Highly adaptable to human environments.



DIET

Omnivorous. Eats insects, fruits, seeds, grains, small vertebrates, and a wide range of human foods.



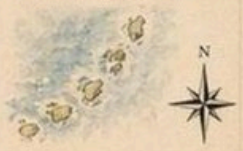
CONSERVATION

Least Concern. Widespread and abundant. Benefits from habitat protection, waste management, and preservation of natural areas.



RANGE

Lesser Antilles, Trinidad and Tobago, northern South America.



NOTE: Protect native forests and mangroves. Avoid pollution and improper waste disposal. Maintain healthy ecosystems.

PLATE 13.

OSPREY

Pandion haliaetus

FAMILY PANDIONIDAE
ORDER ACCIPITRIFORMES

Pandion haliaetus is a large bird of prey found worldwide in association with coasts, lakes, rivers, and wetlands. It is easily recognized by its white head with dark eye stripe, brown upperparts, and white underparts.

It is an excellent fisherman, diving feet-first from the air into the water to capture fish with its reversible outer toe and spiny foot pads.

It builds large stick nests on trees, snags, cliffs, or man-made platforms. Both parents share in incubation and feeding of the young.



Adult

RANGE

Worldwide in all regions except Antarctica. Common in the Caribbean, and along coasts and inland waters.



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Talon (lateral view)



E. Foot (plantar view)



F. Egg



HABITAT



Near coasts, islands, lakes, rivers, and wetlands. Nests on trees, snags, cliffs, and artificial platforms.

G. Fishing



Soars high, then dives steeply feet-first into the water to catch fish.

H. Catch



Grips fish head-first with reversible outer toe and carries it to a perch.

I. Feeding



Tears fish into pieces with hooked beak and feeds young.

J. Nest



Large nest of sticks and branches, lined with softer material.

K. Pair



Both parents share in building the nest, incubation, and feeding the young.

L. Eggs



Usually 2–4 eggs. Whitish with bold reddish-brown blotches.

M. Chick



Chicks fledge after about 8–10 weeks.

SIZE

Length: 50–66 cm
Wingspan: 127–180 cm
Weight: 0.9–2.1 kg
Oldest wild bird: 26 years 11 months



IDENTIFICATION

Large raptor with white head and underparts. Distinct dark eye stripe. Upperparts dark brown. Wings long and narrow with a distinctive kink at the wrist. Tail banded. Legs long and strong.



VOICE

Calls are high-pitched and ringing, a whistled "khrreeee" or "cheep." Usually silent when hunting.



BEHAVIOUR

Diurnal. Solitary or in pairs. Loyal to nest site year after year. Performs an aerial display with rolling dives and fish-carrying flights.



DIET

Fish almost exclusively, including mullet, herring, snapper, and many other species.



CONSERVATION

Least Concern. Populations are stable in most areas. Threats include habitat loss, disturbance to nests, and contaminants.



RANGE

Breeds on all continents except Antarctica and South America. Migrates seasonally in temperate regions.



NOTE: Protect nesting sites and coastal habitats. Reduce pollution and avoid disturbance during breeding season.

PLATE 14.

GREEN HERON

Butorides virescens

FAMILY ARDEIDAE
ORDER PELECANIFORMES

Butorides virescens is a small heron widespread in North and Central America and the Caribbean. It is easily recognised by its dark greenish cap, chestnut neck and breast, and dark wings edged with pale lines.

It is a secretive bird, often found alone near freshwater and brackish wetlands, ponds, and mangroves. It hunts by perching motionless or stalking slowly along the water's edge before striking swiftly.

It usually nests in single pairs, rarely in colonies, in trees or shrubs near water. Both parents share in building the nest and feeding the young.

RANGE

Southern Canada to Panama and the Caribbean; winters to northern South America.

Adult



A. Head (profile)



B. Wing (open)



C. Tail (top view)



D. Bill (lateral view)



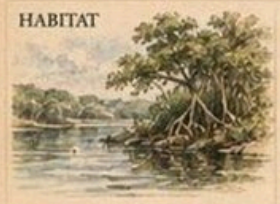
E. Foot (lateral view)



F. Egg



HABITAT



Freshwater and brackish wetlands, ponds, slow streams, lakes, mangroves, marshes, and coastal lagoons.

G. Stalking



Moves slowly and quietly along the water's edge, neck retracted.

H. Striking



Spears fish, insects, frogs, crayfish, and other small prey with its sharp bill.

I. Perched



Often perches low over water for long periods, watching for movement.

J. Nest



Nest of sticks in trees or shrubs; usually single pairs, rarely colonies.

K. Nestlings



Young are fed fish, insects, and other small aquatic animals.

L. Egg



2 to 6 pale green eggs. Incubation by both parents; 19 to 21 days.

M. Fledgling



May leave the nest at 16 days; fully fledged at 30 to 35.

SIZE

Length: 41–46 cm
Wingspan: 64–68 cm
Weight: about 240 g



IDENTIFICATION

Small heron. Dark greenish cap. Rich chestnut neck and breast with white throat stripe. Dark wings with fine pale edging. Short neck. Yellow eyes. Legs yellow, orange when breeding.



VOICE

A harsh "*skeow*" or "quick" call. Usually quiet and secretive.



BEHAVIOUR

Solitary and secretive. Prefers to hunt at dawn, dusk and night. Drops bait such as insects or bread to lure fish. Seizes prey with a quick strike.

DIET

Fish (especially small fish), amphibians, aquatic insects, crustaceans, worms, and other small aquatic creatures.



CONSERVATION

Least Concern.
Wide distribution and adaptable to a variety of wetland habitats. Threats include habitat loss, pollution, and disturbance to breeding colonies.



RANGE

Southern Canada to Panama and the Caribbean; winters to northern South America.



NOTE: Protect wetland habitats and nesting colonies. Reduce pollution and disturbance. Wetlands are vital for all herons.

PART TWO

CREATURES OF LAND AND SHORE

From a monkey brought from West Africa to a snake found only on the Grenada Bank, and from giant turtles on moonlit sand to a frog you will hear every single night, Grenada's mammals, reptiles and amphibians reward the curious and the patient. Many are shy or nocturnal, so a sighting is always a small event.

PLATE 15.

MONA MONKEY

Cercopithecus mona

FAMILY CERCOPITHECIDAE
ORDER PRIMATES

The mona monkey is an Old World monkey native to the forests of West Africa. It was brought to Grenada during the slave trade and is now established in the island's forests, most famously around Grand Etang.

It is easily recognised by its dark cap, white cheek whiskers and rufous sides against a white throat and chest.

The name comes from the Spanish and Portuguese mona, meaning female monkey.

Adult



RANGE

Native to West Africa, from Ghana east to Cameroon. Introduced to Grenada.

In Grenada: the forests of Grand Etang and the central mountains.

A. Head (profile)



B. Hand (dorsal view)



C. Foot (plantar view)



D. Tail (detail)



E. Dentition (left side)



HABITAT



Tropical forests, gallery forests, swamps, and mangroves, often near water.

F. Group



Lives in troops of 5–50 individuals. Social groups have a linear hierarchy.

G. Foraging



Feeds on fruits, seeds, flowers, leaves, insects, spiders, and small animals.

H. Locomotion



Moves swiftly through the trees using agile leaps and aiding balance with its tail.

I. Vigilant



Alert to predators; gives loud alarm calls and scans from high branches.

J. Resting



Rest periods occur in the midday heat in dense foliage.

K. Infant



Young cling to the mother's belly. Weaning occurs at about 5–6 months.

L. Sleeping



Sleeps high in tall trees. Builds no nest.

SIZE
Length: 40–60 cm
Tail length: 50–70 cm
Weight: 3.5–6.5 kg
Lifespan:
Up to 20 years in the wild.



IDENTIFICATION
Dark cap and nape. White cheek whiskers and throat. Rufous-brown sides and upper back. White chest and belly. Dark arms and legs. Nose pinkish; face dark with pale eyebrow line. Sexes similar.



VOICE
Wide range of calls—chirps, whistles, chatters, barks, and alarm calls. Members keep contact with soft "keow" notes and grunts.



BEHAVIOUR
Diurnal and arboreal. Forages in mid-morning and late afternoon, mostly in the trees. Sleeps high in tall trees.



DIET
Fruits and seeds form the bulk of the diet, also flowers, leaves, insects, small reptiles, eggs, and other small vertebrates.



CONSERVATION
Near Threatened (IUCN). Hunted and losing forest in West Africa.



RANGE (detail)
Ghana east to Cameroon. Introduced to Grenada and São Tomé.



NOTE: Protect forest habitats and riparian zones. Reduce hunting pressure and support conservation of wetland ecosystems.

PLATE 16.

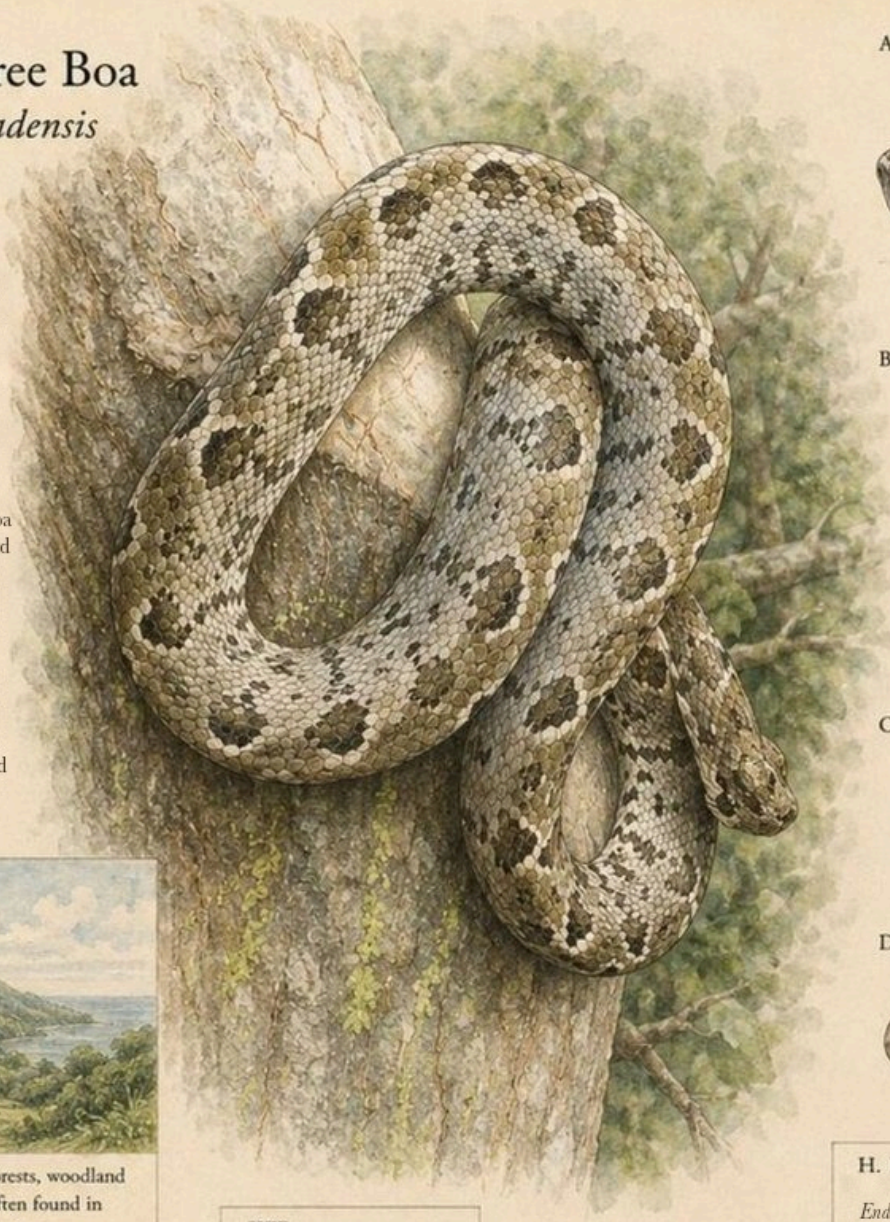
Grenada Tree Boa

Corallus grenadensis

FAMILY BOIDAE
ORDER SQUAMATA

The Grenada Tree Boa is endemic to the Grenada Bank: Grenada and the larger Grenadines, including Carriacou, Union, Mayreau, Canouan, Mustique and Bequia.

This common, arboreal boa inhabits forests and wooded areas from sea level to the mid-hills. It is nocturnal and secretive, spending daylight hours coiled on tree branches. Its colour and pattern provide excellent camouflage among lichens and mottled bark.



HABITAT



Primary and secondary forests, woodland edges and plantations. Often found in tall trees and dense vegetation.

SIZE
Snout-vent length:
up to 1,625 mm

A. Head *(lateral view)*



3 cm

B. Head *(dorsal view)*



2 cm

C. Ventral scales *(mid-body)*



2 cm

D. Tail *(prehensile)*



5 cm

H. Distribution

Endemic to the Grenada Bank: Grenada and the larger Grenadines, including Carriacou, Union, Mayreau, Canouan, Mustique and Bequia.

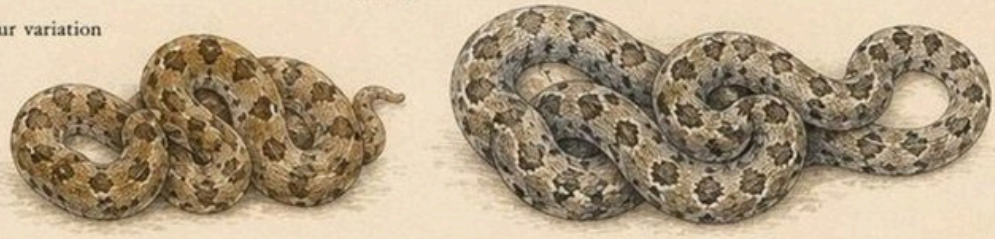
Endemic to the Grenada Bank, Grenada and the Grenadines.

E. Full body *(dorsal view)*



100 cm

F. Colour variation



G. Pattern detail



2 cm

NOTE: Endemic to the Grenada Bank. IUCN Least Concern, though land development and persecution are local threats. Do not handle. Observe from a distance.

PLATE 17.

Green Iguana

Iguana iguana

FAMILY IGUANIDAE
ORDER SQUAMATA

The Green Iguana is the largest lizard in the Caribbean and a common sight in Grenada and the Grenadines. It inhabits tropical forests, mangroves, riverbanks and coastal areas. Primarily arboreal, it is an excellent climber and spends much of its time in trees. Herbivorous, it feeds on leaves, flowers and fruit. Green Iguanas are diurnal, basking in the sun to regulate body temperature. When threatened, they may drop from branches and swim to safety.



50 cm

A. Head (lateral view)



5 cm

B. Head (dorsal view)



5 cm

C. Dewlap (extended)



5 cm

D. Dorsal crest



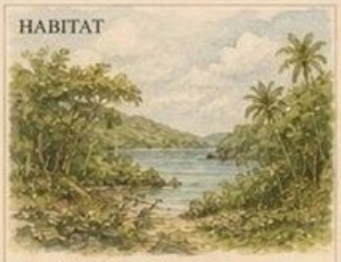
3 cm

E. Forefoot (ventral view)



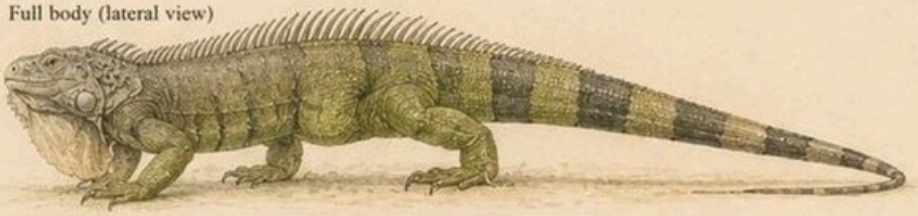
5 cm

HABITAT



Tropical forests, mangroves, riparian zones and coastal areas. Often found near water.

F. Full body (lateral view)



100 cm

G. Tail (detail)



20 cm

SIZE
Total length: up to 2.0 m (including tail)
Weight: up to 8.0 kg

COLOUR
Variable shades of green, brown and grey. Young iguanas are brighter green; adults become more muted with age.
Dark bands often present on tail.

DIET
Herbivorous: leaves, flowers, fruits and tender shoots.



BEHAVIOUR
Diurnal and arboreal.
Basks in sun to regulate temperature.
Good swimmer; may drop from trees to escape danger.

RANGE
Native to Central and South America. The Grenadines hold a native island iguana, Iguana insularis; mainland Grenada's iguanas show hybrid traits.

NOTE: Green Iguanas may cause damage to cultivated plants and ornamental vegetation. In Grenada iguanas may be hunted only in the open season. Hybrids with introduced iguanas threaten the native Grenadine lineage.

PLATE 18.

