

# The Wildlife of Fort Buchanan, Puerto Rico

A Photo-identification Guide for the Common Birds, Reptiles,  
Amphibians, and Invertebrates Found on the Installation



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“We are Fort Buchanan”



# Acknowledgements

## **Environmental Division DPW, Fort Buchanan, Puerto Rico**

Aníbal Negrón - Chief Environmental Division and Installation Energy Manager  
Fort Buchanan, Puerto Rico

Victor J. Rodriguez-Cruz – Contractor, Environmental Protection Specialist  
Sol Solutions, LLC

Eneilis S. Mulero Oliveras - Graduate Student  
University of Puerto Rico, Mayaguez Campus

Sergio Morales Vidot - Undergraduate student  
Inter American University of Puerto Rico, Metropolitan Center

## **US Army Corps of Engineers, Engineer Research and Development Center, Construction Engineering Research Laboratory, Champaign, IL**

Brett A. DeGregorio – Wildlife Biologist  
Loren Merrill – ORISE Postdoctoral Researcher  
Jinelle H. Sperry – Wildlife Biologist  
Patrick J. Wolff – Wildlife Biologist

Cover: Clockwise starting on the left: Banded Caracol (*Caracolus bornii*), Puerto Rican Frog (*Eleutherodactylus coqui*), Puerto Rican Crested Anole (*Anolis cristatellus*), and Puerto Rican Oriole (*Icterus portoricensis*).

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**FORT BUCHANAN MAP-BACK COVER**

# Introduction

This field guide is meant to serve as an aid in the identification of the wildlife encountered on Fort Buchanan. It should be noted that this guidebook does not cover all species that occur on the installation, but instead includes the species that are most commonly seen. The guide has been split into major taxonomic categories, and includes information regarding each species' distribution, where it is likely to be found on the installation, a brief description of its appearance, its preferred habitats, behavior, and conservation status. This is by no means a comprehensive account of each species, but should help visitors ID the common animals, and learn a bit about them. Puerto Rico is home to many species endemic to the island (that is, found nowhere else in the world), and Fort Buchanan is home to a number of those animals. Many of the reptiles, amphibians, and invertebrates are nocturnal, and are thus difficult to see during the day, but rainy events often trigger increases in activity and improve the chances of encountering one during the day. Exploring with a headlamp or spotlight during the night (especially on rainy nights) is also an excellent way to find some of these species. The turtles and some of the lizards (especially the anoles) are diurnal, so can be found during daylight hours. The birds included in this guide are all diurnal, and are generally most active in the morning and evening hours, although some are active throughout the day. Some of the birds are migratory and are present on the fort only during the winter months while they avoid the colder conditions on the mainland of North America. We hope you enjoy your time on the installation and get an opportunity to see and experience some of its wildlife.

For those looking to learn more about any of the wildlife of Puerto Rico, there are a wealth of resources available. Herbert Raffaele and James Wiley's "Birds of the West Indies (Princeton Field Guides)" and Mark Oberle's "Puerto Rico's Birds in Photographs: A Complete Guide Including the Virgin Islands" (available in English and Spanish) are excellent options for bird guides. Juan Rivero's "Los Anfíbios y Reptiles de Puerto Rico/ The Amphibians and Reptiles of Puerto Rico" covers the reptiles and amphibians of the island in both Spanish and English. There is also an excellent website at: [www.caribherp.org](http://www.caribherp.org) that has information on the herpetofauna of Puerto Rico and the other Caribbean Islands. This website includes range maps, images, taxonomy, as well as vocalizations for some of the frogs. There is a spectacular book on the invertebrates of Puerto Rico, called "*Biodiversidad de Puerto Rico: Invertebrados*" which contains information on 10,500 species with excellent photographs. Finally, "Wildlife of the Caribbean" by Herbert Raffaele and James Wiley covers a broad range of plants and animals found throughout the West Indies.

# Reptiles



**Common Name:** PUERTO RICAN SLIDER, CENTRAL ANTILLEAN SLIDER  
(*Trachemys s. stejnegeri*)

**Spanish Common Name:** JICOTEA, HICOTEA

**Distribution:** Puerto Rico (includes Vieques and Culebra Islands).

**Military Interactions:** On Fort Buchanan, it occurs in Toro Creek, retention ponds and man-made stream channels near the roads.

**Description:** Antillean sliders are semi-aquatic turtles. Their size ranges from 16.7 – 26.7 cm and the carapace is olive brown or dark colored with a dull brownish-red band that extends from behind eye to lower jaw. Both Puerto Rican Sliders and Red-eared Sliders (which are similar in appearance but generally have a red “ear” patch and are introduced) share the same habitat.

**Habitat:** They use a variety of freshwater wetlands and can be found basking on rocks, submerged in shallow pools and in stream channels (natural and man-made). Females dig their nest and lay eggs near freshwater bodies during the night.

**Behavior:** Sliders are omnivorous and eat both plant and animal material. They are oviparous and mating is from April to July (although courtship has been recorded outside this season).

**Conservation Status:** The Puerto Rican Slider has no federal or NatureServe ranking. It appears as Data Deficient for PRDNER (State level). Although IUCN assessment needs updating, it is listed as Lower Risk/Near Threatened species because of potential hybridization with the exotic Red-eared Slider (*Trachemys scripta*).

\* Photo on left taken by Eneilis Mulero-Oliveras, photo on the right taken by Loren Merrill



**Common Name:** RED-EARED SLIDER, COMMON SLIDER  
(*Trachemys scripta elegans*)

**Spanish Common Name:** TORTUGA DE OREJA ROJA

**Distribution:** Subspecies occur in North, Central and South America. Introduced to Bahamas Bank, Cayman Islands, Puerto Rico and Virgin Islands and the Lesser Antilles.

**Military Interactions:** Quite common. On Fort Buchanan, it occurs in Toro Creek, retention ponds, and natural and man-made stream channels near the roads.

**Description:** Red-eared Sliders are semi-aquatic turtles. Their size ranges from 9 – 29 cm (sexually mature). This turtle can be easily distinguish by its distinctive bright red band that goes from behind the eyes to lower jaw and dark transverse markings spots on its carapace.

**Habitat:** They use a variety of freshwater habitats and can be found basking on rocks, submerged in shallow pools/ponds, lakes, rivers and in stream channels (natural and man-made).

**Behavior:** Sliders can eat vegetative and animal material. Mating season is from April to July. Females dig a nest for their eggs generally close to water and the gender of the hatchlings is determined by the incubation temperature of the nest.

**Conservation Status:** The Red-eared Slider has no federal conservation status. It has a Nature-Serve Ranking of G5/N5-Secure and is listed as Least Concern because of its wide range and tolerance to a wide variety of habitats. Considered an Invasive Species by the Global Invasive Species Database of the IUCN.



**Common Name: PUERTO RICAN GIANT WHIPTAIL /  
COMMON PUERTO RICAN AMEIVA**  
(*Pholidoscelis exsul*)

**Spanish Common Name:** SIGUANA

**Distribution:** Endemic to Puerto Rico and Virgin Islands.

**Military Interactions:** It occurs all over Fort Buchanan. Common in forest edge, pastures and urban areas.

**Description:** Terrestrial lizard that is distinguish by its olive to olive brown dorsal coloration with scattered white dots on the flanks and hind legs. Sometimes it can have turquoise blue coloration along its sides. Adults can range from 6.33- 20.1 cm SVL.

**Habitat:** They can utilize a variety of habitats but are often found in warm, sunny areas including mowed lawns, pastures, and forest edge.

**Behavior:** This diurnal species is distinguish by its undulating movements and tongue flicking and can be heard foraging in leaf litter which makes it easily to spot. Ameivas are omnivorous, and will eat vegetation, a wide variety of invertebrates, and other vertebrates such as anoles and amphibians. Introduced species such as the Boa Constrictor are considered predators of ameivas. They are oviparous and mating season seems to occur from June to August.

**Conservation Status:** The Common Puerto Rican Ameiva has no federal conservation status or NatureServe Ranking. It is listed as Least Concern by IUCN because of its broad geographic range, and tolerance for a wide variety of habitats, including disturbed habitats.



**Common Name: GREEN IGUANA**  
(*Iguana iguana*)

**Spanish Common Name:** IGUANA, GALLINA DE PALO

**Distribution:** Native to Central and South America. Introduced to Puerto Rico and Virgin Islands, Cayman Islands and Lesser Antilles.

**Military Interactions:** It occurs all over Fort Buchanan. Commonly seen basking on tree branches inside forest/forest edge. Also, common in urban areas moving through roads, pastures, near ponds (e.g. CEMEX pond) and streams.