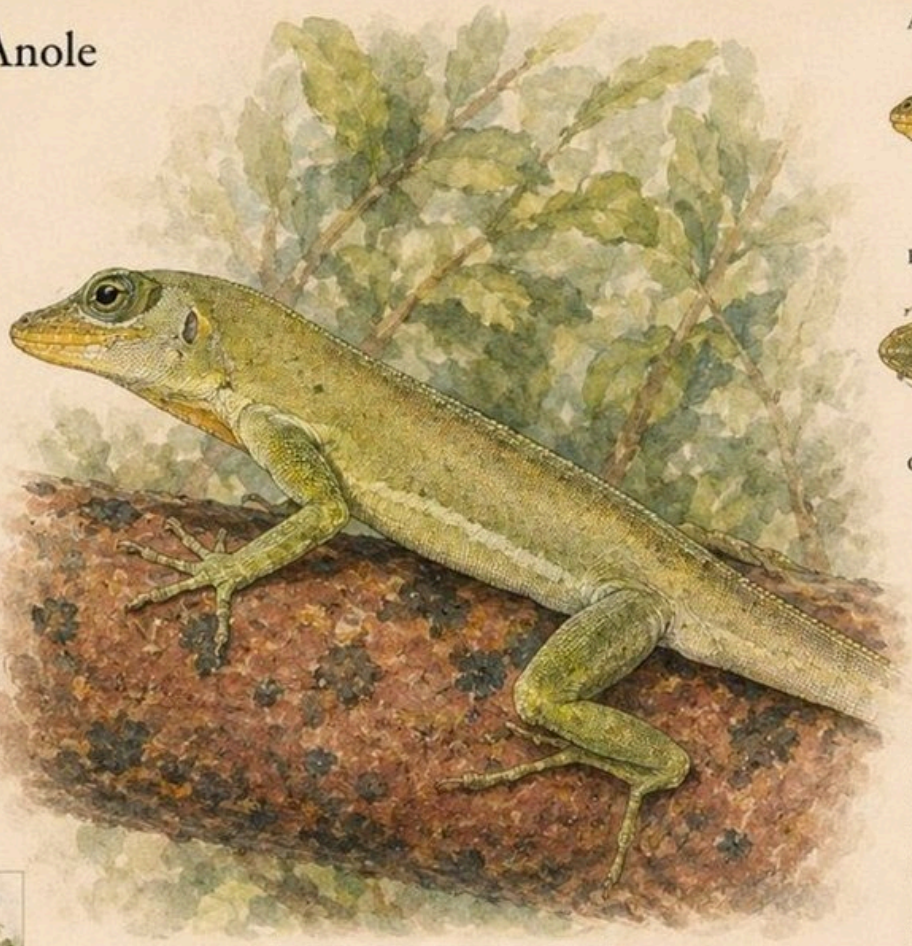
Grenada Tree Anole

Anolis richardii

FAMILY DACTYLOIDAE
ORDER SQUAMATA

The Grenada Tree Anole is native to Grenada and the Grenadines, and is also found on Tobago. It inhabits trees, shrubs and human settlements, where it hunts small insects and spiders.

Males defend territories and perform push-up displays while extending a yellow, orange or grey-green dewlap to attract females and deter rivals. Their colour varies from bright green to brown or grey, often with a pale lateral stripe. They are agile climbers and well adapted to island life.



A. Head (lateral view)



B. Head (dorsal view)



C. Dewlap (extended)



HABITAT



Forests, coastal scrub, gardens and urban areas. Often seen on trees, walls and buildings.

E. Full body (lateral view)



F. Full body (dorsal view)



G. Range

Native to Grenada and the Grenadines; also found on Tobago.

SIZE

Males reach 140 mm snout-vent; females smaller.

COLOUR

Variable: bright green, olive, brown or grey. Often with a pale lateral stripe from behind the eye to the base of the tail.

SEXES

♂ Males: larger head, prominent dewlap and crest scales on neck.

♀ Females: smaller, less prominent dewlap and crest scales.

BEHAVIOUR

Diurnal and arboreal. Territorial males perform push-up displays with dewlap extension. Often bobs head while displaying.

DIET

Small insects, spiders and other invertebrates.



NOTE: Native to Grenada and the Grenadines. Important for natural insect control. Handle gently and avoid stress.

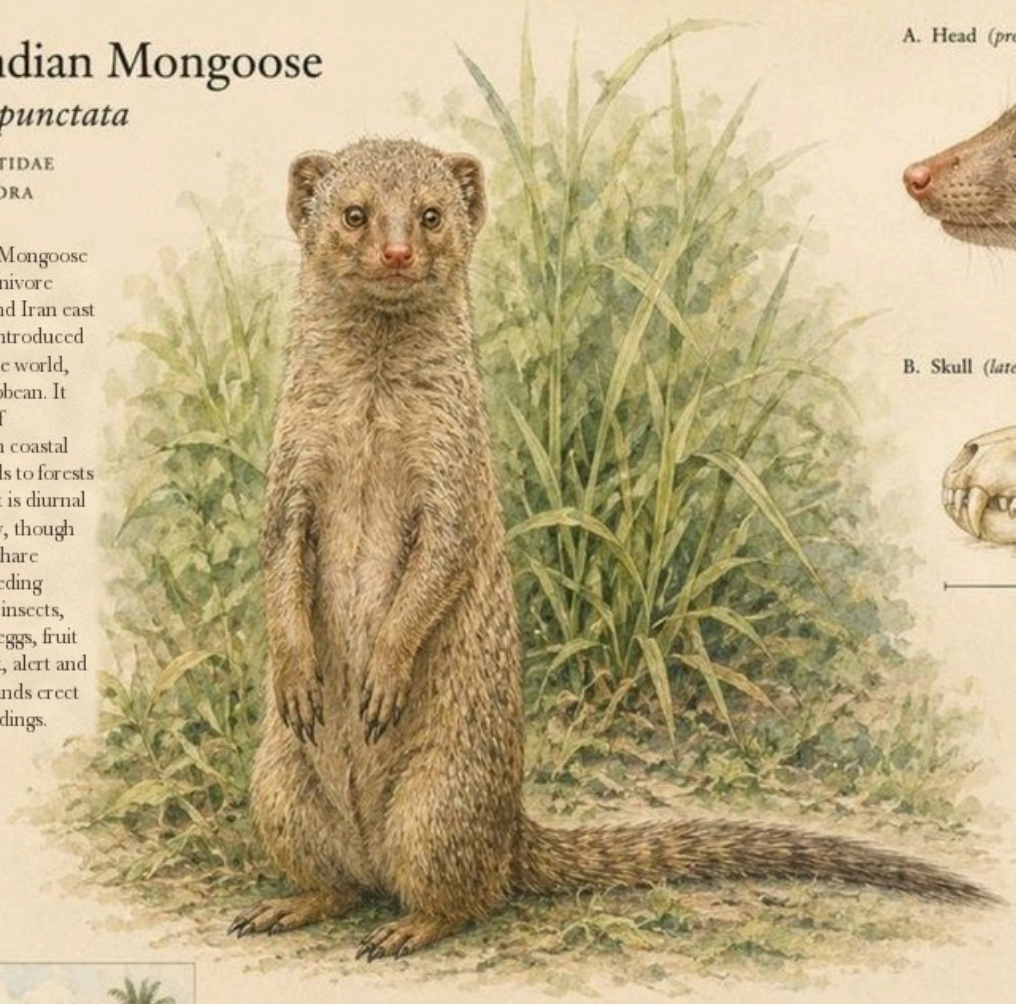
PLATE 19.

Small Indian Mongoose

Urva auropunctata

FAMILY HERPESTIDAE
ORDER CARNIVORA

The Small Indian Mongoose is a small, agile carnivore native from Iraq and Iran east to Myanmar and introduced to many parts of the world, including the Caribbean. It inhabits a variety of environments from coastal areas and farmlands to forests and urban edges. It is diurnal and usually solitary, though males sometimes share burrows in the breeding season. It feeds on insects, small vertebrates, eggs, fruit and carrion. Quick, alert and fearless, it often stands erect to scan its surroundings.



A. Head *(profile)*



B. Skull *(lateral view)*



3 cm

C. Forefoot *(dorsal view)*



2 cm

HABITAT



Often found in coastal scrub, grasslands, agricultural areas, plantations and human settlements.

D. Full body *(lateral view)*



30 cm

E. Tail *(detail)*



10 cm

F. Tracks *(front and hind)*



2 cm

G. Health

CAUTION: The main carrier of rabies in Grenada. Never approach or feed.

SIZE
Males average 650 g, females 430 g.

COLOUR
Grey-brown to golden-brown with pale or golden speckling; underparts paler.

RANGE
Native from Iraq east to Myanmar.

PLATE 20.

Armadillo

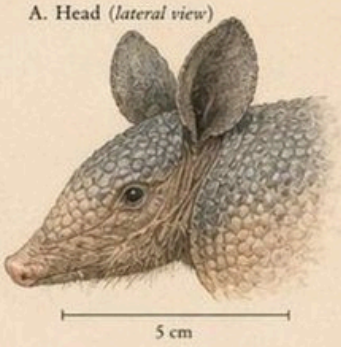
Dasypus novemcinctus

FAMILY DASYPODIDAE
ORDER CINGULATA

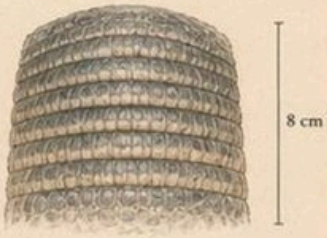
The Nine-banded Armadillo is the only armadillo found on Grenada. It is nocturnal and terrestrial, with a keen sense of smell and excellent digging ability. It uses its strong foreclaws to excavate burrows for shelter and foraging. It feeds mainly on insects and grubs; less than 10% of its diet is plant matter. When threatened, it can dart away quickly or dig in, protected by its bony armour. It cannot roll into a ball.



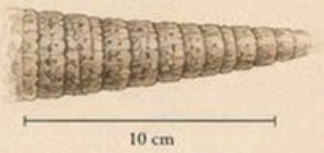
A. Head (*lateral view*)



B. Armour bands (*dorsal view*)



C. Tail (*dorsal view*)



HABITAT

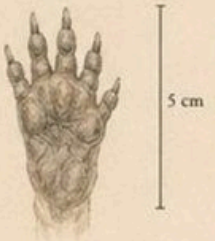


Forests, woodland edges, scrub, grasslands, gardens and cultivated areas. Often near water.

D. Track (*forefoot*)



E. Track (*hindfoot*)



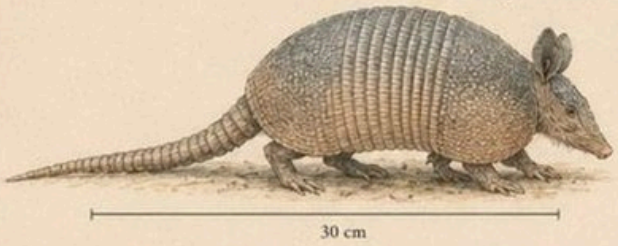
F. Burrow entrance



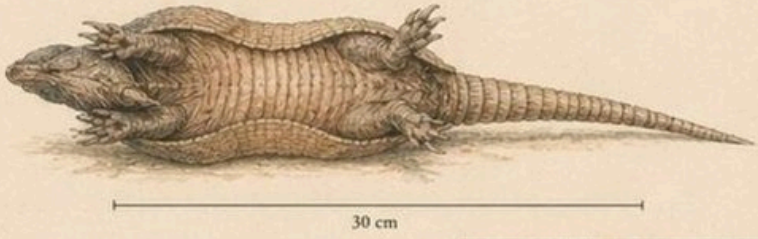
G. Defence

Darts away or digs in when threatened. It cannot roll into a ball.

H. Full body (*lateral view*)



I. Ventral view



DIET



Mainly insects and grubs; less than 10% plant matter.

SIZE

Total length: 64 – 107 cm (including tail)
Weight: usually 2.5 – 6.5 kg

KEY FEATURES

- Usually nine movable bands; the number varies
- Long, strong foreclaws for digging
- Large ears and elongated snout
- Tough, bony plates (osteoderms) covering body and tail

RANGE

Native to the Americas. In the islands, only on Grenada, Trinidad and Tobago.

PLATE 21.

Common Opossum

Didelphis marsupialis

FAMILY DIDELPHIDAE
ORDER DIDELPHIMORPHIA

The Common Opossum, or manicou, is Grenada's larger marsupial; Robinson's mouse opossum also occurs here. It is a medium-sized, nocturnal mammal that thrives in a wide range of habitats including forests, gardens, farms and urban areas. It is an opportunistic omnivore, feeding on fruit, insects, small animals, eggs, carrion and human scraps. When threatened, it may bare its teeth, hiss, or "play dead". Females carry their young in a pouch where they continue to develop.



A. Head (*lateral view*)



B. Dentition (*side view*)



C. Forefoot (*dorsal view*)



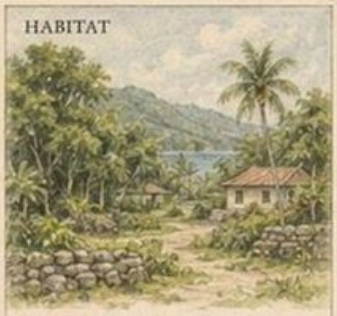
D. Hindfoot (*plantar view*)



E. Tail (prehensile)



HABITAT



Forests, plantations, scrub, farmland and urban areas. Often found near human habitation.

F. Full body (*lateral view*)



G. Health

CAUTION: It can carry the parasites behind Chagas disease and leishmaniasis. Do not handle.

H. Skull (*dorsal view*)



DIET



Fruit, insects, small vertebrates, eggs, carrion and human scraps.

SIZE

Head and body: 26.5 – 43 cm
Average weight: 1.53 kg

KEY FEATURES

- Pointed snout and large, naked ears
- Greyish fur with darker legs
- Long, naked, prehensile tail
- Five toes on front feet; hind foot with opposable "thumb" on inside
- Females with pouch for young

I. Range

Northeast Mexico to Bolivia, plus Trinidad, Tobago and the Windward Islands.

NOTE: Probably brought to Grenada by Amerindian settlers, the Common Opossum also preys on the Grenada Tree Boa.

PLATE 22.

Whistling Frog

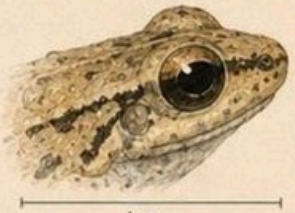
Eleutherodactylus johnstonei

FAMILY ELEUTHERODACTYLIDAE
ORDER ANURA

The Whistling Frog is a small, nocturnal frog of the Lesser Antilles, introduced to Grenada in 1885. It is named for the call of the male: a short low note, then a higher whistle, repeated, carrying across forest and garden habitats, especially on warm, wet nights. It inhabits a wide range of environments from mature forests and plantations to gardens and secondary growth. It is often found on leaves and low vegetation.



A. Head *(lateral view)*



B. Head *(dorsal view)*



C. Finger tips *(ventral view)*



D. Toe tips *(ventral view)*



HABITAT



Forests, plantations, gardens and secondary growth. Often found on leaves and low vegetation at night.

E. Adult male *(lateral view)*



F. Adult female *(lateral view)*



H. Call *(male)*

A two-note call: a short low note, then a higher whistle, repeated.

I. Range

Lesser Antillean; introduced to Grenada; now spread widely.

SIZE
Snout-vent: males about 25 mm, females about 35 mm.

COLOUR
Variable shades of tan, brown or grey with dark spots and irregular markings. A dark stripe often through the eye.

DIET
Small insects, spiders and other invertebrates.

CONSERVATION
IUCN Least Concern. Introduced here; it overlaps with Grenada's endemic frog, *Pristimantis euphronides*.

NOTE: This species is most active at night, especially after rainfall. Listen for the clear, whistling call coming from leaves and shrubs. Handle gently and release where found.

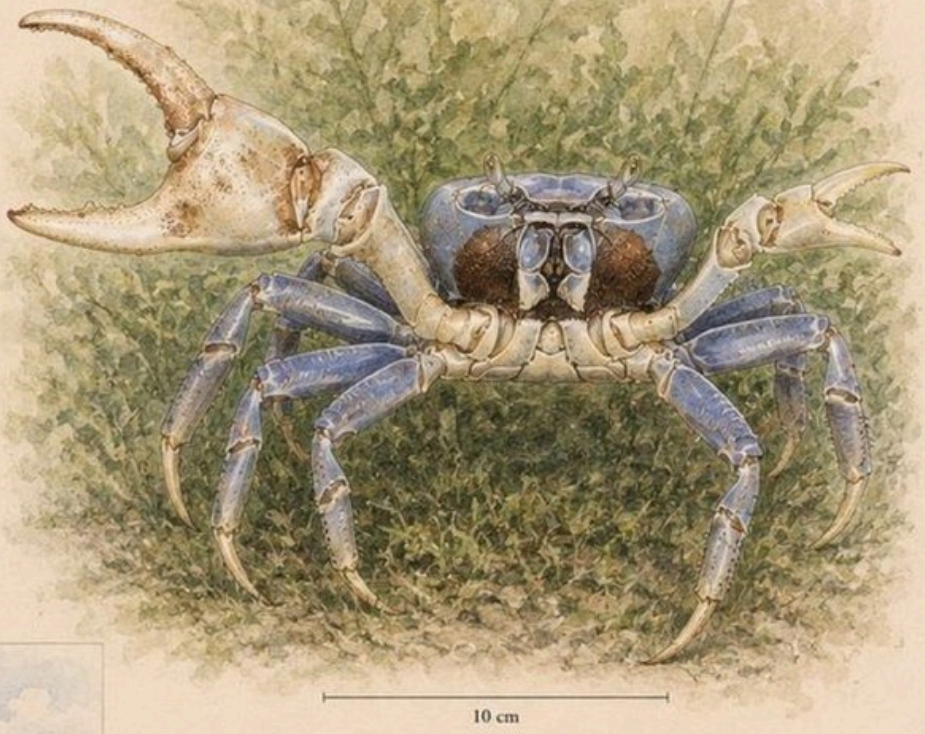
PLATE 23.

Blue Land Crab

Cardisoma guanhumi

FAMILY GECARCINIDAE
ORDER DECAPODA

The Blue Land Crab is a large land crab. It inhabits coastal and inland areas, living in burrows it digs in soil or sand. It is primarily nocturnal and omnivorous, feeding on fruit, leaves, flowers, carrion and small animals. During the wet season, females migrate to the sea to release larvae. Males defend their burrows and may raise their large claws in threat displays.



A. Carapace (front view)



C. Left cheliped (major)



D. Right cheliped (minor)



E. Walking leg (lateral view)



F. Abdomen (ventral view)



HABITAT



Coastal forests, scrub, mangroves, beaches and inland areas. Burrows are often found in well-drained soil or sand above high tide.

G. Burrow entrance



DIET



Fruits, leaves, flowers, carrion, small invertebrates and other animal matter.

SIZE

Carapace width: up to 15 cm
Weight: over 500 g in large males

COLOUR

Carapace bluish with dark brown areas; legs blue to violet; claws pale cream to tan, often with brown speckling.

BEHAVIOUR

Nocturnal and terrestrial. Excavates deep burrows with a single entrance. Males are territorial and use chelipeds in displays and fights.

RANGE

From Bermuda and Florida through the Caribbean and Gulf of Mexico to southern Brazil.

NOTE: The Blue Land Crab plays an important ecological role in nutrient cycling and soil aeration. During the rainy season, females travel to the sea to brood and release larvae.

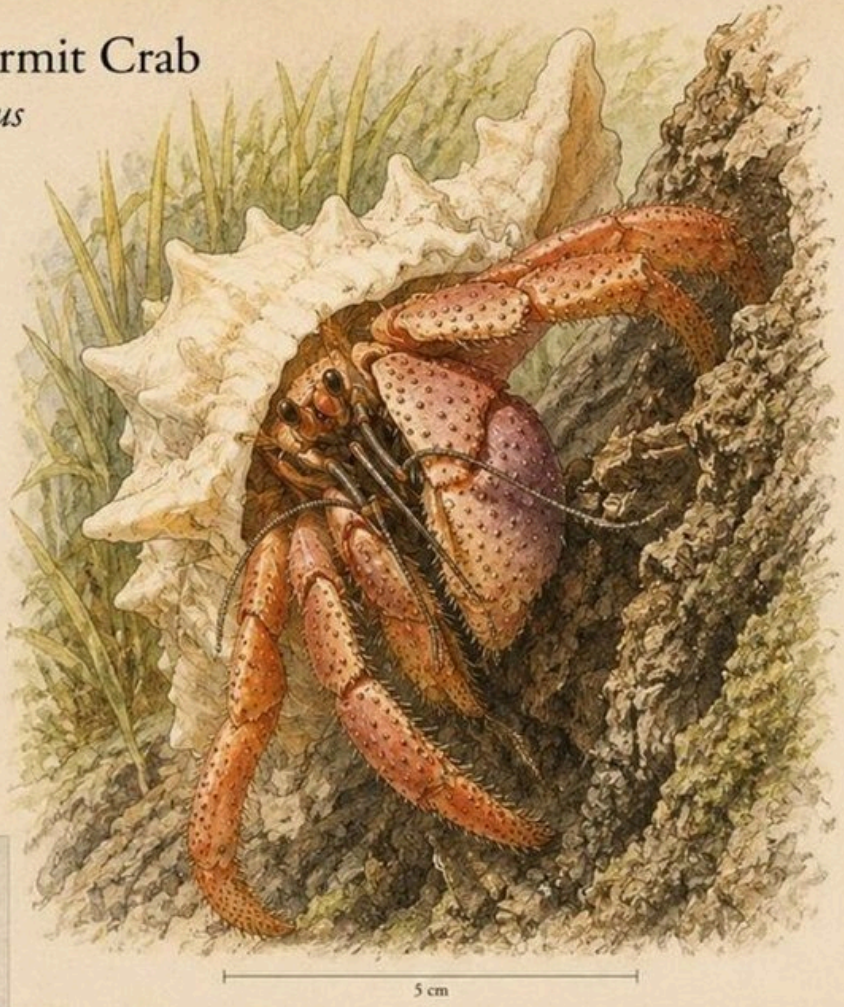
PLATE 24.

Caribbean Hermit Crab

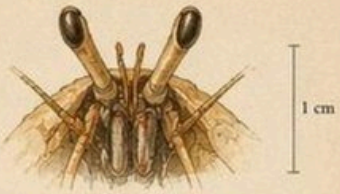
Coenobita clypeatus

FAMILY COENOBITIDAE
ORDER DECAPODA

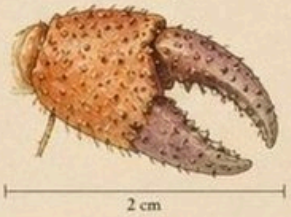
The Caribbean Hermit Crab is a common land crustacean throughout the Caribbean. It inhabits beaches, coastal forests and gardens, where it seeks empty shells for protection. It is omnivorous, feeding on decaying plant matter, fruits, small invertebrates and carrion. As it grows, it must find larger shells to accommodate its soft abdomen. Moisture is essential for respiration, and it often retreats to humid places during dry periods.



A. Eyes and antennae (front view)



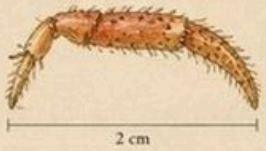
B. Left cheliped (major)



C. Right cheliped (minor)



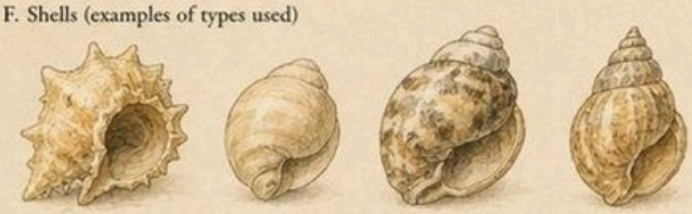
D. Walking leg (lateral view)



E. Abdomen

Soft and spirally curled.

F. Shells (examples of types used)



Uses a variety of empty gastropod shells. Changes shell as it grows.

HABITAT



Beaches, coastal forests, scrub and gardens. Often found near shorelines and under logs, leaves and rocks. Requires high humidity to survive.

DIET



Decaying plant matter, fruits, small invertebrates, carrion and organic debris.

BREEDING

Females release their eggs into the sea, usually around August.

COLOUR

Variable: shades of red, orange, purple, brown or grey. Colour may vary with shell background and environment.

BEHAVIOUR

Nocturnal and crepuscular. Excellent climber. Retreats to shell or moist places when threatened or during dry conditions.

RANGE



Widespread throughout the Caribbean Sea, from Florida and the Bahamas to northern South America.

PLATE 25.

BLUE SNAIL

A bulimulid land snail

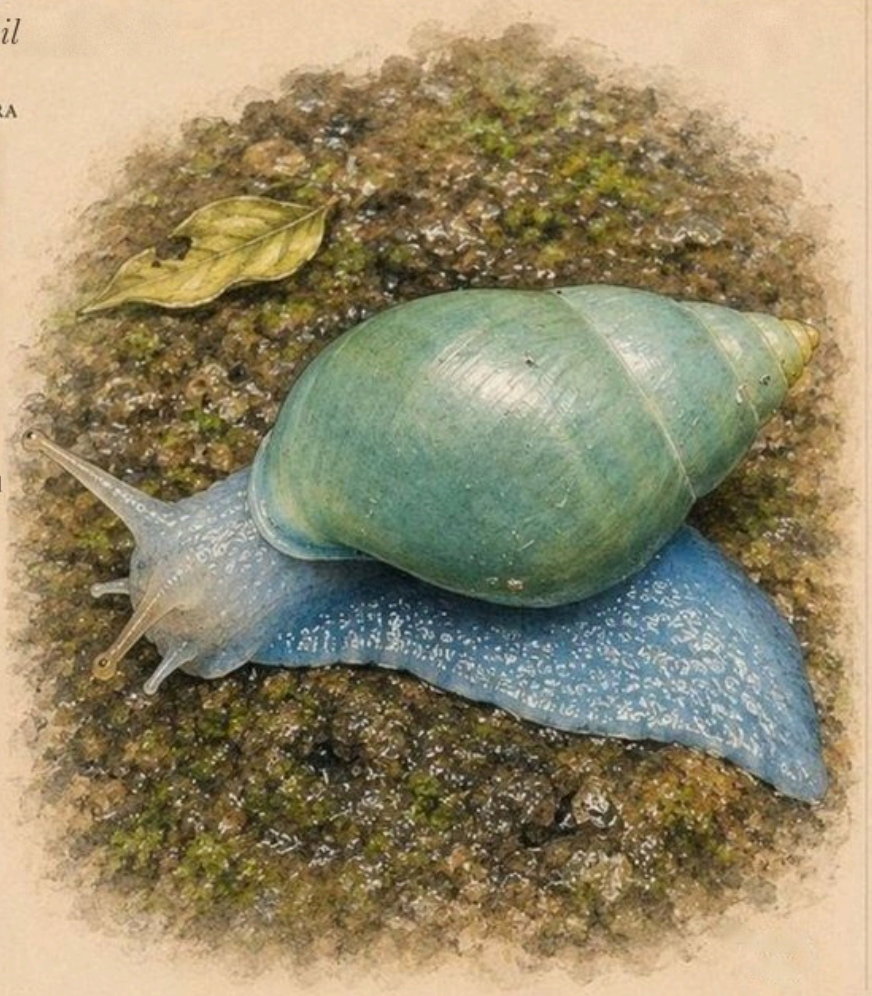
FAMILY BULIMULIDAE
ORDER STYLOMMATOPHORA

The Blue Snail is a land snail of the southern Lesser Antilles, in the family Bulimulidae. It has been recorded at The Tower Estate, Grenada.

The shell is elongated and conical, with a smooth surface.

It is an air-breathing land snail that thrives in humid environments, active at night and after rainfall. It feeds on decaying plant matter, algae and fungi.

It lives on vegetation in moist forest and gardens.



RANGE

Southern Lesser Antilles; recorded at The Tower Estate, Grenada.

A. Shell (side view)



B. Shell (apertural view)



C. Shell (top view)



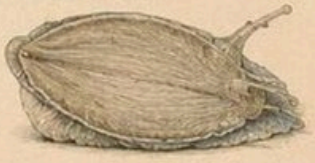
D. Head and tentacles (dorsal view)



E. Radula (magnified)



F. Foot (ventral view)



HABITAT AND BEHAVIOUR



On vegetation in moist forest and gardens.



Mostly nocturnal. Emerges after rainfall to feed and explore.



Feeds on decaying leaves, algae, fungi, and other plant material.



Hermaphrodite. Mates on land; eggs laid in moist soil.



Eggs.



Young resemble adults but have thinner, more fragile shells.

SHELL



IDENTIFICATION

Elongated, smooth shell. Two pairs of tentacles; eyes at tips of upper pair.



VOICE

Silent. Communicates chemically using mucus and tactile signals.



BEHAVIOUR

Slow moving. Secretes mucus that helps it glide and reduces water loss. Retreats into shell when disturbed or in hot, dry conditions.



DIET

Detritivore. Feeds on decaying vegetation, algae, fungi, and organic matter.



HABITAT

On vegetation in moist forest and gardens.



RANGE (detail)

Southern Lesser Antilles; recorded at The Tower Estate, Grenada.

NOTE: Protect moist forest habitats. Avoid use of pesticides and herbicides. Preserve leaf litter and natural ground cover.

PART THREE

BENEATH THE WAVES

Slip on a mask and the island doubles in size. Grenada's warm, clear water holds coral gardens, seagrass meadows and one of the Caribbean's first underwater sculpture parks. Turtles, rays, parrotfish and the clever octopus are all here, and a little care keeps them so.

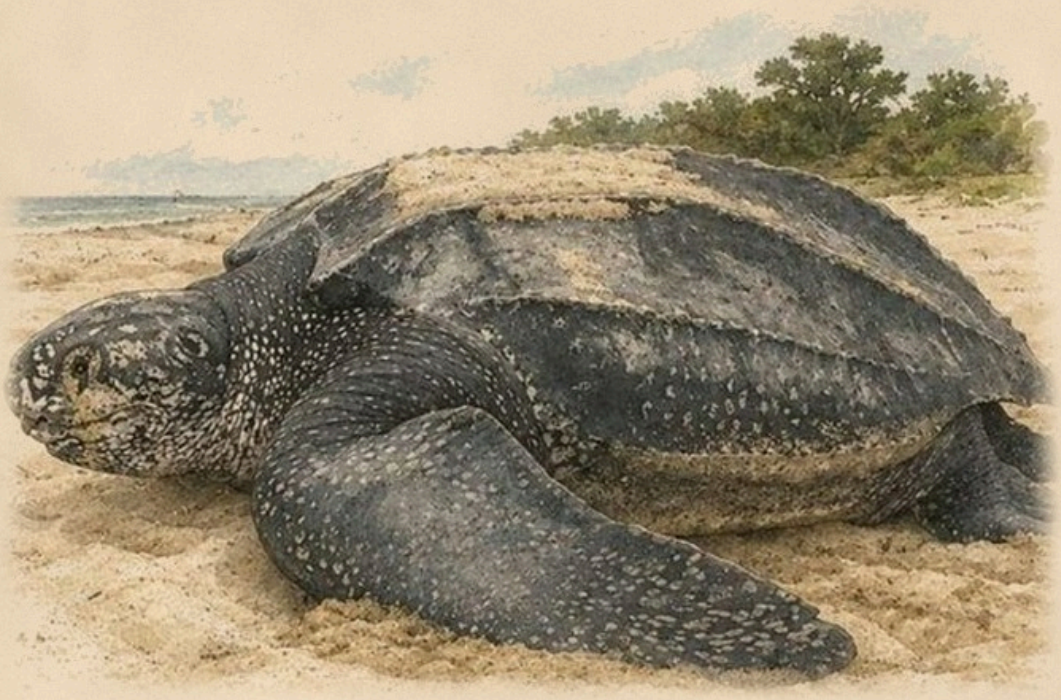
PLATE 26.

Leatherback Turtle

Dermochelys coriacea

FAMILY DERMOCHELYIDAE
ORDER TESTUDINES

The Leatherback Turtle is the largest of all living turtles and the heaviest of all non-crocodilian reptiles. It ranges worldwide, from the tropics to subpolar seas, the widest range of any reptile. It has a soft, leathery carapace covered in tiny embedded ossicles instead of hard scutes. Leatherbacks travel vast distances across oceans to feed on jellyfish. Females come ashore at night to lay their eggs in sandy beaches above the high tide line.



A. Head (lateral view)



B. Carapace (dorsal view)



C. Front flipper (dorsal view)



HABITAT



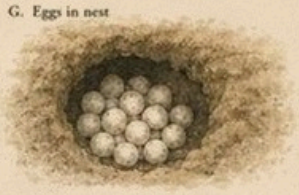
Oceans, tropics to subpolar seas. Nesting occurs on sandy beaches above the high tide line.

F. Female nesting



Females nest at night, digging a pit with their rear flippers to lay 80–120 eggs.

G. Eggs in nest

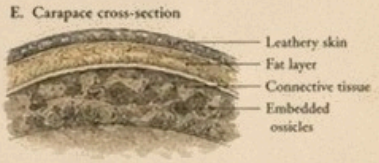


Incubation takes about 60 days. Hatchlings emerge and head to the sea.

D. Rear flipper (dorsal view)



E. Carapace cross-section



SIZE

Curved carapace length: up to 2.1 m
Weight: largest verified 650 kg

COLOUR

Dark blue to black with white or pinkish spots and blotches. Varies between individuals.



DIET

A wide range of jellyfish, plus salps and other soft-bodied prey.



BEHAVIOUR

Highly migratory. Feeds in open oceans and nests on beaches. Excellent swimmer, capable of deep dives.



RANGE

Worldwide, from the tropics to subpolar seas.

The widest range of any reptile.

NOTE: Leatherbacks are vulnerable to threats including bycatch, plastic pollution, habitat loss and climate change. Protect nesting beaches and keep our oceans clean.

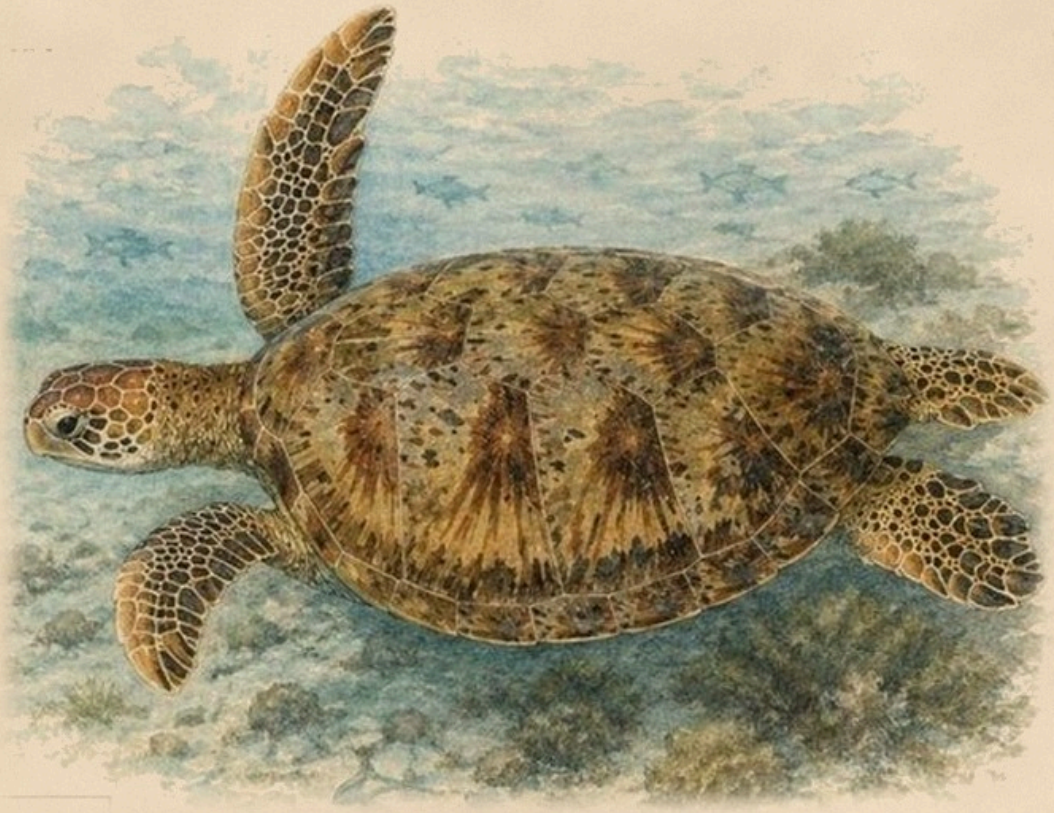
PLATE 27.