**Description:** Semi-arboreal and semi-aquatic lizard that may be green, grayish green, gray tending towards yellow-orange in the flanks and with dark bars on the dorsal and flanks. Green Iguanans can grow up to 200 cm SVL and 4-5 kg in weight.

**Habitat:** Commonly occurs in forested wetlands, riparian, cliff and woodland habitats. They can show a preference for disturbed sites near water bodies, especially in areas where trees extend over the water, allowing them to jump into the water when disturbed.

**Behavior:** This diurnal species is active all year long and is commonly seen crossing roads or basking high in trees. Green Iguanans are mainly frugivores and herbivores, but they can also eat bird eggs, invertebrates and small vertebrates. They are oviparous and mating season occurs from November to February. Nesting season is from February to April and females search for clearings in the forest and sandy areas to excavate nests and lay their eggs.

**Conservation Status:** The Green Iguana has no federal or state level conservation status. It has a NatureServe Ranking of G5-Secure. It has not been assessed with IUCN criteria, but it is listed as an invasive species by the Global Invasive Species Database of the IUCN. In Puerto Rico, it is considered a collision hazard on airport runways.



**Common Name: BIG-SCALED LEAST GECKO**  
(*Sphaerodactylus macrolepis*)

**Spanish Common Name: SALAMANQUITA**

**Distribution:** Endemic to Puerto Rico and Virgin Islands. It is the most common and widely distributed Puerto Rican species of *Sphaerodactylus*.

**Military Interactions:** It occurs inside forests and forest edges with high amount of leaf litter and canopy cover on Fort Buchanan. Most commonly seen in Coconut Grove forest patches, the wetland next to the wind turbines where Old DPW was located, the CEMEX pond area, and forested areas with bamboo vegetation.

**Description:** Ground-dwelling gekkonid lizard. This genus can be distinguish from other geckos by its oval/round pupils and digits that terminate in a single scale. There is sexual dichromatism and males are characterized by having yellow or orange-yellow color in head and tail and females have a target-like pattern on the head. Both sexes are tan or brown freckled with dark all over the body (salt and pepper markings) and are easily distinguish by a black spot on the head, a black patch on the shoulders that contain two white dots either inside or that can extend the black margin.

**Habitat:** This species occur in forested areas, coastal vegetation, coffee and coconut groves, and human habitations. They are usually found under leaf litter, rocks and debris.

**Behavior:** Crepuscular species with secretive habits. Diet consists of springtails, spiders and isopods. Observations on Fort Buchanan have documented termites as part of their diet. They are oviparous and can only lay 1 egg per clutch. The reproductive biology is poorly known but females with a developing egg have been observed from May to July on Fort Buchanan.

**Conservation Status:** The Big-scaled Least Gecko has no federal / state level conservation status or NatureServe Ranking. It is listed as Least Concern by IUCN because it is abundant throughout its range.



**Common Name:** TROPICAL/COSMOPOLITAN HOUSE GECKO  
(*Hemidactylus mabouia*)

**Spanish Common Name:** SALAMANDRA, SALAMANQUESA COMUN

**Distribution:** Native to continental Africa. It was introduced to the Caribbean islands (including Puerto Rico) and the American continents. It has a wide distribution.

**Military Interactions:** On Fort Buchanan it occurs in buildings with outside lighting and has been observed inside the forest fragment near building 34 and on/under bark of dead trees outside the forest near Building #139 and Water Park.

**Description:** Terrestrial gekkonid lizard that has the ability to vocalize (peeps to rapid short squeaking sounds). It is characterized by being flattened with large eyes without eyelids and a vertical pupil. Their average size range goes from 3.5 – 7 cm SVL (total length can reach 12.7 cm) and an average mass of 4.6 g. It is difficult to distinguish this species from the West African House Gecko. Its colors can vary from dark brown to a grey almost white. When darker they are covered in black/brown V-shape bands that can be darker in the posterior than the anterior.

**Habitat:** This species is associated with suburban and urban habitats. It can use piles of debris, or rocks, logs and other objects on the ground; also found under the bark of dead trees.

**Behavior:** Nocturnal species. Diet consists of invertebrates (invertivore) and sometimes frogs or other small geckos. They can be found near outside wall-mounted lighting to catch the insects that are drawn to the light. They can walk upside down on smooth surfaces because of their toe pads. They are oviparous and lay 2 eggs per clutch. The mating season is year-round.

**Conservation Status:** The Tropical House Gecko is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is not listed in the IUCN redlist, but it is listed as an invasive species by the Global Invasive Species Database of the IUCN because it is an aggressive species that can displace and eat native geckos.



Juvenile *A. cristatellus*



Adult male *A. cristatellus*

**Common Name: PUERTO RICAN CRESTED ANOLE**  
(*Anolis cristatellus*)

**Spanish Common Name:** LAGARTIJO COMÚN

**Distribution:** Native to Puerto Rico, British and US Virgin Islands. Not on Mona Island.

**Military Interactions:** It is a common lizard found just about anywhere on Fort Buchanan, from urban areas to forests. It can be seen near outside wall-mounted lighting capturing the insects that are drawn to the light.

**Description:** Coloration is variable. It occurs in all shades of brown or greenish gray, becoming lighter or darker depending on the mood of the animal. Dorsal surface has small dark spots, cross-bands or other patterning. The dewlap is also variable and can range from greenish-yellow merging into orange towards the edge, but also may be light olive or cream throughout. Males may have a crest in the tail although the crest can extend along the back or be completely absent. The average size of mature anoles ranges from 5.7 -7.5 cm. Females are smaller, have no dewlap and no crest.

**Habitat:** This species is widespread across shrublands, forests, and developed areas. They are typically found on tree trunks, shrubs, fence posts, walls, or under debris on the ground. This anole ecomorph is considered a trunk-ground specialist.

**Behavior:** These lizards are diurnal and during the night they can be found sleeping on leaves and branches. Their diet consists of fruits, invertebrates and other lizards. It is oviparous and males mate with several females each year. Mating season is year-round. Males exhibit territoriality and will extend their dewlaps, do “push-ups”, swing their tails to show dominance. Big males can eat smaller males.

**Conservation Status:** The Puerto Rican Crested Anole is not listed at the federal/state level, but has a NatureServe Ranking of G5-Secure. It has not been assessed by IUCN redlist, but is listed as an invasive species by the Global Invasive Species Database of the IUCN because it is a tough competitor to native fauna of countries where it has been introduced.



Adult male *A. evermanni*

**Common Name:** PUERTO RICAN EMERALD ANOLE  
(*Anolis evermanni*)

**Spanish Common Name:** LAGARTIJO VERDE

**Distribution:** Endemic to Puerto Rico.

**Military Interactions:** It is a common species inside forests on Fort Buchanan and is usually seen on tree trunks.

**Description:** This lizard is easily distinguish by its emerald green coloration and blue eyes. It can change color depending on the environment and mood, going from green to very dark brown (almost black), passing though an intermediate yellowish green phase. The dark phase is uniform and velvety. The dewlap is yellow with brown scales. Adults are typically 4.5 – 7 cm in length.

**Habitat:** From sea level habitats (mangroves, wet forest) to highland wet forests. This species is associated with perches of large diameter. This species' ecomorph is considered as trunk-ground specialist.

**Behavior:** Males exhibit territoriality and behavior similar to *A. cristatellus*. Its diet consists of invertebrates, fruits, and nectar from flowers. Like other anoles, this species is oviparous.

**Conservation Status:** The Emerald Anole is not listed at the federal/state level or NatureServe Ranking. It has not been assessed by the IUCN redlist.



**Common Name: PUERTO RICAN BUSH ANOLE**  
(*Anolis pulchellus*)

**Spanish Common Name:** LAGARTIJO JARDINERO, LAGARTIJO DE LAS YERBAS

**Distribution:** Native to Puerto Rico, British and US Virgin Islands.

**Military Interactions:** Common on Fort Buchanan. It can be found on fences next to forests or in any open areas such as lawns and fields.

**Description:** The Bush Anole is yellowish brown or brownish gray. It is easily distinguish by a brown band that extends laterally from the head to shoulders and a cream line that extends from tip of snout to near groin or tale if female. It is characterized by having a long thin trunk. The dewlap is bluish pink to purplish near the throat, merging to bright red, with yellow scales in the margins. Its average size ranges from 3.9 – 5 cm SVL. Males may have a dorsal crest.

**Habitat:** It is widespread in lowland grasslands and uplands in disturbed areas. It can be found in gardens, coffee plantations, and pastures with rocky outcrops. It can be seen running through grass, under logs, rocks, tree stumps and surface debris where it can hide. This species' ecomorph is considered a grass-bush specialist.

**Behavior:** Diurnal. Diet consists of invertebrates. Can swim on the surface of water to escape from danger and like other anoles are territorial with males making aggressive displays to other males. This lizard lays egg and its mating season occurs in fall and spring.

**Conservation Status:** The Bush Anole is not listed at the federal/state level or NatureServe Ranking. It has not been assessed by the IUCN redlist.



Juvenile *A. stratulus*



Juvenile *A. stratulus*

**Common Name: PUERTO RICAN SPOTTED ANOLE**  
(*Anolis stratulus*)

**Spanish Common Name: LAGARTIJO MANCHADO**

**Distribution:** Native to Puerto Rico, British and US Virgin Islands.

**Military Interactions:** Common on Fort Buchanan and can be seen on buildings, light posts, fences, in forest edges and forests. When seen in forest/forest edge it can be found on tree trunks or in the crown of trees.

**Description:** The Puerto Rican Spotted Anole is gray or brownish gray, and it has hour glass-shaped spots dorsally. They have shorter limbs and are slender than the crested anole. The dewlap is orange with yellow scales and males have no crest. Their average size can range from 3.5 -5.5 cm SVL and their weight ranges from 1.2 - 3.5 g.

**Habitat:** It is widespread in urban/suburban, xeric- and wet-forests, lowlands and highlands. They perch in leaves, twigs, branches and trunks even in urban habitats. Ecomorph is considered as trunk-crown specialist.

**Behavior:** Diurnal. Diet consists of insects and other invertebrates. Oviparous and their mating season is from February to summer. Like other anoles males make aggressive displays to defend their territories.

**Conservation Status:** The Puerto Rican Spotted Anole is not listed at the federal/state level or NatureServe Ranking. It has not been assessed by the IUCN redlist.



**Common Name: PUERTO RICAN BOA**  
(*Chilabothrus inornatus*)

**Spanish Common Name:** BOA DE PUERTO RICO, CULEBRÓN

**Distribution:** Endemic to Puerto Rico (including several cays and Culebra).

**Military Interactions:** On Fort Buchanan, it is found primarily inside forest fragments, but can occasionally be seen in developments (buildings and housing). Can also be found along the forest edge of the golf course basking in the sun.

**Description:** Largest snake found on Fort Buchanan. Mature individuals can range from 110 - 270 cm and weigh of up to 2310 g. Its color can vary from dull brown, light tan, mahogany red or gray with dark splotches along body.

**Habitat:** Primarily arboreal and found in forested areas. Can occasionally be seen in urban areas and open habitats.

**Behavior:** Non-venomous species that uses constriction to kill prey. It camouflages well with its surrounding. The mating season usually starts in the spring or rainy season and then gives birth to live young in the early fall.

**Conservation Status:** The Puerto Rican Boa is classified as Endangered by federal laws (US-FWS) and as Vulnerable by state laws. The species has no NatureServe ranking. It appears as Least Concern by IUCN Redlist.

**Non-venomous**

The Boa is a protected species and is monitored on the installation.

Please report any sightings to the following departments:

DPW-Environmental Division POC: (787) 707-3508; -3575; -3522|

Pest Control POC: (787) 707-4864; (787) 407-4864

Emergency Services POC: (787) 707-3337



**Common Name: PUERTO RICAN RACER**  
(*Borikenophis portoricensis*)

**Spanish Common Name:** CORREDORA DE PUERTO RICO

**Distribution:** Native to Puerto Rico, British and US Virgin Islands.

**Military Interactions:** On Fort Buchanan it can be observed inside forest fragments and along the forest edge of the golf course area.

**Description:** Second largest snake on the island and on Fort Buchanan. It is mainly ground-dwelling, but can be found in trees. It is distinguished by its brown to olive brown dorsal coloration and whitish color ventrally. Sometimes, scale edges are darker. Adults can grow up to 80 cm SVL.

**Habitat:** It uses different types of habitats from coastal plains to forested middle elevations.

**Behavior:** Primarily diurnal, although it has been observed active during the night on Fort Buchanan. Diet consists of vertebrates such as coqui frogs, lizards, and other snakes. The Puerto Rican Racer can exhibit aggressive behavior when cornered and will bite. When cornered it will rise the upper part of its body and expand its neck in cobra-like fashion. This is a rear-fanged snake and its venom is toxic enough to paralyze its small prey. They are oviparous and will lay eggs from March to May. Generally not dangerous to people, although some people may be allergic to their venom and if bitten there can be swelling and bleeding round the bite.

**Conservation Status:** The Puerto Rican Racer is not listed at the federal/state level or Nature Serve Ranking. It is not listed in the IUCN redlist.



**Common Name: PUERTO RICAN RACERLET**  
(*Magliophis stahli*)

**Spanish Common Name:** CULEBRA DE JARDÍN

**Distribution:** Endemic to Puerto Rico.

**Military Interactions:** It is an uncommon snake species on Fort Buchanan with only four individuals observed. It could be found in forest edges or near forest edges around Las Colinas, K-9, Water Tank and Building 34 forest fragments.

**Description:** Third largest snake on Fort Buchanan (~45 cm SVL). It is a ground-dwelling species distinguished by its wood brown to reddish brown color. It has a darker brown lateral band that start at the tip of the snout and extend to the tail. It has a whitish cream color on its belly. Its eye pupils are round.

**Habitat:** It uses coastal forest, rainforest, dry forest, gardens, coffee plantations, and pastures with rocky outcrops. It can be seen gliding through grass, under logs, rocks, tree stumps and surface debris where it can hide.

**Behavior:** Little is known due to its secretive habits. All individuals have been observed foraging during the night on Fort Buchanan, but there are observations outside the installation of them foraging in early evening. Diet consists of coqui frogs and their eggs, small lizards and eggs and adults of *Typhlops* sp and *Amphisbaena* sp. It uses envenomation to kill its prey. This species is oviparous and may lay eggs of about 2-2.5 cm in length in “nests”. It is not an aggressive snake.

**Conservation Status:** The Puerto Rican Racerlet is not listed at the federal/state level or Nature Serve Ranking: It is listed as Least Concern in the IUCN redlist.

\*Photo on the left taken by Eneilis Mulero-Oliveras, and photo on the right taken by Alberto López

# Amphibians



**Common Name: MARINE TOAD**  
(*Rhinella marina*)

**Spanish Common Name:** SAPO COMÚN, SAPO DE LA CAÑA

**Distribution:** Wide distribution. Native to Southern USA, Central America and Northern South America. Introduced to Puerto Rico in the 1920's as a biological control agent for crop pests.

**Military Interactions:** It is the most common toad on Fort Buchanan and can be seen in any urban area near water, in gardens, hidden under debris, or beneath houses.

**Description:** The Marine Toad is a large toad with short legs and a short, rounded snout. Adults have rough, warty skin and colors may vary from tan, brown or dark brown, dull green or black some individuals may have darker dorsal patterns. Males are slightly smaller than females. Size typically ranges from 12-15 cm, but can grow up to 30 cm. This toad is poisonous and secretes a cardiotoxic venom from glands that are located above the shoulder. The tadpoles are also poisonous. The voice of males is a motor-like trill.

**Habitat:** Found in humid areas with adequate cover, including cane fields, savanna, open forest, wetlands, and urban areas with watered yards and gardens. It can be found by day beneath fallen trees, leaf litter, or other debris. It can adapt to various climates including dry areas.

**Behavior:** This is a nocturnal species that is most active during/after rain events. Eats mostly invertebrates but will consume just about any animal it can fit in its mouth. Its mating season ranges from April to September and a female can lay approximately 35,000 eggs in one reproductive event. The eggs are laid in rosary strings that can be entangled on rocks, plants and other submerged objects. The eggs develop into small black tadpoles.

**Conservation Status:** The Marine Toad is not listed at the federal/state level. It has a Nature-Serve Rating of G5-Secure, and is listed as Least Concern by the IUCN Red list. It is also listed as an invasive species by the Global Invasive Species Database of the IUCN. This toad will eat any terrestrial animal small enough to fit in its mouth, and there have been reports of native predators dying from the toad's poison.

**NOTE:** Because this species can secrete a poisonous compound from its glands, you should wash your hands immediately after handling one.



**Common Name: PUERTO RICAN DITCH FROG, PUERTO RICAN WHITE-LIPPED FROG**

*(Leptodactylus albilabris)*

**Spanish Common Name: RANITA DE LABIO BLANCO**

**Distribution:** Native to Puerto Rico (including Vieques and Culebra), Dominican Republic, US and British Virgin Islands.

**Military Interactions:** This is a common frog species on Fort Buchanan and can be seen in any muddy area near streams, wetlands, drainage ditches or ponds. They often call in the evening (after 6pm) from muddy areas with stagnant water.