Green Sea Turtle

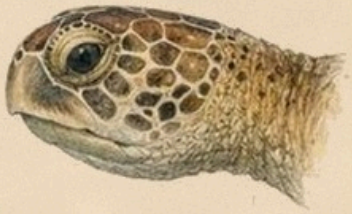
Chelonia mydas

FAMILY CHELONIIDAE
ORDER TESTUDINES

The Green Sea Turtle is a large marine reptile found in tropical and subtropical waters worldwide. It is named for the greenish colour of its cartilage and fat, not its shell. It feeds mainly on seagrasses and algae in shallow coastal waters. Females return to sandy beaches to nest, laying about 110 eggs per clutch. Adults are herbivores; young turtles at sea also eat small animals. It helps keep seagrass beds healthy.

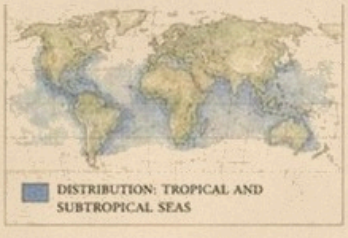


A. Head (lateral view)



B. Carapace (dorsal view)







Beak strong, with finely serrated edges for cropping seagrass.
Diet primarily seagrass *(Thalassia, Halophila)*, algae, and other marine plants.

E. Rear flipper (dorsal view)



D. Front flipper (dorsal view)



C. Plastron (ventral view)



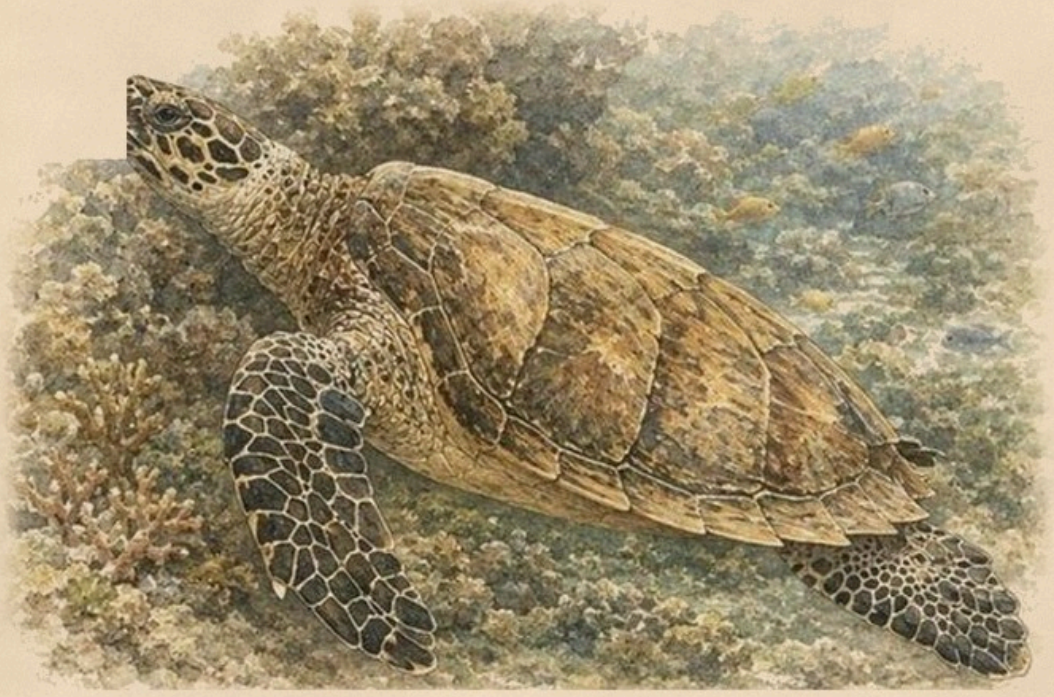
PLATE 28.

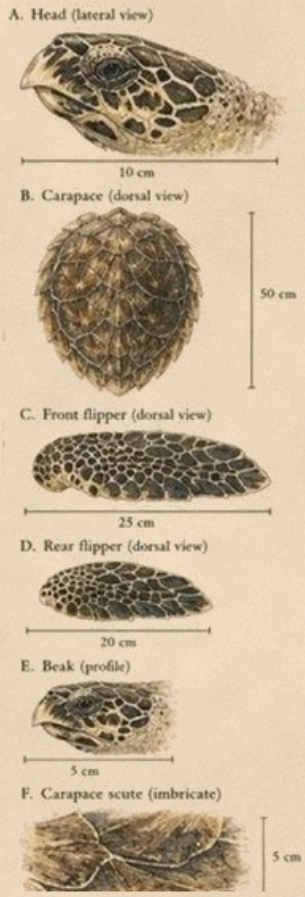
Hawksbill Turtle

Eretmochelys imbricata

FAMILY CHELONIIDAE
ORDER TESTUDINES
CRITICALLY ENDANGERED

The Hawksbill Turtle is a tropical marine reptile found in coral reefs, lagoons and coastal areas worldwide. It is named for its narrow, hawk-like beak, which it uses to reach sponges and invertebrates in reef crevices. Its beautifully patterned shell, with its overlapping scales (imbricate), is highly prized, leading to severe population declines. Hawksbills play a vital role in maintaining healthy reef ecosystems.







HABITAT

Coral reefs, rocky reefs, lagoons and seagrass meadows in tropical and subtropical seas.



G. Feeding

Feeds mainly on sponges, cnidarians and other invertebrates.



H. Nesting

Females come ashore at night to dig nests above the high tide line.



I. Eggs in nest

Incubation takes about 60 days. Hatchlings emerge and head to sea.

SIZE
Curved carapace length: up to 90 cm
Weight: typically 45 to 68 kg

COLOUR
Varies from amber, brown, golden and black to reddish or greenish hues. Scutes often have mottled patterns.

DIET
Sponges (mainly), algae, cnidarians, molluscs, crustaceans and other invertebrates.



BEHAVIOUR
Solitary; forages on reefs. Resting dives on Caribbean reefs average 35 to 47 minutes.



RANGE
Tropical and subtropical oceans worldwide.



NOTE: Hawksbill Turtles are Critically Endangered due to habitat loss, illegal trade in shell (tortoiseshell), bycatch in fisheries and climate change. Protect reefs and marine life.

PLATE 29.

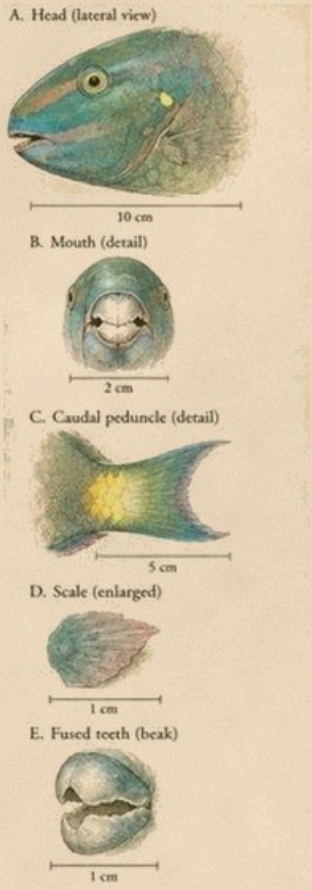
Stoplight Parrotfish

Sparisoma viride

FAMILY SCARIDAE
ORDER LABRIFORMES

The Stoplight Parrotfish is a common and important inhabitant of Caribbean reefs. Its vibrant colours, greens, blues and pinks, with a yellow "stoplight" marking near the tail, make it easily recognisable. Using its powerful beak-like fused teeth, it scrapes algae from rocks and coral, playing a vital role in maintaining healthy reef ecosystems. As it feeds, it produces sand, which helps build and maintain Caribbean beaches.





HABITAT



Coral reefs, rocky reefs, and seagrass beds in tropical and subtropical Caribbean seas.
Usually found from 3 to 50 m.

F. Feeding



Scrapes algae from rocks and coral with fused teeth.

G. Sleeping



Sleeps in crevices or under ledges at night, often secreting a mucus cocoon for protection.

H. Sand production



Excretes fine sand while digesting calcareous algae and coral.

SIZE
Total length: up to 64 cm
Common: about 38 cm
Weight: up to 1.6 kg

COLOUR
Variable: green, turquoise, blue and pink with red edging on scales. Yellow "stoplight" patch at base of tail.



DIET
Primarily algae (especially filamentous algae), cyanobacteria, and small invertebrates.
Uses its beak-like teeth to scrape food from substrates.



BEHAVIOUR
Diurnal. Forms small groups or travels singly while feeding. Territorial during feeding; communicates with colour changes and body movements.



RANGE
Bermuda, Florida, the Bahamas and the Gulf of Mexico, through the Caribbean to Brazil.



NOTE: Plays a key role in reef ecology by controlling algae and producing sand. Overfishing and habitat loss can impact populations. Protect reefs for future generations.

PLATE 30.

Atlantic Blue Tang

Acanthurus coeruleus

FAMILY ACANTHURIDAE
ORDER PERCIFORMES

The Atlantic Blue Tang is a common herbivorous reef fish found throughout the western Atlantic, from New York and Bermuda to Brazil, including the Caribbean Sea and Gulf of Mexico. Recognisable by its distinctive electric blue body and fins, it plays a vital role in reef ecosystems by grazing algae from rocks and coral. It often forms schools over reefs and rocky areas, usually in shallow waters.



20 cm

A. Side view



15 cm

B. Head (detail)



3 cm

C. Caudal peduncle (detail)



2 cm

D. Dorsal fin (detail)



2 cm

E. Anal fin (detail)



2 cm

F. Spine (scalpel)



2 cm

HABITAT



Coral reefs, rocky reefs and seagrass beds in coastal waters, 2 to 50 m, usually 2 to 18 m. Often seen in large schools near algae-covered substrate.

G. Feeding



Grazes filamentous algae from rocks and corals.

H. Schooling



Forms schools for protection and efficient foraging.

I. Cleaning



May visit cleaning stations for parasite removal.

SIZE

Total length:
up to 39 cm
Common: about 25 cm



COLOUR

Body: vibrant blue to deep blue-gray.
Fins: bright blue edging.
Yellow scalpel spine at base of tail.



DIET

Herbivore. Feeds entirely on algae.



BEHAVIOUR

Diurnal. Active swimmer. Uses sharp scalpel-like spine at base of tail for defence when threatened.



RANGE

Western Atlantic Ocean: from New York and Bermuda to Brazil, including the Caribbean Sea, Gulf of Mexico and Bahamas.



NOTE: Important for controlling algae on reefs. Overfishing and habitat degradation can affect reef health. Protect coral reefs and coastal habitats.

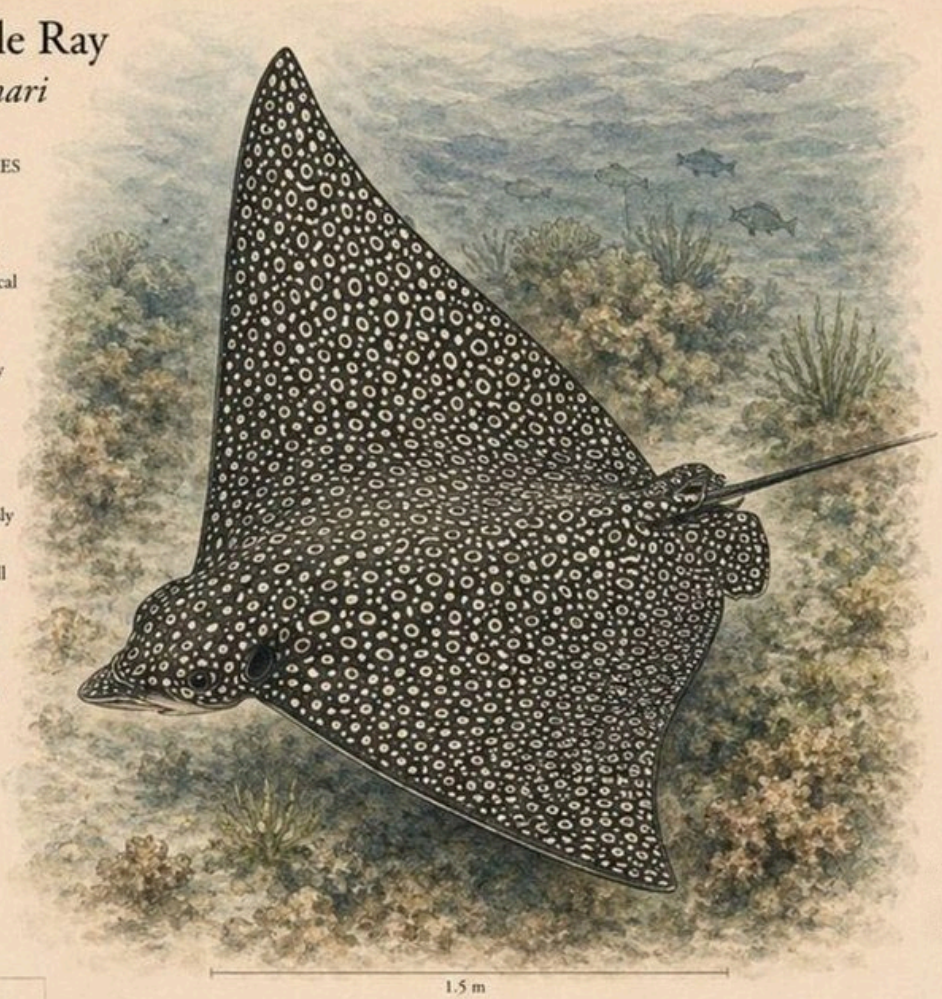
PLATE 31.

Spotted Eagle Ray

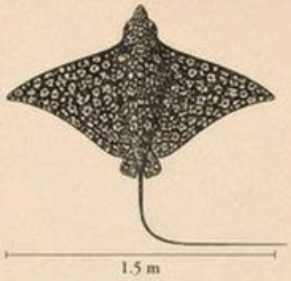
Aetobatus narinari

FAMILY AETOBATIDAE
ORDER MYLIOBATIFORMES

The Spotted Eagle Ray is a graceful and wide-ranging ray found in tropical and subtropical waters of the Atlantic Ocean, including the Caribbean Sea and Gulf of Mexico. It is easily recognized by its dark body covered in white or pale rings and spots, giving it a striking pattern. With its wing-like pectoral fins, it glides effortlessly through the water. It feeds on molluscs, crustaceans and small bony fish, using its powerful jaws to crush prey. Often seen in small groups, it plays an important role in maintaining healthy marine ecosystems.



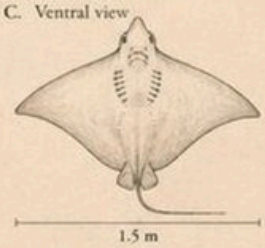
A. Dorsal view (whole ray)



B. Head (lateral view)



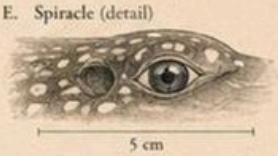
C. Ventral view



D. Tail

Two to six spines near the base of the tail.

E. Spiracle (detail)



F. Tooth plate (detail)



HABITAT



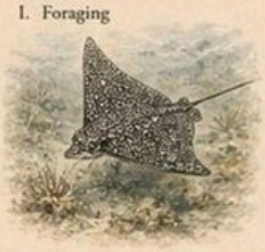
Coral reefs, reef slopes, sandy bottoms and seagrass beds. Found from 1 to 80 m, mostly shallower than 60 m.

H. Swimming



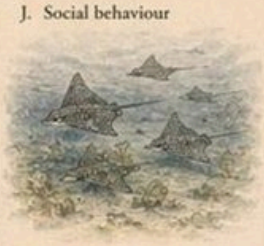
Moves with slow, powerful wing-like strokes.

I. Foraging



Disturbs the substrate to uncover prey such as clams, crabs and fish.

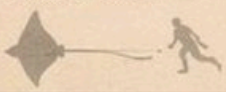
J. Social behaviour



Often seen in small groups or schools.

SIZE

Disc width: up to 230 cm
Weight: up to 230 kg



COLOUR

Dark brown to black above with numerous white or pale yellowish rings and spots. Underside white or pale grey.



DIET

Carnivorous. Feeds on molluscs, crustaceans, polychaete worms and small bony fish.



BEHAVIOUR

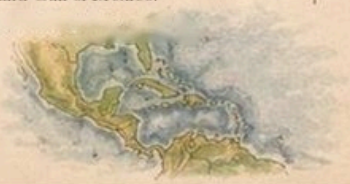
Diurnal. Active swimmer. Migratory in some regions. May leap partially out of the water.



RANGE

Western Atlantic Ocean: from North Carolina (USA) to Brazil, including the Caribbean Sea and Gulf of Mexico.





NOTE: Listed as Endangered by the IUCN (2020) due to overfishing, habitat degradation and bycatch. Protect marine habitats and support sustainable fishing practices.

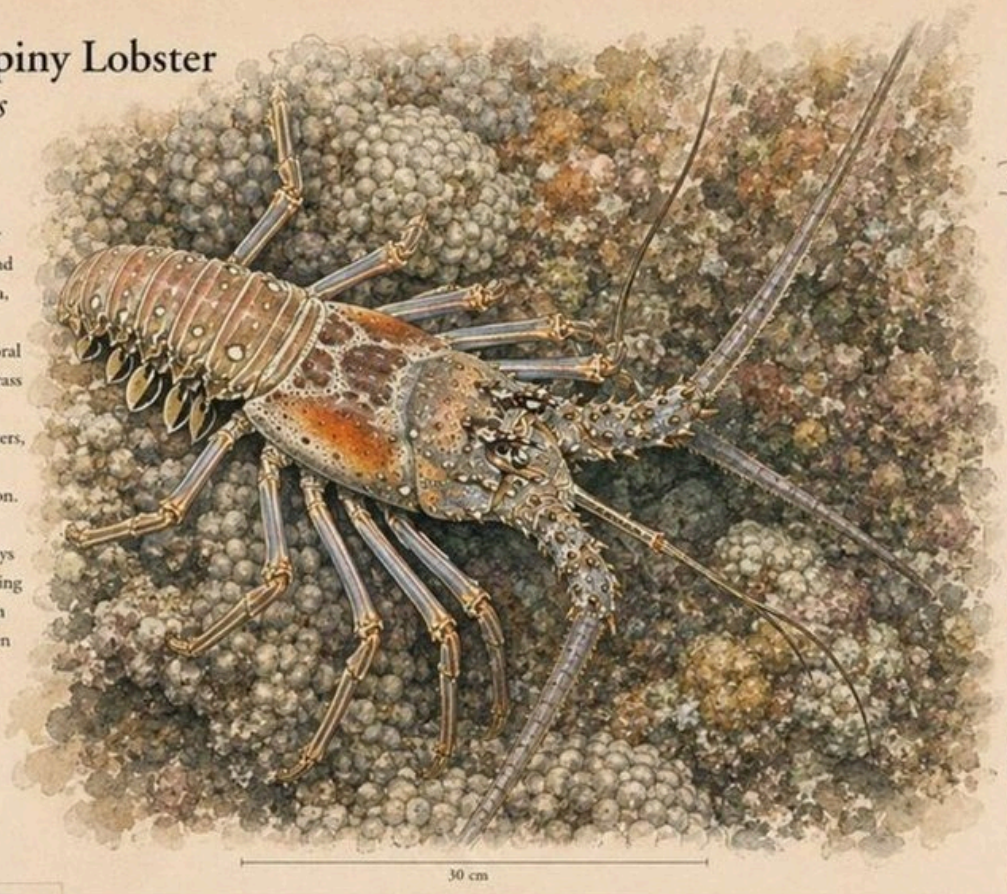
PLATE 32.

Caribbean Spiny Lobster

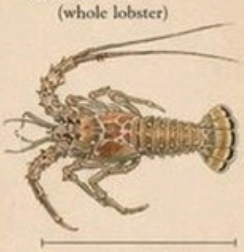
Panulirus argus

FAMILY PALINURIDAE
ORDER DECAPODA

The Caribbean Spiny Lobster is a long-lived crustacean found throughout the Caribbean Sea, Gulf of Mexico and western Atlantic Ocean. It inhabits coral reefs, rocky bottoms and seagrass beds from shallow waters to deeper reefs. Unlike true lobsters, it has no front claws, but is covered in spines for protection. A key species in Caribbean ecosystems and fisheries, it plays an important role in maintaining reef health. Juveniles shelter in crevices before moving to open reefs as they mature.



A. Dorsal view (whole lobster)



B. Carapace (detail)



C. Antennae (detail)



D. Tail (detail)



E. Telson (tail fan)



F. Eyes (detail)



G. Walking leg (detail)

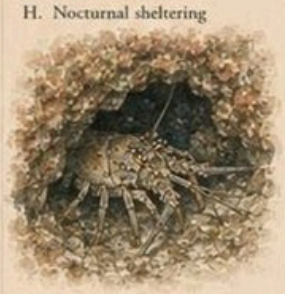


HABITAT



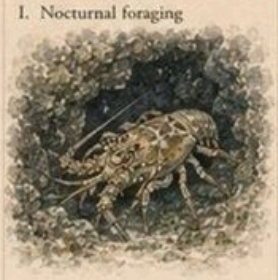
Coral reefs, rocky bottoms and seagrass beds in tropical and subtropical waters, from the shoreline to depths of about 50–90 m.

H. Nocturnal sheltering



Resting in crevices or under ledges during the day.

I. Nocturnal foraging



Active at night, emerging to forage on algae, invertebrates and small fish.

J. Juvenile shelter



Juveniles shelter in crevices and among algae until they mature.

SIZE

Body length:
up to 45 cm,
commonly 20 cm



COLOUR

Variable: reddish brown to greenish brown with white spots and bands. Antennae purple to blue with orange accents.



DIET

Omnivorous. Feeds on algae, sponges, molluscs, worms, crustaceans and small fish.



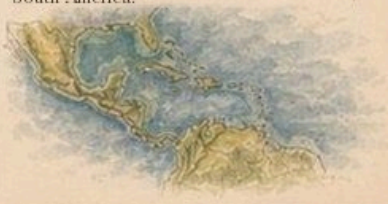
BEHAVIOUR

Gregarious; shares dens and migrates in single-file queues of up to 50.



RANGE

Caribbean Sea, Gulf of Mexico and western Atlantic Ocean, from North Carolina and Bermuda to northern South America.



NOTE: An important species for Caribbean fisheries. Overfishing, habitat degradation and pollution threaten populations. Protect coral reefs and support sustainable fishing practices.

PLATE 33.

Common Octopus

Octopus americanus

FAMILY OCTOPODIDAE
ORDER OCTOPODA

The Common Octopus is one of the most intelligent and adaptable cephalopods found in coastal waters of the western Atlantic, from Connecticut through the Gulf of Mexico and Caribbean to Argentina. It inhabits rocky reefs, seagrass beds and sandy bottoms, usually at 20 to 100 m. Solitary and nocturnal, it uses its colour-changing skin, flexible body and problem-solving abilities to hunt, hide and escape. Its diet includes crabs, shellfish and small fish.



30 cm (arm span)

A. Dorsal view



20 cm

B. Eye (detail)



1 cm

C. Arm cross-section



1 cm

D. Sucker (detail)



1 cm

E. Beak



5 mm

F. Radula (detail)



2 mm

G. Ink sac



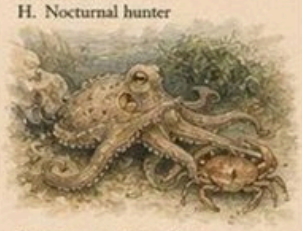
2 cm

HABITAT



Rocky reefs, crevices, seagrass beds and sandy or shell bottoms; usually 20 to 100 m, recorded from 15 to 200 m.

H. Nocturnal hunter



Emerges at night to hunt crabs, molluscs and small fish.

I. Camouflage



Changes colour and texture to blend with surroundings for concealment.

J. Problem solver



Known for intelligence, can open jars and solve complex tasks in captivity.

SIZE
Total length:
up to 79 cm



COLOUR
Variable: beige, brown, grey, red or mottled patterns.
Uses chromatophores to change colour and texture instantly.



DIET
Carnivorous. Feeds on crabs, shellfish, bivalves, shrimp and small fish.
Uses beak and radula to tear and consume prey.



BEHAVIOUR
Solitary and territorial.
Active at night.
Short life span: typically 1–2 years.



RANGE

Western Atlantic, from Connecticut through the Gulf of Mexico and Caribbean to Argentina.

NOTE: Maintain healthy marine habitats. Overfishing, pollution and coastal development threaten octopus populations. Protect our seas for future generations.

PART FOUR

SPICES, FRUIT AND FLOWERS

Grenada is the Isle of Spice, and its flora is its fortune. Nutmeg and cocoa built the island's name, cinnamon and clove scent its kitchens, and mango, soursop and breadfruit fill its tables. All the while frangipani, flamboyant and bougainvillea set the roadsides ablaze.

PLATE 34.

Nutmeg

Myristica fragrans

FAMILY MYRISTICACEAE
ORDER MAGNOLIALES

Nutmeg is an evergreen tree native to the Banda Islands of Indonesia, but now cultivated in many tropical regions, including the Caribbean. It is valued for two spices: nutmeg, the seed kernel, and *mace*, the aril that surrounds it. The tree is an important economic species and has played a significant role in trade and history.



A. Flower

Small, bell-shaped and pale yellow, 5 to 10 mm. Male and female flowers grow on separate trees.

B. Fruit (whole)



C. Fruit (opening)



D. Seed with aril (mace)



E. Seed (nutmeg)



F. Aril (mace)



HABITAT



Tropical evergreen forests at low to mid elevations. Prefers well-drained, fertile soils and high humidity with consistent rainfall.

G. Flowering



Flowers are small, yellowish and fragrant.

H. Fruiting



Fruits develop for 6–9 months, changing from green to yellow when ripe.

I. Harvesting



Ripe fruits are picked by hand and carefully split to remove seed and aril.

J. Processing



Aril is sun-dried to produce mace. Seeds are dried to produce nutmeg.

SIZE

Height:
usually 5 to 15 m, occasionally 20 m



LEAVES

Simple, alternate, elliptic to lanceolate, glossy green, 5 to 15 cm.



DIET / USES

Spice. Nutmeg (seed kernel) used whole or ground in sweet and savoury dishes. Mace (aril) has a more delicate flavour.



CHEMISTRY

Contains *myristicin*, *elemicin*, safrole and eugenol, compounds responsible for aroma, flavour and potential medicinal properties.

BEHAVIOUR

Perennial tree. Long-lived (60+ years). Begins fruiting in 6–9 years.



RANGE

Native to the Banda Islands, Indonesia. Cultivated throughout the tropics, including the Caribbean, India and Sri Lanka.



NOTE: Data Deficient on the IUCN Red List (1998).

PLATE 35.

Cinnamon

Cinnamomum verum

FAMILY LAURACEAE
ORDER LAURALES

Cinnamon is an evergreen tree native to Sri Lanka. The inner bark of its young shoots is harvested and dried to produce the spice cinnamon. Warm, aromatic and sweet, it has been valued for thousands of years in cooking, medicine, perfumery and sacred rituals. Cinnamon supports local economies and traditional livelihoods, especially in rural communities.



A. Flowers (cluster)



B. Flower (enlarged)

Small flowers with six tepals.

C. Young leaves



D. Leaf (upper side)

Ovate-oblong, with three main veins from the base.

E. Fruit (berry)



F. Seed

Borne in a purple drupe set in a cup.

G. Bark (outer)



H. Inner bark (quill)



HABITAT



Grows in tropical evergreen forests from sea level up to 1,000 m elevation. Prefers well-drained, fertile soils and a warm, humid climate with regular rainfall.

I. Cultivation



Propagated from cuttings or seeds. Transplanted when 6–12 months old.

J. Growing



Trees grow for 2–3 years before bark can be harvested.

K. Harvesting



Young shoots (1–2 years old) are cut and the outer bark removed.

L. Stripping



The inner bark is carefully separated in long strips (quills).

M. Drying



Quills are sun-dried for several days until they curl and harden.

SIZE

Height: 10–15 m



LEAVES

Simple, opposite or nearly opposite, ovate-oblong, with three main veins from the base. 7–18 cm long.

DIET / USES

Inner bark used as spice and flavouring in food and drinks. Used in traditional medicine for digestive health, colds and inflammation.



CHEMISTRY

Contains cinnamaldehyde, eugenol and other essential oils with antimicrobial, anti-inflammatory and antioxidant properties.

BEHAVIOUR

Evergreen. Shoots flush several times a year, especially after rain. Plantations produce for 40 to 50 years.



RANGE

Native to Sri Lanka. Cultivated in many tropical regions including Seychelles, Madagascar and the Caribbean.



NOTE: Overharvesting and habitat loss threaten wild cinnamon populations. Sustainable cultivation and fair trade support conservation and local communities.

PLATE 36.

Breadfruit

Artocarpus altilis

FAMILY MORACEAE
ORDER ROSALES

Breadfruit is an evergreen tree native from New Guinea through the Indo-Malayan islands to western Micronesia. It was spread across the Pacific by voyagers and is now widely cultivated throughout the tropics. The large, round fruit is rich in carbohydrates and versatile in cookery. When ripe, it has a soft, creamy texture and a mild, slightly sweet flavour. The tree provides abundant food and plays an important role in food security, traditional cultures and sustainable agriculture in many regions.



A. Flower (male)



Spike 12.5–30 cm long

B. Flower (female)



C. Young fruit



D. Mature fruit (whole)



E. Fruit (longitudinal section)



F. Seed



HABITAT



Grows in tropical lowland and coastal regions at low to moderate elevations (0–600 m). Prefers warm, humid climates, well-drained soils and areas with annual rainfall of 1,500–3,000 mm.

G. Flowering



Trees flower throughout the year, with more flowers produced during the warm, wet season. Male and female flowers are on the same tree.

H. Fruit set



Some 1,500 to 2,000 tiny flowers fuse into one compound fruit.

I. Fruit development



The skin is green and covered with soft spines which flatten as the fruit matures.

J. Harvesting



Fruits are harvested when mature but still firm. Latex may be released when cut.

K. Prepared fruit



The skin is removed and the flesh cooked by boiling, baking, roasting or steaming.

L. Uses



Eaten fresh or cooked as a staple food. Also used in chips, flour, bread, desserts and animal feed.

SIZE

Height: 15 to 20 m, up to 26 m
Begins bearing fruit at 3 to 6 years.
Productive life: 50–80+ years.



LEAVES

Large, glossy, deeply cut into 5 to 11 pointed lobes along the midrib, 22.8 to 90 cm long.



DIET / USES

Rich in complex carbohydrates, dietary fibre, vitamins (C, B6) and minerals (potassium, magnesium). Low in fat and cholesterol-free.
Used in savoury dishes, flours, snacks and traditional medicines.



CHEMISTRY

Contains carbohydrates, dietary fibre, vitamin C, potassium and phenolic compounds with antioxidant and anti-inflammatory properties.

BEHAVIOUR

Evergreen; tolerates short dry periods.



RANGE

Native from New Guinea through the Indo-Malayan islands to western Micronesia; spread across the Pacific by voyagers. Now grown throughout the tropics.





NOTE: Overharvesting, habitat loss and climate change can threaten breadfruit diversity. Sustainable cultivation supports food security, livelihoods and resilience in tropical communities.

PLATE 37.

Coconut Palm

Cocos nucifera

FAMILY ARECACEAE
ORDER ARECALES

The coconut palm is a tropical palm tree cultivated throughout the tropics for its many uses. Every part of the tree has practical value. The fruit provides food, drink, oil and fibre. The leaves are used for thatching and weaving. The wood is used in construction and for many other purposes. Coconut palms grow well in coastal areas and on low islands, and are an important part of tropical life and economies.



A. Inflorescence



B. Flower (male)



C. Inflorescence

Male and female flowers are borne on the same inflorescence.

D. Flower (female)



E. Young fruit (nut)



F. Mature fruit (nut)



G. Seed (inside nut)



HABITAT



Grows in tropical coastal regions and on low islands, from sea level to 600 m. Thrives in sandy or well-drained soils and warm, humid climates with annual rainfall of 1,500–2,500 mm.

H. Germination



The seed germinates in warm, moist sand. The seedling emerges after 2–3 months.

I. Seedling



The seedling develops several leaves and strong roots.

J. Young palm



Tall palms first fruit at 6 to 10 years; dwarf types sooner.

K. Flowering



Palms flowering all year round. Flowers are borne in large clusters.

L. Fruit development



Fruits grow and mature over 10–12 months.

M. Uses



Provides food, drink, oil, fibre, timber, thatch, weaving materials and many other products.

SIZE

Height: 20–30 m
Lifespan:
60 to 100 years
(tall types).



LEAVES

Large, pinnate leaves, 4–6 m long, with many narrow leaflets arranged along a central midrib.



DIET / USES

Coconut water and flesh are eaten fresh. The flesh is used in cooking, coconut oil is extracted from the meat. Used in drinks, sweets, curries and more.



CHEMISTRY

Coconut oil is rich in medium-chain fatty acids (lauric acid, caprylic acid). The flesh contains iron, magnesium and potassium.

BEHAVIOUR

Pollinated by insects, mainly bees, and by wind. Fruits dispersed by ocean currents; capable of floating long distances. Highly tolerant of salt spray and sandy soils.



RANGE

Native to tropical regions of the Indo-Pacific. Cultivated throughout the tropics including Asia, Africa, the Americas and the Pacific Islands.





NOTE: Overharvesting, habitat loss and climate change can threaten coastal ecosystems and the livelihoods of communities that depend on coconut palms. Sustainable cultivation supports food security, traditional culture and coastal protection.

PLATE 38.

Red Ginger

Alpinia purpurata

FAMILY ZINGIBERACEAE
ORDER ZINGIBERALES

Alpinia purpurata is a tropical herbaceous perennial prized for its vibrant red inflorescences and lush foliage. Native from the Moluccas and New Guinea to the Solomon Islands, Vanuatu and New Caledonia, it is now widely cultivated throughout the tropics and subtropics as an ornamental and for cut flowers.

The plant thrives in warm, humid climates with rich, well-drained soils and partial to full shade.



A. Inflorescence (side view)



Spike 15–30 cm

B. Flower (opened)

Small and white, about 0.5 cm long.

C. Bract



D. Plantlets

New plants form as plantlets on old flower heads.

E. Fruit (capsule)



F. Seed (with aril)



About 0.2 cm

HABITAT



Grows in tropical rainforests and moist, shaded areas. Prefers humus-rich, well-drained soils with good organic matter and high humidity.

G. New shoot



Shoots emerge from underground rhizomes, at the onset of the wet season.

H. Leaf (young)



Leaves unfurl from the shoot, forming broad, lance-shaped blades.

I. Leaf (mature)



Mature leaves are glossy, evergreen and arranged in two ranks.

J. Flowering



Inflorescences appear at the tip of the stem, surrounded by overlapping red bracts.

K. Pollination



Visited by hummingbirds; seed is rarely set.

L. Fruit development



After pollination, flowers develop into green capsules within the bracts.

M. Seed dispersal



Fruit is rarely produced; new plants form as plantlets on old flower heads.

N. Propagation



Propagated easily by division of rhizomes and root clumps.

O. Uses



Grown as an ornamental plant in gardens and landscapes. Inflorescences used in floral arrangements and tropical displays.

SIZE

Height: up to 4 m
Spread: 1–1.5 m
Lifespan: Perennial (many years with proper care).



LEAVES

Large, simple, lanceolate, 30–80 cm long and 10–20 cm wide. Dark green, glossy with a prominent midrib.



DIET / USES

Ornamental plant grown for its striking inflorescences and foliage. Inflorescences used in cut flower arrangements. Bracts are used in leis; leaves yield a yellow dye.



CHEMISTRY

Contains flavonoids, phenolic compounds, essential oils and terpenoids with antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Attracts hummingbirds and beneficial insects with nectar-rich flowers. Thrives in stable, humid conditions with filtered light or partial shade.