**Description:** The Puerto Rican Ditch Frog is smooth and not warty like a toad. It is usually grayish yellow or brownish yellow with darker longitudinal streaks and spots. It has a characteristic white upper lip, barred thighs, black streaks within snout and shoulders and webless fingers and toes. Adults may grow up to 3.5 cm although individuals of 5 cm have been found at higher elevations. The voice of males is a characteristic “pink, pink, pink”.

**Habitat:** It is semi-aquatic, inhabiting streams, marshes, and irrigated fields, as well as drainage ditches and gutters in both forested, open country and urban areas.

**Behavior:** This is a nocturnal frog. Its diet consists of insects and other invertebrates. The mating season appears to be year-round. The female lays its eggs in a nest of foam, often under a rock, and the tadpoles remain there until a downpour draws them into the water. The tadpoles are brown in color.

**Conservation Status:** The Puerto Rican Ditch Frog is not listed at the federal/state level or has a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.

\*Photos by Mel J. Rivera



**Common Name: PUERTO RICAN WHISTLING FROG**  
(*Eleutherodactylus cochranae*)

**Spanish Common Name:** COQUÍ PITITO

**Distribution:** Native to Puerto Rico (including Vieques and Culebra), US and British Virgin Islands.

**Military Interactions:** This is a common frog in the forests of Fort Buchanan. They can be found in bromeliads, on heavily vegetated tree trunks or hidden in yards and gardens. Their call can be heard during the night and after rain.

**Description:** The Puerto Rican Whistling Frog is smooth-skinned. It is gray or brown with an inverted parenthesis pattern that is generally darker than the background color. Adults have an average size of 1.94 – 2.18 cm with males slightly smaller than females. This is one of the smallest frog species from Puerto Rico. They also have webless fingers and toes. The voice of males is a characteristic fine whistle song followed by 2-3 short “clicks” sound.

**Habitat:** Inhabits bogs, meadows, dry forests, pastures, gardens in urbanized areas and in many of these habitats is found in bromeliads. In humid areas it is found closer to the ground (up to 2.5 m above ground) compared to dry forests (up to 8 m above ground).

**Behavior:** Crepuscular/nocturnal and its diet consists of insects and other invertebrates. The mating season appears to be year-round. Females lay terrestrial eggs and male takes care of them until the eggs hatch. Coquis do not have a tadpole stage, but rather have direct development where young hatch as tiny froglets.

**Conservation Status:** The Puerto Rican Whistling Frog is not listed at the federal/state level or has a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: PUERTO RICAN RED-EYED FROG; PUERTO RICAN RED-EYED COQUI**

*(Eleutherodactylus antillensis)*

**Spanish Common Name: COQUÍ CHURÍ**

**Distribution:** Native to Puerto Rico, US and British Virgin Islands. Introduced to Panama City, Panama.

**Military Interactions:** This is a common frog species on Fort Buchanan and can be seen in urban areas, gardens and well-watered yards, forest edges and inside forests calling from leaves. They are heard during the night or after rainy events, but may be difficult to observe since they are carefully hidden.

**Description:** The Puerto Rican Red-eyed Coqui is a smooth-skinned frog. Its colors vary from light gray to light brown to brown and may or may not have a fine line in the back. It has distinct red eyes and has a marbled pattern on the thighs. They also, have webless fingers and toes. The average size of adults is 2.34 – 2.94 cm. Males are slightly smaller than females. The voice of males is a characteristic “chu-rí, chu-rí, chu-rí”.

**Habitat:** Located in all of Puerto Rico. This species is common in urban areas and grasslands. It can be found from the plains to the mountains, but it does not reach the highest peaks. Can be found in dry areas if there is appropriate refuge. Can be found from ground to 1.8 m above ground.

**Behavior:** Nocturnal and terrestrial frog. Diet consists of insects and other invertebrates. The mating season appears to be year-round. Females lay terrestrial eggs and males take care of eggs until they hatch. Coquis do not have a tadpole stage, but rather have direct development where young hatch as tiny froglets.

**Conservation Status:** The Red-eyed Coqui is not listed at the federal/state level or has a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: PUERTO RICAN FROG**  
(*Eleutherodactylus coqui*)

**Spanish Common Name: COQUÍ COMÚN**

**Distribution:** Native to Puerto Rico, but has been introduced to US Virgin Islands, Dominican Republic, and United States (Florida, California and Hawaii Islands).

**Military Interactions:** It is the most common frog on Fort Buchanan and can be found in gardens, buildings, grasslands/open habitats and inside the forest. Their call can be heard during the night and sometimes during the day after rain.

**Description:** The Puerto Rican Frog is usually brown or chestnut gray but sometimes it can be cream and in very rare occasions it can be reddish. A reddish or orange coloration may be present on the thighs. Adults are 5.03 – 6.3 cm. and males are slightly smaller than females. They also have webless fingers and toes. The voice of males is a characteristic “co-qui, co-qui”.

**Habitat:** This species is associated with many habitats including mesic broadleaf forest and developed habitats. They are often found in bromeliads, under logs or rocks, in palm axils, curled leaves, or in tree holes. Can be found on the ground or up in the canopy.

**Behavior:** This species is crepuscular/nocturnal and its diet consists of insects and other invertebrates. The mating season is year-round, but breeding activity is highest during the rainy season. Females lay terrestrial eggs and male takes care of them until they hatch. Coquis do not have a tadpole stage, but rather have direct development where young hatch as tiny froglets.

**Conservation Status:** The Puerto Rican Frog is not listed at the federal/state level. It has a NatureServe Ranking of G4-Apparently Secure. It is listed as Least Concern by the IUCN redlist and as an invasive species outside its native range by the Global Invasive Species Database of the IUCN.



Adult *O. septentrionalis*



Juvenile *O. septentrionalis*

**Common Name: CUBAN TREEFROG, GIANT TREEFROG**  
(*Osteopilus septentrionalis*)

**Spanish Common Name:** RANA CUBANA

**Distribution:** Native from Bahamas, Cayman Islands and Cuba. Introduced to Puerto Rico, United States (Florida and Hawaii Islands), US and British Virgin Islands.

**Military Interactions:** On Fort Buchanan, it is found primarily in or near wetlands where males call at night.

**Description:** The Cuban Treefrog is a large frog ( up to 14 cm) with warty skin. The color may vary from emerald green, gray, brown, brown and silver. It has transverse bars in its extremities. They have big toepads and there is no webbing between toes of front legs; however, the rear toes are slightly webbed. The voice of males is variably pitched, and sounds like a rubber duck.

**Habitat:** Associated with wetlands, forests and urban habitats. They congregate in temporary pools, flooded pastures, and drainage ditches to breed. They can be located on the ground or in trees.

**Behavior:** This is a nocturnal and terrestrial frog that eats insects, lizards, and other frogs. They may also be cannibalistic. The mating season occurs during the rainy season. Males call from vegetation near pooled rainwater. Females lay eggs in water bodies and eggs hatch into black tadpoles.

**Conservation Status:** The Cuban TreeFrog is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist and as an invasive species outside its native range by the Global Invasive Species Database of the IUCN.

**NOTE:** Wash your hands after handling Cuban Treefrogs because they secrete a substance that may cause irritation to skin and eyes.

# Invertebrates



**Common Name: BANDED CARACOL**  
(*Caracolus bornii*)

**Spanish Common Name:** CARACOL DE BANDA ESPIRAL DE LAS COSTAS

**Distribution:** Native to Puerto Rico but has been introduced in Florida.

**Military Interactions:** Common on Fort Buchanan. Found in gardens, forests and forest edges. Most often found in tree trunks, at the base of trees, and on house walls.

**Description:** The Banded Caracol has a flattened, light tan shell with a darker band that extends throughout the shell in a spiral pattern. It has two pairs of tentacles on its head. The longer pair is for the eyes and the shorter pair is for smelling and feeling. The animal is capable of retracting completely into its shell. Its shell can measure up to 4 cm.

**Habitat:** Most abundant and predominant in coastal moist forests. Primarily occurring on or around tree trunks.

**Behavior:** Nocturnal, terrestrial mollusk. This species is hermaphroditic and lays eggs.

**Conservation Status:** The Banded Caracol is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It has not been assessed by the IUCN redlist and appears as invasive in the Center for Invasive Species and Ecosystem Health.



**Common Name: RASPING NIPPLE SNAIL**  
(*Granodorus lima*)

**Spanish Common Name:** CARACOL NODULOSO PARDO

**Distribution:** Native to Puerto Rico.

**Military Interactions:** Common on Fort Buchanan. Found in forests and forest edges. Most often found on tree trunks and on leaves of terminal branches.

**Description:** The Rasping Nipple Snail has a spiraling, light brown shell with regularly spaced, small raised bumps that give the feeling of an abrasive file. The shell is dull (not glossy) and has no color patterns/markings. The animal is capable of retracting completely into its shell. The body is dark brown with a pale brown foot. Individuals can grow up to 2.5 cm in diameter.

**Habitat:** Predominantly found in coastal moist forests on tree trunks.

**Behavior:** Nocturnal, terrestrial mollusk. This species lays calcareous eggs.

**Conservation Status:** The Rasping Nipple Snail is not listed at the federal/state level. It does not have a NatureServe Ranking and has not been assessed by the IUCN redlist.



**Common Name: TREE SNAIL**  
(*Caracolus caracolla*)

**Spanish Common Name:** CARACOL ARBÓREO CASTAÑO DE BOSQUES PLUVIALES

**Distribution:** Native to Puerto Rico.

**Military Interactions:** Common on Fort Buchanan. It is found in gardens and on trees (forest/ outside forest).

**Description:** The Tree Snail has a circular, symmetrical and brownish flattened shell and its body is also brown. It has two pairs of tentacles on its head; the longer pair is for the eyes and the shorter pair for smelling and feeling. The animal is capable of retracting completely into its shell. It is one of the largest snails on the island with a shell that can measure 7-10 cm.

**Habitat:** Distributed widely in Puerto Rico from wet forests of the central region to forests near the coast. Primarily occurs in moist areas. In cool wet climates it is found more often on tree trunks, but in dryer and hotter climates, it is more often found in leaf litter.

**Behavior:** Nocturnal, terrestrial mollusk. Diet consists of diatoms, wood cells, plant hairs and leaf cells. Snails are long lived. One snail was documented with a life span of 15 years. The mating season occurs year-round and they can lay ~ 20 calcareous eggs that are as big as an anole egg. This species is hermaphroditic.

**Conservation Status:** The Tree Snail is not listed at the federal/state level and does not have a NatureServe Ranking. It has not been assessed by the IUCN redlist.



**Common Name: SLUGS**  
(*Veronicella cf. cubensis*)

**Spanish Common Name:** BABOSA, LAPA O SIETE CUEROS

**Distribution:** The most common species is of Cuban origin (*V. cubensis*). Only one species is endemic to Puerto Rico (*V. portoricensis*).

**Military Interactions:** Common inside Fort Buchanan, most frequently encountered after wet weather. They are found on the ground, tree snags, trunks, leaf litter and under rocks, and usually emerge from their refuges after rain.

**Description:** The Cuban Slug has a variable coloration, but the most common morph is one with two darker stripes that run down the length of its back and parallel to a light tan dorsal band. The body is dark brown. Individuals can grow up to 5 – 7 cm long.

**Habitat:** Associated with croplands, grasslands and suburban habitats. Found on the ground, under leaf litter, rocks and other objects.

**Behavior:** Terrestrial mollusk. This species lays 20-30 translucent eggs.

**Conservation Status:** The slug is not listed at the federal/state level. The Cuban Slug (*V. cubensis*) has a NatureServe Ranking of G5-Secure. It has not been assessed by the IUCN redlist. *V. cubensis* is considered an agricultural pest.



**Common Name: MILLIPEDES**

(*Anadenobolus arboreus* and *A. monolicornis*)

**Spanish Common Name:** MILPIÉS, GONGOLÍ, GUNGULEN

**Distribution:** Endemic to Puerto Rico.

**Military Interactions:** Common in Fort Buchanan on trunks and branches inside the forests and forest edges. Can be found in gardens and inside houses after rain events.

**Description:** Millipedes have long cylindrical bodies divided by segments or rings. Arboreal species have 40-50 simple eyes that detect light. Coloration is variable depending on the subspecies. On Fort Buchanan there have been observations of the Yellow-banded Millipede which is black with yellow bands and *A. arboreus* subspecies that has alternate black, white, and gray bands with dull red-orange spots. This subspecies has yellow antennae and black legs that end in yellow. These species can grow up to 13 cm with a diameter of 0.8 cm.

**Habitat:** Tree trunks and branches. The Yellow-banded can be found on the ground under leaf litter and other objects. Widely distributed in an array of forests, but subspecies will vary depending on the region of Puerto Rico.

**Behavior:** Terrestrial arthropod. Diet consists of leaf litter and decomposing vegetative material. Some subspecies have been observed eating soft scales, wax scales and tortoise scales which are insects that are considered agricultural pests. In the tropics reproduction can vary throughout year; they have separate sexes (not hermaphrodites).

**Conservation Status:** The millipedes in Puerto Rico are not listed at the federal/state level. They do not have a NatureServe Ranking and have not been assessed by the IUCN red list.



**Common Name: HUNTSMAN SPIDERS**  
(*Selenops cf. lindborgi*)

**Spanish Common Name:** ARAÑA BOBA, ARAÑA CANGREJO

**Distribution:** Widely distributed in Puerto Rico. Most common species is *S. lindborgi*.

**Military Interactions:** Common inside Fort Buchanan. Found on tree trunks inside forests and forest edges, and can be found inside houses and on fences. They are usually welcome inside houses since they eat cockroaches.

**Description:** It has a brown and tan body with legs that have dark and lighter alternate bands. Distinguished by having flattened bodies. Their body is short but wide and legs are long, although not as long as other species from the Sparassidae family (*Olios* sp and *Heteropoda* sp). They have a peculiar eye pattern consisting of 6 simple eyes in a frontal line and two posterior simple eyes. This spider species can glide through the air when jumping from the tree canopy.

**Habitat:** Rocks and under loose bark of trees which is where they most frequently occur. Can be seen in urban areas (inside houses, fences, among others).

**Behavior:** Can move rather quickly in any direction. Diet consists of other invertebrates such as cockroaches. When they reproduce, females prepare a silk bag where they lay the eggs and attach it to a surface.

**Conservation Status:** This spider is not listed at the federal/state level. It does not have a NatureServe Ranking and has not been assessed by the IUCN red list.



**Common Name:** MAY BEETLES, JUNE BEETLES  
(*Phyllophaga vandinei* and *P. portoricensis*)

**Spanish Common Name:** CACULOS DE MAYO, GUSANOS BLANCOS

**Distribution:** Widely distributed in Puerto Rico.

**Military Interactions:** Common inside Fort Buchanan. Found inside forests, urban areas and in gardens. Can be found near lighting of houses and other buildings.

**Description:** Brown-colored scarab. Larvae are white and fleshy.

**Habitat:** Larvae live underground while adults are found in ground foliage or trees and bushes.

**Behavior:** This species is herbivorous and the larvae feed on detritus and the roots of plants, especially grasses. It is attracted to light, which is why it can often be found near light-sources at night.

**Conservation Status:** This beetle is not listed at the federal/state level. It does not have a NatureServe Ranking and has not been assessed by the IUCN red list. Larvae are considered sugar cane pests and were once considered a major threat to the Puerto Rican economy.



Males of *A. s. cubana*

**Common Name: MIGRANT SULPHUR, PALE SULPHUR**  
(*Aphrissa statira cubana*)

**Distribution:** Occurs from Texas to Argentina, including Florida and the Caribbean. This subspecies occurs in Cuba, Cayman Islands, Jamaica and Puerto Rico.

**Military Interactions:** Males can be observed flying in groups in open areas near streams at Fort Buchanan.

**Description:** This species display sexual dimorphism. Females have lemon yellow wings with a black border at the apex margin and a solid black spot in the outer margin, whereas males have a pale yellow outer half of wing and yellow lemon inner half. Wing span can be from 6 – 8 cm.

**Habitat:** Tropical scrub, gardens, fields and forest edges.

**Behavior:** Mostly observed on flowers or when males congregate on the ground foraging for water and nutrients (behavior called puddling). Females deposit eggs in a variety of plants, but prefer members of the Fabacea family.

**Conservation Status:** This subspecies is not listed at the federal/state level. It has a G5-Secure ranking. This species has not been assessed by the IUCN redlist.



**Common Name: LONG-TAILED SKIPPER**

*(Urbanus proteus domingo)*

**Distribution:** Occurs from Texas to Argentina, Florida and the Caribbean.

**Military Interactions:** Can be observed jumping or flying erratically from plant to plant in forest fragments, fields, and gardens at Fort Buchanan.

**Description:** This butterfly has a long tail. Their upperside is dark brown while body and wing bases are iridescent blue-green. The apex of the antenna forms a hook. Its wing span ranges from 4.5 -6 cm.

**Habitat:** Brushy fields, forest edge, gardens and other disturbed open habitats.

**Behavior:** They have an erratic flight and seem to jump from plant to plant. Females deposit their eggs in a variety of plants, but prefer Leguminosae which can make their caterpillars pests on snap beans.

**Conservation Status:** The skipper is not listed at the federal/state level. It is considered G5-Secure but has not been assessed by IUCN criteria.