RANGE

Native from the Moluccas and New Guinea to the Solomon Islands, Vanuatu and New Caledonia.



Now cultivated in tropical and subtropical regions worldwide.

NOTE: Keep soil consistently moist but not waterlogged. Mulch to conserve moisture. Protect from strong winds and frost. Divide rhizomes every 2–3 years to maintain vigour.

PLATE 39.

Torch Ginger

Etlingera elatior

FAMILY **ZINGIBERACEAE**
ORDER **ZINGIBERALES**

Etlingera elatior is a striking tropical herbaceous perennial prized for its spectacular, torch-like inflorescences and ornamental value. Native to Thailand, Peninsular Malaysia, Sumatra, Java, Borneo and Sulawesi, it is now widely cultivated throughout the tropics and subtropics in gardens and landscapes.

The plant thrives in warm, humid climates with rich, well-drained soils and partial to full shade.



A. Inflorescence (front view)



B. Inflorescence (side view)



C. Bract



D. Flower (longitudinal section)



1. Outer bract
2. Calyx
3. Stamen
4. Labellum (yellow margin)
5. Ovary (inferior)
6. Style and stigma

E. Fruit (mature)



Each fruit 2–2.5 cm

F. Seed



HABITAT



Grows in tropical rainforests and moist, shaded areas. Prefers humus-rich soils with good organic matter and consistent moisture.

G. Rhizome



Perennial plant with underground rhizomes that store nutrients and produce new shoots.

H. New shoot



Shoots emerge from the rhizome with protective sheaths.

I. Leaf (young)



Leaves unfurl from the pseudostem, broad and lance-shaped.

J. Leaf (mature)



Large, glossy leaves provide a tropical foliage effect.

K. Flowering



Inflorescences arise on stout stalks from the base.

L. Pollination



Pollinated by spiderhunters, sunbirds and butterflies.

M. Fruit development



After pollination, ovary develops into a green fruit.

N. Seed dispersal



Fleshy fruits are eaten and seeds dispersed by bats and rodents.

O. Uses



Ornamental plant for gardens and floral arrangements.

Young buds used in cooking.

SIZE

Height: 2–6 m
Spread: 1–2 m
Lifespan:
Perennial (many years with proper care).



LEAVES

Large, lanceolate, glossy green leaves arranged in two ranks along a leafy stem.



DIET / USES

Young flower buds flavour laksa, curries and salads; ripe fruits are eaten raw.



CHEMISTRY

Contains flavonoids, phenolic compounds and essential oils with antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Attracts pollinators. Thrives in stable, humid environments with filtered light or partial shade.



RANGE

Native to Thailand, Peninsular Malaysia, Sumatra, Java, Borneo and Sulawesi. Now cultivated in tropical and subtropical regions worldwide.





NOTE: Keep soil consistently moist but not waterlogged. Mulch to conserve moisture. Divide rhizomes every 2–3 years to maintain vigour and flowering.

PLATE 40.

Hanging Lobster Claw

Heliconia rostrata

FAMILY HELICONIACEAE
ORDER ZINGIBERALES

Heliconia rostrata is a striking tropical plant known for its pendant inflorescences of vibrant claws. Native to the rainforests of western South America, it is now widely cultivated throughout the tropics as an ornamental plant.

The bracts are not true petals but modified leaves that protect the small, tubular flowers. The plant thrives in warm, humid climates with rich, well-drained soils and partial shade.



A. Bract (front view)



B. Bract (side view)



C. True flower (with bract opened)



D. Flower (side view)



E. Ovary (longitudinal section)

Each ovary holds 1 to 3 seeds.

F. Fruit (drupe)



About 1 cm, purplish blue

G. Seed



HABITAT



Grows in tropical rainforests and moist, shaded areas. Prefers humus-rich soils with good drainage and high humidity. Commonly found along forest edges, riverbanks and in garden plantings.

H. Flowering



I. Pollination



Pollinated mainly by hummingbirds that feed on the nectar produced by the tubular flowers.

J. Fruit development



After pollination, the ovary develops into a drupe within the bract.

K. Ripening fruit



Fruits mature from green to deep blue or black inside the bracts.

L. Seed dispersal



Fruits are eaten by birds and other animals. Seeds pass through and are dispersed in droppings.

M. Propagation



Propagated by division of rhizomes or seeds. Best in warm, humid conditions.

N. Uses



Used as an ornamental plant in gardens and landscapes. Inflorescences are used in floral arrangements.

SIZE

Height: 1.5–5 m
Spread: 1–2 m
Lifespan:
Many years with proper care.



LEAVES

Large, elongated, banana-like leaves with parallel veins. Arranged in a fan from the base.



DIET / USES

Ornamental plant valued for its showy inflorescences. Used in landscaping and floral design. Provides nectar for hummingbirds



CHEMISTRY

Contains flavonoids, phenolic compounds and essential oils with antioxidant and anti-inflammatory properties.

BEHAVIOUR

Attracts hummingbirds and beneficial insects. Thrives in stable, humid environments with protection from strong winds.



RANGE

Native to western South America (Colombia, Ecuador, Peru, Bolivia). Now cultivated in tropical regions worldwide.

N

Wild in the rainforests of Colombia, Ecuador, Peru and Bolivia.

NOTE: Protect from frost and strong winds. Provide regular watering and mulch to retain soil moisture. Divide clumps every 2–3 years to maintain vigour and flowering.

PLATE 41.

ANTHURIUM

Anthurium andraeanum

FAMILY ARACEAE
ORDER ALISMATALES

Anthurium andraeanum is a tropical perennial herb prized for its glossy, heart-shaped spathes and showy inflorescences. Native to Colombia and Ecuador, it thrives in warm, humid environments and is widely cultivated as a florist's plant.

The plant prefers rich, well-drained soils with high organic matter and consistent moisture. It grows well in bright, filtered light and partial shade.



A. Inflorescence (whole)



B. Spathe (side view)



C. Spadix (longitudinal section)

All flowers on the spadix are bisexual.

D. Flower (enlarged)



1. Perianth
2. Stamen
3. Pollen
4. Ovary
5. Stigma

E. Fruit (developing)



F. Seed



HABITAT



Grows as an epiphyte in shaded wet forest, in warm, humid conditions with filtered light.

G. Rhizome



Perennial plant with short rhizomes and adventitious roots.

H. New shoot



New shoots emerge from the rhizome with unfolding leaves.

I. Young leaf



Leaves are initially rolled and emerge with a coppery tint.

J. Mature leaf



Mature leaves are glossy, leathery, and heart-shaped.

K. Inflorescence bud



The spadix develops first, enclosed by a green spathe.

L. Blooming



Spathe opens to reveal the spadix; flowers bloom sequentially.

M. Fruit development



Ovary develops into berries as flowers are pollinated.

N. Fruit maturity



Berries turn orange to red when mature and contain seeds.

O. Seed



Seeds are dispersed by birds and other animals.

P. Use



Widely used as an ornamental plant for interiors and floral displays.

SIZE

Height: 30–60 cm
Spread: 30–50 cm
Lifespan: Perennial (many years with proper care).



LEAVES

Heart-shaped, entire, leathery, 10–30 cm long and 8–20 cm wide. Glossy dark green with prominent veins.



DIET / USES

Ornamental plant cultivated for its long-lasting flowers and foliage. Also used in floral arrangements and interior landscaping.



CHEMISTRY

Contains oxalates, flavonoids, phenolic compounds and essential oils with antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Attracts pollinators such as beetles and small flies. Thrives in stable, humid environments with filtered light or partial shade.



RANGE

Native to Colombia and Ecuador. Now cultivated throughout tropical and subtropical regions worldwide.





CAUTION: contains calcium oxalate crystals. Chewing causes mouth pain and swelling; sap irritates skin and eyes.

PLATE 42.

PRIDE OF BARBADOS

Caesalpinia pulcherrima

FAMILY FABACEAE (CAESALPINIOIDEAE)
ORDER FABALES

Caesalpinia pulcherrima is a showy, evergreen shrub or small tree native to the tropical Americas, but now widely naturalized in the Caribbean, Africa, Asia, and the Pacific.

It is best known for its spectacular clusters of red, orange, and yellow flowers with long, crimson stamens that attract butterflies, bees, and hummingbirds.

The plant is drought tolerant, makes an excellent ornamental for gardens and hedges, and is also used in traditional medicine.



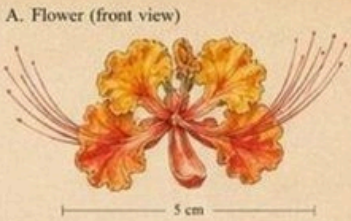
Flowering branch



RANGE
Native to south-eastern Mexico and Central America; long cultivated in the Caribbean.

Wild from south-eastern Mexico through Central America.

A. Flower (front view)



5 cm

B. Flower (side view)



5 cm

C. Flower (longitudinal section)



5 cm

D. Stamen



55–75 mm long

E. Pistil



2 cm

F. Leaf (bipinnate)

Bipinnate, with many small oval leaflets.

G. Seed pod



Pods 6–11 cm

LIFE CYCLE AND POLLINATION



New growth appears at the tips of branches after rain.



Buds form in terminal panicles and develop sequentially.



Flowers open from yellow to orange to red.



Hummingbirds, butterflies, and bees feed on nectar and pollen.



After pollination, slender pods develop and mature.



Pods dry and split open, releasing hard, black seeds.

USES

Ornamental in gardens, along roadsides, and in hedges. Flowers used in traditional medicine for fever, inflammation, and stomach complaints.



SIZE

Height: 2–5 m
Spread: 2–4 m
Growth: Shrub or small tree
Lifespan: Many years



IDENTIFICATION

Evergreen. Leaves alternate, bipinnate, with many small oval leaflets. Flowers in terminal panicles, 5-petalled, with 10 long, showy stamens.



FLOWERS

Brilliant, irregular flowers with 5 ruffled petals. Colours range from yellow to orange to deep red.



FRUITS & SEEDS

Pods flat, 6–11 cm long, turning brown when mature. Seeds hard, dull and black.



HABITAT

Thrives in full sun in hot, dry climates. Found in disturbed sites, hedges, open woodlands, and coastal areas.



POLLINATORS

Attracts hummingbirds, butterflies, bees, and other nectar-feeding insects.



CONSERVATION

Least Concern.
Very adaptable and widely naturalized. Can self-seed prolifically.



RANGE (detail)

SE Mexico and Central America; naturalised in the Caribbean, Africa, Asia and the Pacific.



NOTE: Drought tolerant once established. May self-seed and spread in disturbed areas. **CAUTION: seeds and pods are poisonous if eaten.**

PLATE 43.

Manchineel

Hippomane mancinella

FAMILY EUPHORBIACEAE
ORDER MALPIGHIALES
GENUS *Hippomane*

The Manchineel is a small evergreen tree native to the tropical coasts of the Americas and the Caribbean. It is notorious as one of the most toxic trees in the world. All parts of the plant contain a milky, corrosive latex that can cause severe skin blisters, blindness, and internal damage if ingested. The small, apple-like fruits are deceptively attractive but extremely dangerous. The tree often grows along beaches and coastal areas where salt tolerance gives it a competitive advantage.

CAUTION
Extremely toxic. Do not touch, burn, or eat any part of this tree or its fruit.



A. Leaf (upper surface)



B. Leaf (lower surface)



C. Leaf base
(gland at top of leaf stalk)



HABIT



Small coastal tree, 5–15 m high, often with low, spreading canopy.

D. Flower (male)

Minute and petal-less, on spikes 3–12 cm long.

E. Fruit (unripe)



F. Fruit (ripe)



G. Fruit (cross-section)



H. Seed

Flattened, about 5 mm long.

I. Stone

Seeds are held inside a hard, woody stone.

J. Branch with milky latex



K. Bark (detail)



NOTE: Never shelter beneath the tree in rain; dripping sap blisters skin.

PLATE 44.

Flamboyant

Delonix regia

FAMILY FABACEAE
SUBFAMILY CAESALPINIOIDEAE

Flamboyant is a spectacular tropical tree, loved for its brilliant scarlet flowers and broad, spreading canopy that provides welcome shade. Native to Madagascar, it is now cultivated throughout the tropics and subtropics as an ornamental and shade tree. The flowers attract pollinators and are a symbol of vitality and beauty. The tree is drought tolerant once established.



A. Flower (front view)



B. Flower (side view)



C. Flower bud



D. Leaf (bipinnate)



Leaf 20–60 cm

E. Fruit (pod)



Pod 30–75 cm

F. Seed



HABITAT



Grows in a wide range of tropical and subtropical climates, from sea level up to 2,000 m. Prefers full sun, well-drained soils, and areas with annual rainfall of 700–1,200 mm.

G. Flowering



Trees begin flowering in their fourth or fifth year. Blooms appear in late spring to early summer.

H. Pollination



Flowers are rich in nectar and attract bees, butterflies, hummingbirds and bananaquits.

I. Fruit development



After pollination, pods develop and elongate over several months.

J. Ripening pods



Pods ripen from green to dark brown or black and become woody and dry.

K. Seed dispersal



Woody pods hang for months, fall, and rot to release the seeds.

L. Seedling



Seeds germinate in warm conditions. Seedlings grow rapidly in full sun.

M. Uses



Ornamental shade tree for parks, avenues, and gardens. Wood used for small items and fuel. Attracts wildlife.

SIZE

Height: 10–15 m



LEAVES

Bipinnate, finely divided, with many small leaflets. Provide light, dappled shade.



Leaves 20–60 cm

DIET / USES

Not edible. Grown as an ornamental tree. Pods sometimes used in crafts.



CHEMISTRY

Contains flavonoids, tannins, saponins and alkaloids with antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Deciduous in dry seasons in some regions. Flowers abundantly after dry conditions.



RANGE

Native to Madagascar. Widely cultivated throughout the tropics and subtropics including Asia, Africa, Australia, the Caribbean, Central and South America.





NOTE: Least Concern (IUCN). Widely planted as a shade and ornamental tree in the tropics.

PLATE 45.

Frangipani

Plumeria rubra

FAMILY APOCYNACEAE
ORDER GENTIANALES

Frangipani is a small tropical tree or large shrub, prized for its exquisitely fragrant flowers and ornamental beauty. Native from Mexico to Colombia and Venezuela and introduced in the Caribbean, it is now widely cultivated throughout the tropics and subtropics. The flowers are used in leis, ceremonies and perfumery. The plant thrives in warm climates and well-drained soils, and is both drought tolerant and long-lived.



A. Flower (front view)



B. Flower (side view)



C. Flower bud



D. Leaf (upper surface)



E. Fruit (pair of follicles)



F. Seed (with tuft)



HABITAT



Grows in tropical and subtropical regions, often in dry or seasonal climates. Prefers full sun, well-drained soils and thrives in low rainfall areas. Commonly planted in gardens, along pathways and near temples or memorials.

G. Flowering



H. Pollination



Pollinated by sphinx moths lured by scent; the flowers hold no nectar.

I. Fruit development



After pollination, the ovary develops into a pair of slender follicles.

J. Ripening fruit



Fruits ripen over several months and turn brown as they mature and dry.

K. Seed dispersal



When dry, the follicles split open, releasing seeds with tufts that are carried by wind.

L. Seedling



Seeds germinate in warm conditions. Seedlings grow slowly at first but establish strong roots.

M. Uses



Used in leis, religious offerings, perfumery and aromatherapy. Ornamental plant for gardens and resorts.

SIZE

Height: 3–8 m
Spread: 3–6 m
Trunk diameter: 15–30 cm
Lifespan: 30–50+ years.



LEAVES

Large, simple, alternate, oblong to lanceolate, glossy dark green above, paler beneath. Clustered at branch tips.



DIET / USES

Not edible. Flowers used in leis, teas and spa rituals. Essential oils from flowers used in perfumes, soaps and aromatherapy.



CHEMISTRY

Contains iridoids, flavonoids, triterpenoids and essential oils. Exhibits antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Deciduous or semi-evergreen. Highly drought tolerant.



RANGE

Native to Mexico, Central America, Colombia and Venezuela. Now cultivated worldwide in tropical and subtropical regions.



NOTE: All parts of the plant contain a milky latex that can be irritating to skin and eyes. Sustainable cultivation preserves ornamental value and supports cultural traditions.

PLATE 46.

Bougainvillea

Bougainvillea glabra

FAMILY NYCTAGINACEAE
ORDER CARYOPHYLLALES

Bougainvillea is a vigorous climbing shrub valued for its brilliant papery bracts which surround the small, tubular flowers. Native to eastern and southern Brazil, it is now widely cultivated throughout the tropics and subtropics as an ornamental plant for gardens, walls and pergolas.

The bracts are not true petals but modified leaves that attract pollinators and provide long-lasting colour in a range of hues.



A. Flower (longitudinal section)



B. Flower (side view)



C. True flower (enclosed by bract)



D. Bract (front view)



E. Bract (back view)



F. Fruit (achene)



G. Seed



HABITAT



Thrives in warm, sunny climates. Prefers well-drained soils and tolerates drought once established. Commonly used in landscaping, hedges, arbours and as a climbing vine.

H. Flowering



Blooms throughout the year, with peak flowering in warm seasons. Bracts provide the showy display.

I. Pollination



Pollinated by insects, birds and other small nectar-feeders attracted to the tubular flowers.

J. Fruit development



After pollination, the ovary develops into a small, dry fruit (achene) within the bracts.

K. Ripening



The fruit matures and turns brown as it dries on the plant.

L. Seed dispersal



The one-seeded fruit (anthocarp) does not split open.

M. Propagation



Easily propagated from stem cuttings. Rooting occurs in warm, humid conditions.

N. Uses



Used for ornamental planting, screens, climbers, hedges and colourful garden displays.

SIZE

Canopy spread: 1–6 m+



LEAVES

Simple, alternate, ovate to elliptic, pointed tip. Glossy green, entire margin. 4–10 cm long.



DIET / USES

Ornamental plant for landscaping and decoration. Provides habitat and nectar for pollinators. Used in traditional medicine in some cultures for anti-inflammatory and wound healing properties.