# Birds



**Common Name: PIED-BILLED GREBE**  
(*Podilymbus podiceps*)

**Spanish Common Name:** ZARAMAGO

**Distribution:** Common permanent resident in Puerto Rico. Found in permanent waterbodies across the island. Throughout West Indies on larger and moderate sized islands that have wetlands. Has the largest American distribution of any grebe, ranging from Central Canada to South America.

**Military Interactions:** Can be found on the golf course ponds and other permanent ponds of Fort Buchanan.

**Description:** A small, stocky, short-billed and short-necked bird. They are 31-38 cm long and weigh about 250-550 g. They have a short, blunt bill with a vertical dark stripe bisecting it (during summer breeding season). They are generally brown in coloration although under their tails they have white under-feathers. They do not have webbed feet and instead the toes are lobed allowing them to swim easily.

**Habitat:** All water bodies including marshes, ponds, and sluggish rivers.

**Behavior:** Pied-billed Grebes rarely fly. Instead, they slowly swim around wetlands and dive to avoid predators and hunt food. When diving they catch aquatic invertebrates, fish, and amphibians. Like other grebes, they will sometimes eat their own feathers to aid in digestion. They build nests of floating vegetation and lay 3-10 bluish, elliptical eggs. When they hatch, the young will occasionally ride on the backs of the parents. Legs are positioned far back on the body which allows for excellent propulsion when diving, but means they have great difficulty walking on land.

**Conservation Status:** The Pied-Billed Grebe is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure.



**Common Name: GREEN HERON**  
(*Butorides virescens*)

**Spanish Common Name:** MARTINETE

**Distribution:** Breeds in Puerto Rico and other Caribbean islands, as well as North and Central America. Common, year-round resident.

**Military Interactions:** Common throughout Fort Buchanan, especially near small pools of freshwater and along Toro Creek. Can be seen in forest edges near a water body.

**Description:** A relatively small wading bird (41 -46 cm; 240 g), the Green Heron has a dark cap, iridescent green plumage on the back and wings, and chestnut on the sides of its neck and chest, with white and chestnut streaks in the middle of its breast, and a white belly. It has a long, straight, dark beak. Immatures are duller and more streaked. Its legs are greenish-yellow to orangish although breeding adults have bright orange legs.

**Habitat:** All water bodies.

**Behavior:** It is generally a solitary bird although can be seen in pairs. It catches its prey by standing and waiting motionless and then striking with its bill. It sometimes uses bait such as twigs, leaves, worms, flies, or pieces of bread to lure fish in. Its diet consists of fishes, frogs, small lizards, and invertebrates. Females lay 3 – 5 blue-green eggs in nest constructed of trigs and sticks, usually placed over or close to water.

**Conservation Status:** The Green Heron is not listed at the federal/state level. It has a Nature-Serve Ranking of G5-Secure. It has not been assessed with IUCN criteria.



**Common Name: SNOWY EGRET**  
(*Egretta thula*)

**Spanish Common Name:** GARZA BLANCA

**Distribution:** Year-round resident of Puerto Rico and most Caribbean islands. Distributed from the Southeastern United States to southern South America. Found around permanent wetlands but may be absent from high elevation sites.

**Military Interactions:** Relatively common on Fort Buchanan around Toro Creek and the permanent wetlands.

**Description:** Small egret identified by entirely white plumage, yellow feet, and bright yellow lores. Bill is black and legs are dark as well.

**Habitat:** Marshes, ponds, creeks, and rivers.

**Behavior:** Snowy Egrets nest in mixed species colonies. Feeds on fish, frogs, and large invertebrates. Exhibits a wide range of foraging behaviors, including sit and wait, running after prey, stomping their feet in the mud to flush fish, and following after diving birds to catch fish trying to escape the divers.

**Conservation Status:** The Snowy Egret is not listed at the federal/state level. It has a Nature-Serve Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: OSPREY**  
(*Pandion haliaetus*)

**Spanish Common Name:** AGUILA PESCADORA

**Distribution:** Migrant species in Puerto Rico during winter. This species breeds in North America and winters in the Caribbean. Common during winter.

**Military Interactions:** Observed flying over Fort Buchanan, especially near the large pond and over Toro Creek.

**Description:** Large sized hawk (55 – 58 cm; 1,200 – 2,000 g) that is brown above and white below, with a white head and dark eye-stripe.

**Habitat:** Sea coasts, lakes and along rivers that can be in urban environments.

**Behavior:** Large hawk that flaps above the water searching for fish. They plunge, feet first into the water to grab their prey. When they fly with a fish in their talons, they generally position its head facing forward to reduce drag.

**Conservation Status:** The Osprey is not listed at the federal/state level. It has a NatureServe Ranking of and it does not have a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: RED-TAILED HAWK**  
(*Buteo jamaicensis*)

**Spanish Common Name:** GUARAGUAO COLIRROJO

**Distribution:** Migrant species in Puerto Rico during winter. This species breeds in North America and winters in the Caribbean. Common during winter.

**Military Interactions:** Observed perched in large trees near open areas of Fort Buchanan.

**Description:** Red-tailed Hawks are large hawks with typical Buteo proportions: very broad, rounded wings and a short, wide tail. Most Red-tailed Hawks are rich brown above and pale below, with a streaked belly and, on the wing underside, a dark bar between shoulder and wrist. The tail is usually pale below and cinnamon-red above, though in young birds it's brown and banded. "Dark-morph" birds are all chocolate-brown with a warm red tail. "Rufous-morph" birds are reddish-brown on the chest with a dark belly

**Habitat:** Forested habitat and forest edges, even suburban and urban forests.

**Behavior:** Large hawk often perched on trees or powerline poles overlooking open areas. Frequently seen hunting near roadsides.

**Conservation Status:** The Red-tailed Hawk is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: COMMON GALLINULE**  
(*Tringa solitaria*)

**Spanish Common Name:** GALLARETA COMÚN

**Distribution:** Common year-round resident throughout the West Indies. Becoming more widespread with the creation of golf courses and their associated water traps.

**Military Interactions:** Common on Fort Buchanan on the golf course pond and other permanent water bodies.

**Description:** The Common Gallinule swims like a duck and walks atop floating vegetation like a rail with its long and slender toes. This boldly marked rail has a bright red shield over the bill and a white stripe along its side. It squawks and whinnies from thick cover in marshes and ponds from Canada to South America, peeking in and out of vegetation.

**Habitat:** Freshwater habitats.

**Behavior:** This bird is often seen in small groups on the heavily vegetated golf course pond. They will hide amongst the thick grass or swim around in the open water like a duck.

**Conservation Status:** The Common Gallinule is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: SOLITARY SANDPIPER**  
(*Tringa solitaria*)

**Spanish Common Name:** PLAYERO SOLITARIO

**Distribution:** Migrant to Puerto Rico. Breeds in North America. Winters from Southern Texas to Argentina and the Caribbean Islands. Common winter migrant.

**Military Interactions:** Common on Fort Buchanan around Toro Creek and small pools of freshwater in exposed areas.

**Description:** Medium-sized shorebird (19 - 23 cm; 38 – 69 g) with an olive/brown back with white spots and a white eye ring. Birds in non-breeding plumage have much smaller spots, but the conspicuous eye ring and greenish legs are still distinctive. Often bobs up and down as it walks.

**Habitat:** Small pools of freshwater, ditches, puddles in wetlands, fields and pastures.

**Behavior:** This bird is usually seen singly or in pairs on Fort Buchanan. It wades through shallow water catching aquatic insects, small crustaceans, worms and small frogs. Breeds in the taiga and nests in trees using empty songbird nests, which is unique among shorebirds.

**Conservation Status:** The Solitary Sandpiper is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: KILLDEER**  
(*Charadrius vociferus*)

**Spanish Common Name:** CHORLITO SABANERO

**Distribution:** Nests in Puerto Rico. Breeds throughout North America and along the west Coast of South America, as well as in the Greater Antilles and the Bahamas. Common, year-round resident of Puerto Rico. Also, migrant Killdeer visit the islands in winter.

**Military Interactions:** Common throughout Fort Buchanan, especially in open grassland areas near small pools of freshwater and along Toro Creek.

**Description:** Medium size, heavy-bodied shorebird (20 – 28 cm; 72 - 93 g). It is a brown-backed bird with two black bars across the white breast. Has a white forehead patch bordered by black, and large orange eye-ring. Often very vocal; makes a 'killdeer' call for which it was named.

**Habitat:** Pond edges, fields of low grass, mudflats, golf courses, manicured lawns in residential areas.

**Behavior:** It is generally a solitary bird although can be seen in small flocks. Its diet consists of insects and other invertebrates. This species sounds a high-pitch alarm at the slightest hint of danger. It nests on the ground in open dry or graveled areas. Females lay 3 – 4 eggs that are incubated by both sexes. Birds will perform a broken-wing display in an attempt to draw potential threats away from the eggs or young.

**Conservation Status:** The Killdeer is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is assessed as Least Concern by IUCN criteria.



**Common Name: COMMON GROUND DOVE**  
(*Columbina passerina*)

**Spanish Common Name:** ROLITA

**Distribution:** Nests in Puerto Rico. Occurs from southern United States throughout Caribbean Islands to southern Brazil. Common, year-round resident of Puerto Rico. From 18 subspecies, one is native to Puerto Rico and Virgin Islands (*Columbina p. portoricensis*) and another to Mona Island (*Columbina p. exigua*).

**Military Interactions:** Common throughout Fort Buchanan in urban and forested areas.

**Description:** Small dove (15 – 18 cm; 22 - 42 g). Back and upper-wing plumage is brown and gray, with a scaly pattern on the head and the breast.

**Habitat:** Grasslands, open fields, urban areas and woodlands.

**Behavior:** This birds bobs its head constantly while searching for seeds and berries. They travel in pairs throughout the year and both female and male will vigorously bob their heads before mating. Females lay 2 white eggs in trees, ground, roofs and even house windows. Like other pigeons, they produce pigeon's milk, a thick secretion for feeding the young birds.

**Conservation Status:** The Common Ground Dove is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is assessed as Least Concern by IUCN criteria.



**Common Name: WHITE-WINGED DOVE**  
(*Zenaida asiatica*)

**Spanish Common Name:** TÓRTOLA ALIBLANCA

**Distribution:** Widespread resident from southern Bahamas and across Caribbean islands. Uncommon on northern Bahamas and Puerto Rico. Expanding eastward. On Puerto Rico, typically found in low elevation forest and moist zones of islands. Often found in agricultural areas. Uncommon year-round resident of Puerto Rico.

**Military Interactions:** Common throughout Fort Buchanan in urban and forested areas.

**Description:** When perched, this bird's unspotted brown upperparts and neat white crescents along the wing distinguish it from other doves on Puerto Rico. In flight, the crescents become flashing white stripes. Up close the White-winged Dove has a colorful face, with bright-orange eyes and blue "eye shadow."

**Habitat:** Open forest and grassy areas including suburban and urban areas.

**Behavior:** Like other pigeons, they produce pigeon's milk, a thick secretion for feeding the young birds. These doves are well adapted to living in very dry areas where they feed on nectar and fruit.

**Conservation Status:** The White-winged Dove is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is assessed as Least Concern by IUCN criteria.



**Common Name: ZENAIDA DOVE**  
(*Zenaida aurita*)

**Spanish Common Name:** TORTOLA CARDOSANTERA

**Distribution:** Nests in Puerto Rico. Occurs from northern Yucatan Peninsula to Caribbean Islands, south to Grenada. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common throughout Fort Buchanan mostly in urban areas or forest edges, fences and power line.

**Description:** Medium-sized pigeon (28- 30 cm; 120 – 180 g). A brown bird with an iridescent purple patch on the neck. It has black spots and a thin white bar on the wings. This white bar in the wings and the white outer feathers from the tail are striking in flight.

**Habitat:** Open forests and fields, in urban areas, towns and mangroves.

**Behavior:** It is often seen flying through open fields and searching for food on the ground. They also bob their heads as they walk. Diet consists of seeds, fruits and insects. Females lay 2 white eggs.

**Conservation Status:** The Zenaida Dove is not listed at the federal/state level. It has a Nature-Serve Ranking of G5-Secure and it is listed as Least Concern by IUCN criteria.



**Common Name: MONK PARAKEET**  
(*Myiopsitta monachus*)

**Spanish Common Name:** PERICO MONJE

**Distribution:** Native to South America. Introduced to Puerto Rico. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common in developed areas on Fort Buchanan, particularly in the Coconut Grove housing area.

**Description:** Small parrot (45-53 cm; 90 – 120 g). Mostly green with grey/white throat and forehead; long narrow tail.

**Habitat:** City parks, gardens and farms around Puerto Rico.

**Behavior:** Only member of the parrot family to build large communal stick nests. Very social species; generally seen in groups.

**Conservation Status:** The Monk Parakeet is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist and as an invasive species outside its native range by the Global Invasive Species Database of the IUCN.



**Common Name: WHITE-WINGED PARAKEET**  
(*Brotogeris versicolurus*)

**Spanish Common Name:** PERIQUITO ALIBLANCO

**Distribution:** Native to South America. Introduced to Puerto Rico. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common in developed areas on Fort Buchanan. Commonly seen roosting in colonies, or foraging on fruited Anacaguita trees.

**Description:** Small parrot (25 cm). Mostly green with yellow band bordering wing. Tail is long and pointed. When flying, wings flash large whitish – yellow triangular patches.

**Habitat:** City parks, gardens and farms around Puerto Rico.

**Behavior** The most abundant parakeet in Puerto Rico. It forms large flocks that fly considerable distances in search of fruits and seeds. They nest from February to July in abandoned termite nests or tree cavities.

**Conservation Status:** This parakeet is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: PUERTO RICAN WOODPECKER**  
(*Melanerpes portoricensis*)

**Spanish Common Name:** CARPINTERO DE PUERTO RICO

**Distribution:** Endemic to Puerto Rico. Common, year-round resident.

**Military Interactions:** Common throughout Fort Buchanan. Inside forests, forest edges and developed areas with trees and bushes.

**Description:** Medium size (23 - 27 cm; 70 g) with solid black upper parts, bright red throat and breast, and a white forehead and rump patch. Female has less red than male.

**Habitat:** Found in forested and semi-forested areas.

**Behavior:** Uses its thick, chisel-like bill to extract insects from under tree bark and inside the wood. Has a very long, barbed tongue to pierce prey inside the wood, and sticky saliva to help secure the prey. Diet chiefly composed of invertebrates but will also consume fruits. The Puerto Rican Woodpecker excavates a hole in a tree in which it lays 4 – 6 white eggs. Sometimes it nests in utility poles.

**Conservation Status:** The Puerto Rican Woodpecker is not listed at the federal/state level. It has not been assessed with a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: GRAY KINGBIRD**  
(*Tyrannus dominicensis*)

**Spanish Common Name:** PITIRRE

**Distribution:** Native to North, Central and South America and the Caribbean Basin. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common in developed and forested areas on Fort Buchanan. Frequently observed perched on powerlines.

**Description:** Medium-sized flycatcher (22 – 25 cm; 42 - 48 g) with gray above, white below and a black mask over the eyes. The tail has a slightly forked tip. From below, bill appears triangular in shape.

**Habitat:** Open country, parks, forest edges, urban habitats.

**Behavior:** Sits on exposed perches to catch flying insects, but will also eat fruits. It is an aggressive species in breeding season and will attack possible intruders regardless of their size. In Puerto Rico, this behavior has resulted in the popular expression “cada guaraguo tiene su pitirre”, which translates to “every hawk has its kingbird” (pestering it). Females lay 2 – 5 pink mottled eggs.

**Conservation Status:** The Gray Kingbird is not listed at the federal/state level. It has a Nature-Serve Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: PUERTO RICAN FLYCATCHER**  
(*Myiarchus antillarum*)

**Spanish Common Name:** JUI DE PUERTO RICO

**Distribution:** Endemic to Puerto Rico. Common, year-round resident.

**Military Interactions:** Commonly heard and seen inside forested areas or forest edges throughout Fort Buchanan.

**Description:** Small to medium-sized bird (18 – 20 cm; 23 g) with a dark brown back and light undersides. It has a black, wide and straight beak; also, black legs. It can be detected by its vocalizations, from which its common name in Spanish (Jui) is derived.

**Habitat:** Forested and partially forested areas, including shade coffee plantations and lower elevation forests.

**Behavior:** Often seen perched on branches in the lower and middle levels of the forest, waiting to fly out after insects. Females lay 3 – 6 yellowish eggs with brown spots.

**Conservation Status:** The Puerto Rican Flycatcher is not listed at the federal/state level and does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: RED-LEGGED THRUSH**  
(*Turdus ardosiaecus*)

**Spanish Common Name:** ZORZAL PATIRROJO

**Distribution:** Common and widespread resident of the Greater Antilles including Cuba, Hispanola, Dominica, Puerto Rico, and many of the smaller islands. Widespread on Puerto Rico in many forested habitats, gardens, and plantations. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common throughout Fort Buchanan. Often found in solitary large trees in suburban areas such as the golf course.

**Description:** Medium-sized bird with strikingly red legs and red bill. Often perched with the tail erect in a curious posture. The bird has streaking on its face along its chin. Otherwise, its dark gray or brown on its back and a lighter color on its front.