CHEMISTRY

Contains flavonoids (quercetin, kaempferol), phenolic acids, and other antioxidant compounds with anti-inflammatory, antimicrobial and hepatoprotective properties.

BEHAVIOUR

Fast-growing climber with thorny branches. Responds well to pruning and training. Drought tolerant once established, requires full sun for best flowering.



RANGE

Native to eastern and southern Brazil. Now widely cultivated in tropical and subtropical regions worldwide.



NOTE: Handle with care; thorny branches can cause injury. Some individuals may be sensitive to the sap. Regular pruning encourages vigorous growth and abundant flowering.

PLATE 47.

SILK COTTON TREE

Ceiba pentandra

FAMILY MALVACEAE
ORDER MALVALES

Ceiba pentandra is a majestic tropical tree known for its tall, straight trunk, wide spreading crown, and remarkable buttress roots. It produces large, creamy white flowers and capsule fruits that release abundant silky floss.

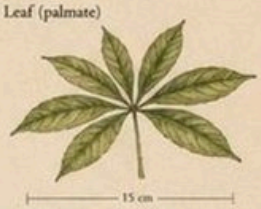
Native from Mexico and the Caribbean to tropical South America, and in West and Central Africa, it thrives in lowland rainforests, moist forests and seasonally dry regions.



A. Tree in habitat



B. Leaf (palmate)



C. Flower (lateral view)



D. Flower (longitudinal section)



E. Fruit (capsule)



F. Seed with floss



HABITAT



Grows in tropical lowland forests, riverine forests and seasonally dry forests. Prefers deep, well-drained soils and open sites. Often emergent, reaching great heights above the forest canopy.

G. Seed



Seeds are small, round to kidney-shaped.

H. Germination



Germinates in warm, moist conditions.

I. Seedling



Seedlings grow rapidly with strong taproots.

J. Young tree



Young trees are fast-growing and light-demanding.

K. Mature tree



Mature trees can reach 40–70 m in height.

L. Flower bud



Flower buds are large, ovoid and covered in scales.

M. Flowering



Flowers open at night and may be pollinated by bats.

N. Fruit development



Capsules develop and enlarge as seeds mature.

O. Fruit mature



Capsules split open when ripe, releasing floss.

P. Seed dispersal



Seeds are carried by wind on silky floss.

SIZE

Height: 40–70 m
Lifespan:
Long-lived



LEAVES

Palmately compound with 5–9 leaflets. Leaflets oblanceolate to elliptic, glossy green, entire. Deciduous in dry seasons in some regions.



DIET / USES

Leaves, flowers and young fruit are cooked in West Africa. Floss used for stuffing pillows and cushions. Bark yields a gum and a dye. Wood light and used for carved objects and boxes.



CHEMISTRY

Contains flavonoids, alkaloids, saponins and phenolic compounds with anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Flowers are bat-pollinated (nocturnal). Seeds are wind-dispersed. Often provides habitat for epiphytes, birds and insects.



RANGE

Native from Mexico and the Caribbean to Bolivia and Brazil; also West Africa. Widely cultivated in tropical and subtropical regions.





NOTE: Protect mature trees and surrounding habitat. Important for biodiversity and cultural heritage. Plant in suitable open spaces; requires room to grow.

PLATE 48.

SEA GRAPE

Coccoloba uvifera

FAMILY POLYGONACEAE
ORDER CARYOPHYLLALES

Coccoloba uvifera is a tropical seaside shrub or small tree, native to the coastal regions of the Americas.

It is readily recognised by its round, leathery leaves with prominent red veins and its clusters of grape-like fruits that ripen from green to deep purple.

Highly tolerant of salt spray, sand, and drought, it plays a vital role in stabilising coastal dunes and providing habitat and food for wildlife.

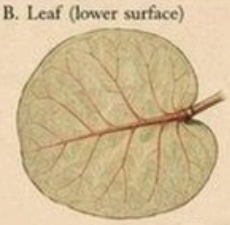
The fruit is edible and used in jellies, wines, and traditional remedies.



A. Leaf (upper surface)



B. Leaf (lower surface)



C. Flower (enlarged)



D. Fruit cluster (immature)



E. Fruit (ripe)



F. Fruit (section)



RANGE

Tropical coasts throughout the Caribbean, Florida, Central America, and northern South America.



HABITAT AND ECOLOGICAL ROLE



Thrives on beaches, dunes, rocky shores, and coastal scrublands.



Its deep roots help stabilise sand and prevent coastal erosion.



Small flowers attract bees, flies, and other pollinators.



Fruits are eaten by birds, reptiles, and small mammals.



Provides shade and shelter for many coastal species.

USES

Fruits are used to make jellies, wines, and syrups. Leaves are used in folk medicine for diarrhoea, inflammation, and toothache. Wood is used for charcoal and small crafts.



SIZE

Shrub or small tree 2–15 m tall.
Leaves 7–26 cm across.
Lifespan: Several decades.



IDENTIFICATION

Round, leathery leaves with entire margins and red midrib. Leaves occur in alternate clusters at branch tips. Fruits in pendant clusters resembling grapes.



FLOWERING

Flowers small, greenish-white, in slender spikes or panicles. Flowering occurs year-round in warm climates. Fragrant and nectar-producing.



FRUITS & SEEDS

Fruits 1.4–2 cm long. Green when unripe, turning red, then deep purple when ripe. One large seed with hard coat.



HABITAT

Coastal beaches, dunes, limestone shores, mangrove edges, and salt-tolerant scrublands. Tolerates high winds, salt spray, and poor soils.



CONSERVATION

Least Concern. Important for coastal restoration and erosion control. Protects shorelines and supports biodiversity in fragile ecosystems.



RANGE (detail)

Caribbean, Florida, Central America, and northern South America.



NOTE: Salt tolerant and drought resistant once established. Do not overwater. Valuable for coastal revegetation and wildlife conservation.

PLATE 49.

Cocoa

Theobroma cacao

FAMILY MALVACEAE
ORDER MALVALES

Cocoa is an evergreen tree native to the humid tropics of the Americas. It is the source of chocolate and cocoa butter. *Theobroma cacao* thrives in the shade of rainforest canopies in fertile, well-drained soils. The tree plays a vital role in ecosystems and livelihoods, supporting biodiversity and providing income for millions of people.



A. Flower



B. Flower (longitudinal section)



C. Young pod



D. Mature pod (whole)



E. Pod (opened)



F. Cocoa beans (fresh)



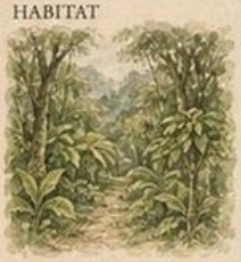
G. Cocoa beans (dried)



H. Cocoa nibs



HABITAT



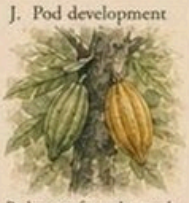
Humid tropical forests. Requires consistent warmth, high humidity, and protection from direct sunlight and wind.

I. Pollination



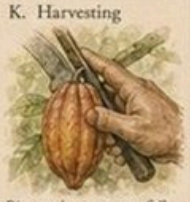
Pollinated by tiny midges (*Forcipomyia* spp.) that are attracted by the flower's scent.

J. Pod development



Pods grow from the trunk and older branches. Developing pods take 5–6 months to mature.

K. Harvesting



Ripe pods are cut carefully with a machete or knife to avoid damaging the tree.

L. Fermentation



Beans are fermented for 5–7 days to develop flavour and reduce bitterness.

M. Drying



Beans are sun-dried for several days until they reach the proper moisture content.

SIZE

Height: 4–8 m
Canopy spread: 4–6 m
Begins bearing pods in 3–5 years.
Productive for 20–30 years.



LEAVES

Simple, alternate, elliptic to oblong, glossy green above, pale beneath. 15–35 cm long.



DIET / USES

Seeds used to make chocolate, cocoa powder and butter. Nibs used in foods and beverages. By-products used in cosmetics, medicine and animal feed.



CHEMISTRY

Contains theobromine, caffeine and polyphenols, compounds with antioxidant and potential health benefits.

BEHAVIOUR

Shade-loving and sensitive to drought and frost. Requires regular rainfall (1,500–2,000 mm/year) and stable conditions.



RANGE

Native to the Amazon basin. Cultivated throughout the tropics in West Africa, South America, Southeast Asia and the Caribbean.



NOTE: Deforestation, climate change, pests and diseases (e.g., witches' broom) threaten cocoa production. Sustainable farming protects this valuable crop and the ecosystems it depends on.

PLATE 50.

Clove

Syzygium aromaticum

FAMILY MYRTACEAE
ORDER MYRTALES

Clove is an evergreen tree native to the Maluku Islands (Spice Islands) of Indonesia. The aromatic flower buds are harvested and dried to produce the spice clove. Warm, tropical climate, well-drained volcanic soils and regular rainfall are essential for healthy growth. Clove has been treasured for centuries for its culinary, medicinal and aromatic properties. It plays an important role in local economies and global spice trade.



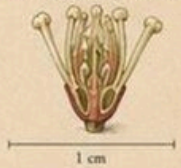
A. Flower (open)



B. Flower bud



C. Longitudinal section



D. Fruit (immature)



E. Fruit (ripe)



F. Dried clove (bud)



G. Clove (opened bud)



HABITAT



Tropical evergreen forests at low to mid elevations (0–600 m). Prefers rich, well-drained volcanic soils and a warm, humid climate with annual rainfall of 1,500–2,500 mm.

I. Flowering



Trees begin flowering at 6–8 years (4–6 in Zanzibar). Flowers appear in clusters at the ends of branches.

J. Bud harvesting



Flower buds are hand-picked when they are plump and beginning to turn pink.

K. Drying



Bud are sun-dried for 4–7 days until they turn brown and become hard.

L. Sorting



Dried buds are sorted by size and quality. Only unopened buds are used as cloves.

M. Packaging



Cloves are packed in bags or containers and kept in a cool, dry place to preserve aroma and flavour.

SIZE

Height: 10–20 m
Canopy spread: 6–12 m
First buds at 6–8 years (4–6 in Zanzibar).
Productive for 50–100 years.



LEAVES

Simple, opposite, elliptic to lanceolate, glossy green above, paler below. 7–18 cm long.



DIET / USES

Used whole or ground in cooking (sweet and savory dishes, spice blends). Used in traditional medicine for digestive and oral health.



CHEMISTRY

Contains eugenol (major compound), caryophyllene and other essential oils with potent antimicrobial, analgesic and antioxidant properties.

BEHAVIOUR

Evergreen and shade-tolerant when young. Flowering and bud production are enhanced by good sunlight, pruning and soil nutrient balance.



RANGE

Native to the Maluku Islands, Indonesia. Cultivated throughout the tropics, including Madagascar, Sri Lanka, India and Tanzania.





NOTE: Sustainable cultivation and fair trade support local communities and protect biodiversity.

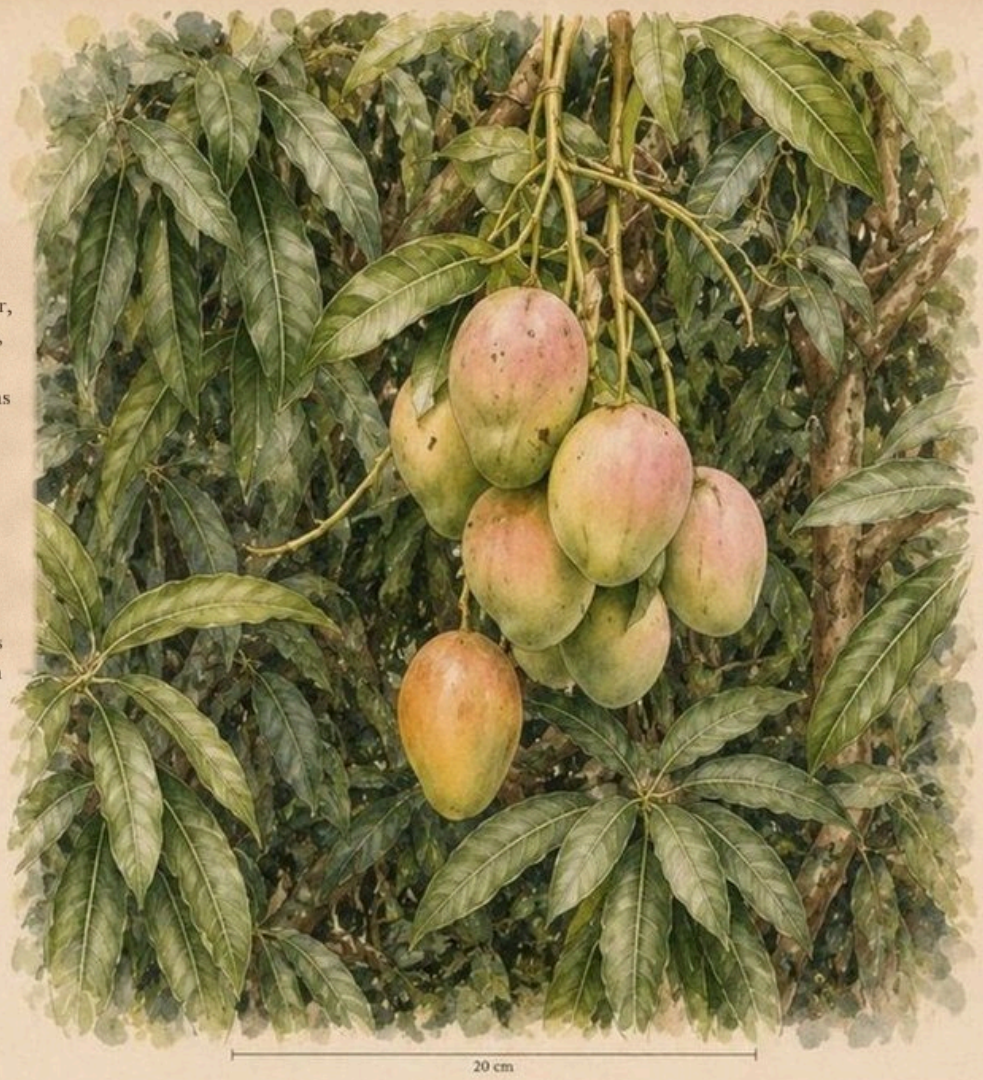
PLATE 51.

Mango

Mangifera indica

FAMILY ANACARDIACEAE
ORDER SAPINDALES

Mango is an evergreen tree native from Assam and the eastern Himalaya to Myanmar, Thailand and southern China, but now cultivated in many tropical and subtropical regions worldwide. It is valued for its delicious, juicy fruit, rich in vitamins and antioxidants. Mangoes are enjoyed fresh, dried, pickled and in many traditional dishes. The tree provides shade and timber, supports biodiversity and plays an important economic role in local communities.



A. Flower (panicle)



B. Flower (enlarged)



C. Young fruit



D. Ripe fruit (whole)



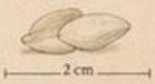
E. Fruit (longitudinal section)



F. Seed (stone)



G. Seed (kernel)



HABITAT



Tropical and subtropical evergreen forests and cultivated orchards at low to mid elevations (0–1,000 m). Requires a warm climate with a distinct dry season.

H. Flowering



Trees flower in panicles in the cool, dry season. Flowers are small, fragrant and attract insects.

I. Fruit set



After pollination, tiny fruits develop. Many naturally drop; the strongest continue to grow.

J. Fruit development



Fruits grow for 3–5 months, increasing in size and changing colour.

K. Ripening



Mangoes ripen on the tree. The skin changes colour and the flesh becomes sweet.

L. Harvesting



Fruits are hand-picked when mature but firm. Care is taken to avoid damaging the fruit and tree.

M. Uses



Mangoes are eaten fresh, dried, juiced, pickled and used in sweets, chutneys and traditional dishes.

SIZE

Height: 10–45 m
Canopy spread: 10–30 m
Begins bearing fruit at 3–5 years.
Productive life: 50–100+ years.



LEAVES

Simple, alternate, lanceolate, leathery, glossy green above, paler below. 15–30 cm long.



DIET / USES

Rich in vitamins A and C, dietary fibre and antioxidants. Supports immune health, digestion and eye health. Used in juices, desserts, pickles, chutneys and savoury dishes.



CHEMISTRY

Contains mangiferin (xanthone), gallotannins, terpenoids and flavonoids—compounds with antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Evergreen and drought-tolerant once established. Deep roots access water in dry seasons. Flowers are pollinated by insects.



RANGE

Native from Assam and the eastern Himalaya to Myanmar, Thailand and southern China. Now cultivated throughout the tropics, including the Caribbean.



CAUTION: sap and peel can cause dermatitis, especially in people sensitised to poison ivy.

PLATE 52.

Soursop

Annona muricata

FAMILY ANNONACEAE
ORDER MAGNOLIALES

Soursop is an evergreen tree native to tropical America, but now cultivated throughout the tropics. The large, spiny fruit is prized for its fragrant, creamy white flesh with a sweet–tart flavour. Rich in vitamins and antioxidants, soursop is enjoyed fresh and in beverages, desserts and ice creams, and has been used in traditional medicine for generations. The tree provides shade and food, and supports biodiversity in tropical ecosystems.



A. Flower

Three thick, yellow-green outer petals, 4–5 cm long.

B. Caution

Seeds are toxic.

C. Young fruit



3 cm

D. Mature fruit (whole)



E. Fruit (longitudinal section)



F. Seed



1,5 cm

HABITAT



Grows in tropical lowland and subtropical forests. Prefers warm, humid climates, well-drained soils and annual rainfall of over 1,000 mm.

G. Flowering

Three thick, yellow-green outer petals, 4–5 cm long.

Borne singly or in small clusters on the trunk.

H. Fruit set



After pollination by beetles and other insects, the ovaries develop into fruits over several weeks.

I. Fruit development



Fruits grow for 4–6 months, increasing in size and developing soft spines.

J. Ripening



When ripe, the fruit softens slightly and the spines become more rounded.

K. Harvesting



Fruits are cut from the tree with a knife or secateurs when fully mature.

L. Prepared fruit



The thick skin is removed to reveal the soft, juicy white flesh and seeds.

SIZE

Height: 6–10 m
Canopy spread: 6–10 m
Begins bearing fruit in its second year.
Productive life: 30–50 years.



LEAVES

Simple, alternate, elliptic to oblong, glossy dark green above, paler beneath. 7.5–15 cm long.



DIET / USES

Flesh eaten fresh; used in juices, smoothies, ice creams, desserts and preserves. Leaves used in herbal teas. Seeds and leaves used in traditional medicine.



CHEMISTRY

Contains acetogenins (annonaceous acetogenins), vitamin C, B-vitamins, flavonoids and other antioxidant compounds with

BEHAVIOUR

Flowers are pollinated mainly by beetles. The tree provides food and shelter for birds, insects and other wildlife.

RANGE

Native to tropical America, from southern Mexico to Venezuela and Peru. Widely cultivated throughout the tropics.





CAUTION: seeds are toxic. Its acetogenins are neurotoxic; regular fruit and leaf tea are linked to atypical parkinsonism.

PLATE 53.

Hibiscus

Hibiscus rosa-sinensis

FAMILY MALVACEAE
ORDER MALVALES

Hibiscus is an evergreen flowering shrub prized for its large, showy flowers and ornamental value.

A cultigen of ancient Pacific hybrid origin, unknown in the wild, it is now cultivated throughout the tropics and subtropics.

The flowers attract pollinators such as butterflies, hummingbirds and bananaquits. The plant thrives in warm climates and well-drained soils with regular moisture and abundant sunlight.



A. *Flower (front view)*



B. *Flower (side view)*



C. Floral column *(and pistil)*



D. Bud



E. *Leaf (upper surface)*



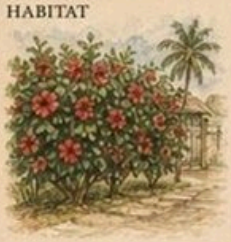
F. Seed capsule



G. Seed



HABITAT



Grows in gardens, hedges and landscapes in tropical and subtropical regions. Prefers full sun, well-drained soils and warm, humid climates with annual rainfall of 1,000–2,500 mm.

H. Flowering



Blooms year-round in favourable conditions. Individual flowers last one day but new blooms are produced continually.

I. Pollination



Pollinated by insects and birds. The long floral column presents pollen and nectar to visitors.

J. Fruit development



After pollination, the ovary swells and develops into a capsule containing many seeds.

K. Ripening capsule



The capsule turns from green to brown and splits open when ripe.

L. Seed dispersal



Seeds are dispersed by wind, water or accidentally.

M. Propagation



Easily propagated from stem cuttings. Roots readily in warm, humid conditions.

N. Uses



Ornamental plant for gardens and pots. Used in traditional medicine in some cultures. Flowers attract pollinators.

SIZE

Height: 2–5 m
Spread: 1–3 m
Lifespan:
Many years with proper care.



LEAVES

Alternate, simple, ovate to elliptic, with serrated margins and a glossy dark green surface.



DIET / USES

Flowers used in teas and herbal remedies in traditional systems. Rich in mucilage and antioxidant compounds.



CHEMISTRY

Contains flavonoids, phenolic acids, anthocyanins and mucilage with antioxidant, anti-inflammatory and soothing properties.

Cyanidin (anthocyanidin)

BEHAVIOUR

Fast-growing and responsive to pruning. Requires full sun for best flowering. Drought tolerant once established but performs best with regular watering.



RANGE

A Pacific hybrid (H. kaute × H. cooperi), known only in cultivation.



Unknown in the wild. Now grown throughout the tropics and subtropics.

NOTE: Regular pruning promotes bushy growth and more flowers. Protect from frost. Overwatering can cause root rot.

PLATE 54.

Bird of Paradise

Strelitzia reginae

FAMILY STRELITZIACEAE
ORDER ZINGIBERALES

Strelitzia reginae is a striking herbaceous perennial, native to South Africa, renowned for its spectacular, bird-like flowers and bold, architectural foliage. Now widely grown throughout the tropics and subtropics as an ornamental plant in gardens and landscapes.

The common name refers to the brilliant flowers whose form and colours resemble the plumage of exotic birds.



A. Flower



Orange petal-like sepals; blue, nectar-bearing petals enclosing the fused stamens and pistil; a beak-like bract (spathe) below.

B. Flower (side view)



C. Bract (spathe)



D. Fruit (mature)

Hard, woody capsule.

E. Seed

Black, with an orange aril.

HABITAT



Native to coastal regions of the Eastern Cape and KwaZulu-Natal, South Africa. Grows in well-drained soils in full sun to partial shade. Tolerates coastal winds and drought once established.

F. New shoot



New shoots emerge from the rhizome in spring.

G. Leaf (young)



Leaves unfurl spear-like and open with age.

H. Leaf (mature)



Large, paddle-shaped leaves provide a bold, architectural effect.

I. Flowering



Flowers from May to December in South Africa.

J. Pollination



Perching birds open the blue petals and pollen dusts their feet.

K. Fruiting



Fertilised flowers form hard, woody capsules.

L. Seed dispersal



Black seeds with an orange aril are eaten and dispersed by birds.

M. Propagation



Propagated by division of rhizomes.

N. Uses



Widely used as an ornamental plant in gardens, parks and landscapes. Excellent cut flower.

SIZE

Height: 1–1.8 m
Spread: 0.6–1 m
Lifespan:
Many years with good care.



LEAVES

Large, simple, oblong to elliptic, glaucous green with a strong midrib. Arranged in a fan from the base.



DIET / USES

Not edible. Grown as an ornamental. Flowers used in floral arrangements and tropical displays.



CHEMISTRY

Contains flavonoids, phenolic compounds and triterpenoids with antioxidant, anti-inflammatory and antimicrobial properties.



RANGE

Native to South Africa (Eastern Cape and KwaZulu-Natal). Now cultivated in tropical and subtropical regions worldwide.





NOTE: Protect from frost. Prefers bright light. Remove old leaves and spent flower stalks to encourage vigorous growth and more blooms.

PLATE 55.

Pink Crab-Claw Heliconia

Heliconia chartacea

FAMILY HELICONIACEAE
ORDER ZINGIBERALES

Heliconia chartacea **is a tropical herbaceous perennial admired for its delicate, pendulous inflorescences that resemble a hanging crab's claw.**



Native to northern South America, from the Guianas to Peru and northern Brazil, it grows in humid rainforests and thrives in warm, shaded environments.

The plant prefers rich, well-drained soils with high organic matter and consistent moisture.

HABITAT



Grows in tropical rainforests and moist, shaded areas. Prefers humus-rich soils with good drainage and high humidity.

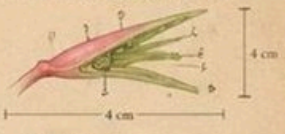
A. Inflorescence (front view)



B. Bract (side view)



C. Flower (longitudinal section)



1. Bract
2. Corolla tube
3. Stamen (fertile)
4. Staminode (sterile)
5. Style
6. Stigma

D. Flower

A narrow, tubular flower.

E. Fruit (developing)



F. Seed



G. Rhizome



Perennial plant with underground rhizomes that store nutrients and produce new shoots.

H. New shoot



Shoots emerge from the rhizome at the onset of the rainy season.

I. Leaf (young)



Leaves unfurl from the shoot, forming broad, lance-shaped blades.

J. Leaf (mature)



Glossy leaves grow in a fan-like arrangement from the base.

K. Flowering



Inflorescences appear on long, arching peduncles that hang gracefully.

L. Pollination



Pollinated mainly by hummingbirds, which feed on nectar.

M. Fruit development



After pollination, ovaries develop into green fruits.

N. Seed dispersal

Blue-black fruits, each with three hard seeds, are eaten by birds.

O. Uses



Widely used as a cut flower and in tropical floral arrangements.

SIZE

Height: up to 7 m
Spread: 0.6–1.5 m
Lifespan:
Perennial (many years with proper care).



LEAVES

Large, lanceolate, bright green leaves. Glossy surface with prominent midrib.



DIET / USES

Not edible.
Ornamental plant used for its spectacular inflorescences in gardens and floral displays.



CHEMISTRY

Contains flavonoids, phenolic compounds and essential oils with antioxidant and anti-inflammatory properties.

BEHAVIOUR

Attracts hummingbirds and beneficial insects. Thrives in stable, humid environments with filtered light or partial shade.



RANGE

Native to northern South America (Guianas, Venezuela, Colombia, Ecuador, Peru, northern Brazil). Now cultivated in tropical and subtropical regions worldwide.





NOTE: Keep soil consistently moist but not waterlogged. Mulch to conserve moisture. Protect from strong winds and direct sun. Divide rhizomes every 2–3 years to maintain vigour.

PLATE 56.

ALLAMANDA

Allamanda cathartica

FAMILY APOCYNACEAE
ORDER GENTIANALES

Allamanda cathartica **is a tropical climbing shrub admired for its abundant, trumpet-shaped, golden-yellow flowers and glossy** evergreen foliage. Native from Venezuela and the Guianas to Brazil and Bolivia, and widely cultivated throughout the tropics, it thrives in warm, sunny environments.

The plant prefers rich, well-drained soils with consistent moisture and grows well in full sun to partial shade.



A. Inflorescence (cluster)



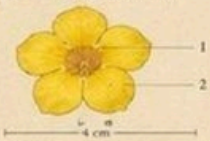
B. Flower (side view)



C. Flower (longitudinal section)



D. Flower (front view)



E. Fruit

A spiny capsule.

F. Seed

Flat winged seeds are carried by wind.

CAUTION: all parts are poisonous; milky sap irritates skin. Eating it causes vomiting and diarrhoea.

HABITAT



Grows in tropical and subtropical regions. Prefers sunny to partly shaded locations, warm climates and well-drained, fertile soils. Tolerates pruning and hedging.

G. Seed germination



Seeds germinate in 3–4 weeks in warm, moist conditions.

H. Young plant



Rapid early growth with bright green leaves.

I. Mature leaf



Opposite or in whorls of three, lanceolate, glossy and evergreen.

J. Flower bud



Elongated buds open in sequence throughout the year.

K. Flowering



Flowers open in clusters.

L. Pollination



Pollinated by bees, butterflies and other insects.

M. Fruit development

Develops into a spiny capsule.

N. Fruit maturity

Capsule turns brown and splits in two.

O. Seed dispersal

Flat winged seeds are carried by wind.

P. Uses



Widely used as ornamental climber, hedge, in gardens, parks and landscaping.

SIZE

Height: 2–6 m
Spread: 1–3 m
Lifespan: Perennial (many years with proper care).



LEAVES

Opposite or in whorls of three. Lanceolate, 5–15 cm long and 2–4 cm wide. Glossy green with entire margins.



DIET / USES

Ornamental plant valued for its long flowering season. Traditionally, leaves and roots used in herbal medicine as a purgative.



CHEMISTRY

Contains alkaloids, saponins, flavonoids and phenolic compounds with anti-inflammatory, purgative and antimicrobial properties.

Allamandin
(iridoid lactone)

BEHAVIOUR

Attracts pollinators such as bees and butterflies. Thrives in full sun, blooms continuously in warm climates. Responds well to pruning and training.



RANGE

Native from Venezuela and the Guianas to Brazil and Bolivia. Now naturalised throughout tropical and subtropical regions worldwide.





NOTE: Keep soil consistently moist but not waterlogged. Provide full sun for best flowering. Prune after major blooming flushes to maintain shape and encourage new growth.

PLATE 57.

IXORA

Ixora coccinea

FAMILY RUBIACEAE
ORDER GENTIANALES

Ixora coccinea is a tropical evergreen shrub admired for its dense clusters of brilliant flowers and glossy foliage. Native to South and Southeast Asia, it is widely cultivated throughout the tropics and subtropics in gardens, hedges and landscapes.

The plant thrives in warm, humid climates with rich, well-drained soils and prefers full sun to partial shade.



A. Inflorescence (whole)



B. Flower (side view)



C. Flower (longitudinal section)



1. Calyx (4 lobes)
2. Corolla (4 lobes)
3. Stamens (4)
4. Style
5. Stigma

D. Flower (front view)



E. Fruit (developing)



F. Seed



HABITAT



Occurs in tropical and subtropical regions. Grows in well-drained, fertile soils. Tolerates heat and humidity; prefers sunny to partly shaded locations.

G. Seedling



Germination takes 2–4 weeks in warm, moist conditions.

H. Young plant



Rapid early growth with opposite leaves.

I. Mature leaf



Leaves opposite, elliptic, glossy and evergreen.

J. Flower bud



Buds elongated, tubular, bright red.

K. Inflorescence



Many tubular flowers borne in dense, terminal heads.

L. Blooming



Flowers open sequentially, lasting several days.

M. Pollination



Pollinated by insects, bees and butterflies.

N. Fruit



Fruits develop after pollination, turning darker at maturity.

O. Seed dispersal



Seeds dispersed by birds and other animals.

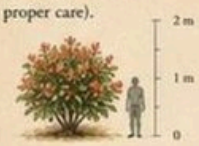
P. Uses



Ornamental plant for hedges, borders, pots and garden landscapes.

SIZE

Height: 0.5–2 m
Spread: 0.5–1.5 m
Lifespan: Perennial (many years with proper care).



LEAVES

Opposite, simple, elliptic to oblong, 5–15 cm long and 2–6 cm wide. Glossy dark green.



DIET / USES

Not edible. Widely used as an ornamental for hedges, borders, pots and landscapes.



CHEMISTRY

Contains iridoids, flavonoids, triterpenoids and essential oils with antioxidant, anti-inflammatory and antimicrobial properties.

BEHAVIOUR

Attracts pollinators such as bees, butterflies, hummingbirds and bananaquits. Flowers open in the morning and may last for several days.



RANGE

Native to India, Sri Lanka and Bangladesh to Indo-China. Now cultivated throughout tropical and subtropical regions.





NOTE: Keep soil consistently moist but not waterlogged. Prune regularly to encourage dense growth a more blooms. Protect from frost. Propagate by stem cuttings.

THROUGH THE YEAR

WHAT TO SEE WHEN

Grenada rewards every season. This is a guide to the island's rhythms, so you can time a visit, or simply know what to look for while you are here.

ALL YEAR ALWAYS HERE	Hummingbirds, bananaquits, mockingbirds and grackles in every garden. Reef life, iguanas and the nightly whistling frog. Hibiscus and bougainvillea in constant flower.
JANUARY TO MAY DRY SEASON	The finest birding and the calmest seas for snorkelling and diving. Clear skies, lower humidity, and the easiest walking in the dry forest where the Grenada dove lives.
DECEMBER TO APRIL MIGRATION AND WHALES	Whales and dolphins offshore, including humpbacks passing through, best seen on a calm-water charter. Northern migrant birds join the residents.
APRIL TO JULY TURTLE NESTING	Leatherback turtles nest by night at Levera, on the north-east coast. Always with a licensed guide and no white light.
MAY TO JULY BLOOM AND HARVEST	The flamboyant sets the island on fire with scarlet bloom, and mango season arrives in glorious abundance. Long, warm, golden evenings.
JUNE TO DECEMBER GREEN SEASON	Warm rain brings the forest to its lushest, waterfalls in full flow, and fruit in abundance, soursop, breadfruit and more. August is Carnival, Spicemas. The Atlantic hurricane season runs to November, so I watch the forecast and plan with care.
MAY TO JULY HATCHLINGS	Turtle hatchlings emerge from the early nests and scramble to the sea, a quiet wonder on the right night.

A GENTLE WORD

WATCHING WISELY

Grenada's wildlife is generous with its beauty. A little care on our part keeps it that way, for the seasons and the visitors to come.

KEEP YOUR DISTANCE

Admire and photograph, but do not feed, touch or crowd wild animals. A fed monkey or bird quickly becomes a nuisance, and in time a problem to be removed. Their wildness is the whole point.

TURTLES NEED THE DARK

Only ever watch nesting turtles with a licensed guide. No torches, camera flash or phone lights on the beach, and never block a turtle's path to or from the sea.

THE REEF IS FRAGILE

Never stand on or touch coral, and take nothing living from the sea. Reef-safe sunscreen helps. Do not buy tortoiseshell, coral or anything made from a protected species.

THE GRENADA DOVE IS OURS ALONE

This bird exists nowhere else on the planet, and fewer than two hundred remain. Visiting its protected forests quietly, and with a guide, supports the very conservation that keeps it alive. Responsible curiosity is part of the rescue.

WITH THANKS

ILLUSTRATIONS AND THANKS

The plates are original illustrations by Ketura James, created in collaboration with Grenada Concierge with the aid of AI image tools, from reference photographs by Grenada Concierge. Five plates reproduce public-domain art: the two hummingbirds after John Gould, the hook-billed kite after Temminck and Laugier, the brown pelican after John James Audubon, and the tanager after Philip Lutley Sclater. Permission for all other works is gratefully acknowledged.

This guide began with a small wonder: a vivid blue land snail found and photographed at The Tower Estate by Joy van Niekerk, founder of Grenada Concierge. It is a reminder that the island's smallest residents are often its most surprising, and that the best way to see Grenada is slowly, and up close.

Species information has been compiled with care. Conservation status, where noted, follows the IUCN Red List, and for the Grenada hook-billed kite, The Peregrine Fund. These are interpretive natural-history illustrations, offered for your enjoyment and gentle field reference.

WARMLY, GRENADA CONCIERGE

GRENADA CONCIERGE

SHALL I SHOW YOU

BOOK YOUR TOUR

A guided rainforest walk, a turtle watch in season, a chocolate estate, a reef morning with a dive guide, or a quiet hour birding the dry forest. Tell me what caught your eye in these pages, and I will arrange the rest.

HELLO@GRENADACONCIERGE.COM

GRENADA, WEST INDIES

FROM TOUCH DOWN TO DEPARTURE, AND EVERYTHING IN BETWEEN, WE TAKE CARE OF YOUR EVERY NEED