**Habitat:** Found in bushes and trees in developed and forested areas.

**Behavior:** Curious and aggressive species that is readily seen and heard around the installation including the housing areas, golf course and forests.

**Conservation Status:** This thrush is not listed at the federal/state level and it does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: NORTHERN MOCKINGBIRD**  
(*Mimus polyglottus*)

**Spanish Common Name:** RUISEÑOR

**Distribution:** Widespread across Caribbean islands and ranges as far North as Southern Canada. Located in all regions of Puerto Rico, particularly in lowlands and the south coast. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common throughout Fort Buchanan.

**Description:** Medium-sized bird that is mostly gray and with a long, distinct tail. In flight, bright white stripes are visible in the wings and the tail making this bird easy to distinguish from thrushes and thrashers.

**Habitat:** Found in bushes and trees in developed and forested areas. Most common in suburban areas where it will nest in yards and gardens and sing continuously from fence posts and shrubs.

**Behavior:** Curious and aggressive species that is readily seen and heard around the installation including the housing areas, golf course and forests.

**Conservation Status:** The Northern Mockingbird is not listed at the federal/state level and is listed as G5 by NatureServ. It is listed as Least Concern by the IUCN redlist.



**Common Name: PEARLY-EYED THRASHER**  
(*Margarops fuscatus*)

**Spanish Common Name:** ZORZAL PARDO

**Distribution:** Native to the Greater Caribbean Basin. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common throughout Fort Buchanan.

**Description:** Medium-sized bird (20 – 30 cm; 90 – 150 g) with mostly brown upper body and white belly and chest, streaked with brown. Distinctive light-colored eye.

**Habitat:** Found in bushes and trees in developed and forested areas.

**Behavior:** Curious and aggressive species that is readily seen and heard around the installation including the housing areas, golf course and forests. Known to attack nestlings of other species and so is thought to be a potential conservation threat to some threatened species.

**Conservation Status:** This thrasher is not listed at the federal/state level and it does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: NORTHERN PARULA**  
(*Setophaga americana*)

**Spanish Common Name:** REINITA PECHIDORADA

**Distribution:** Winter migrant in Puerto Rico, other Caribbean islands and Central America. Breeds in North America. Common in winter as well as spring and fall migration.

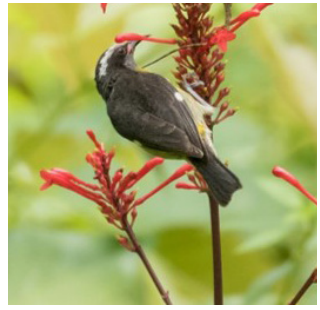
**Military Interactions:** Can be found in forests, forest edges, and landscaped areas with lush vegetation around the installation.

**Description:** Small warbler (11 – 12 cm; 5 g) with bluish upper parts, white wing bars, and a yellow throat and breast. The male has an orange breast band.

**Habitat:** Wide variety of forests that includes primary and secondary forests, gardens, and coastal forests.

**Behavior:** Forms mixed flocks or “temporary social aggregations” with other warblers and resident bird species. Its diet consists of insects that are captured while flying or gleaned from leaves and branches.

**Conservation Status:** The Northern Parula is not listed at the federal/state level. It has a NatureServe Ranking of G5-Secure. It is listed as Least Concern by the IUCN redlist.



**Common Name: BANANAQUIT**  
(*Coereba flaveola*)

**Spanish Common Name:** REINITA COMUN

**Distribution:** Native to the Caribbean (except Cuba), Central and South America. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common just about anywhere there are trees, bushes or flowers throughout Fort Buchanan

**Description:** Small bird (10 - 12 cm; 9 – 10 g) with a strongly decurved bill. It is black above, with a dark gray throat, and a bright yellow belly. It has a white eye stripe and wing patch.

**Habitat:** Forest and open areas with trees, bushes, gardens. Can be located at ground or canopy level.

**Behavior:** It is a noisy bird and is constantly in motion foraging for nectar, fruit, insects and spiders. Can be attracted to sugar water feeders. Females lay 2 – 3 brown-spotted eggs. Both sexes often build separate nests as a safe, night-time roost.

**Conservation Status:** The Bananaquit is not listed at the federal/state level and does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: PUERTO RICAN SPINDALIS**  
(*Spindalis portoricensis*)

**Spanish Common Name:** REINA MORA

**Distribution:** Endemic to Puerto Rico. Common, year-round resident.

**Military Interactions:** Can be found in forests, forest edges and developed areas with trees.

**Description:** A relatively small tanager (17 cm; 22 - 41 g), the male is green above with an orange neck and yellow breast. The head is black with white stripes above and below the eye. The female is dull olive green with a vague suggestion of the male's white stripe pattern on the head.

**Habitat:** Forest, gardens, and plantations with fruiting plants at all altitudes.

**Behavior:** Often travels in pairs, flocks or mixed-species flocks. Important seed disperser and males can be aggressive towards perceived competitors, including their reflection in windows or mirrors. Female lay 2-4 light blue eggs with brown speckling.

**Conservation Status:** The Puerto Rican Spindalis is not listed at the federal/state level and does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: BLACK-FACED GRASSQUIT**  
(*Melanospiza bicolor* )

**Spanish Common Name:** GORRIÓN NEGRO

**Distribution:** Native to South America and the Caribbean Basin. Common, year-round resident of Puerto Rico.

**Military Interactions:** Common in grassland areas and forest edges on Fort Buchanan. Commonly seen in and around the golf course.

**Description:** Small finch (11- 12 cm; 9 – 10 g) with a dark, olive-green back, and black head and undersides. In the breeding season males have a black face. The female is dull olive-green.

**Habitat:** Open, brushy fields and roadsides, gardens, open woodlands and forest clearings. Often perched on fences.

**Behavior:** Travels in pairs or flocks and feeds close to the ground. Diet consists mostly of seeds and can be attracted to bird-feeders. The females lay 2 – 5 eggs that are white with brown spots.

**Conservation Status:** The Black-faced Grassquit is not listed at the federal/state level and does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



Male Saffron Finch



Male Saffron Finch



Female Saffron Finch

**Common Name: SAFFRON FINCH**  
(*Sicalis flaveola*)

**Spanish Common Name:** GORRIÓN AZAFRÁN

**Distribution:** Native to South America, from southern Brazil to Colombia. Common, year-round resident of Puerto Rico.

**Military Interactions:** Very tolerant of humans and commonly seen in grassland areas and forest edges on Fort Buchanan, especially in and around the golf course and residential areas.

**Description:** Small finch (13-15 cm; 12 - 23 g) easily distinguished by its bright yellow coloration. Males have orange coloration on their forehead and face. Females are a duller version of males with streaks on their wings.

**Habitat:** Open, brushy fields, parks, lawns, and roadsides. Often perched on telephone wires and fences.

**Behavior:** Travels in pairs or flocks and feeds close to the ground in short grass. Diet consists mostly of seeds and arthropods. Typically nests in cavities and may use anthropogenic structures such as the eaves of a roof.

**Conservation Status:** The Saffron Finch is not listed at the federal/state level and does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.



**Common Name: PUERTO RICAN ORIOLE**  
(*Icterus portoricensis*)

**Spanish Common Name:** CALANDRIA

**Distribution:** Endemic to Puerto Rico. Common, year-round resident.

**Military Interactions:** Common throughout Fort Buchanan. Mostly in forested areas and forest edges of the golf course, Las Colinas neighborhood, and near wind turbines from Building 34.

**Description:** Medium-sized bird (20 – 22 cm; 37 g). The adult is black, with a yellow wing patch, and yellow patches on the rump and on the underside at the base of the tail. Immature birds are olive green.

**Habitat:** Dry and moist forests. Can be found in urban gardens, forest edges and forested areas.

**Behavior:** Observed hopping through branches searching for insects in the forest canopy and mid-canopy. Their nests are made of grasses woven together into a hanging cup, and often placed in palm trees. They lay 3-4 bluish or brownish eggs.

**Conservation Status:** The Puerto Rican Oriole is threatened by Shiny Cowbird nest parasitism. However, the species is not listed at the federal level and appears as Data Deficient (DD) at the state level. It does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist although the population might be decreasing.



**Common Name: GREATER ANTILLEAN GRACKLE**  
(*Quiscalus niger*)

**Spanish Common Name:** CHANGO, MOZAMBIQUE

**Distribution:** Endemic to Greater Antilles. Common, year-round resident of Puerto Rico.

**Military Interactions:** One of the most common birds found on Fort Buchanan. The Greater Antillean Grackle can be found in any open habitat, often around human structures.

**Description:** Large, glossy black bird (27 cm; 67 – 88 g) with startling yellow eyes. The tail is unusually keel-shaped.

**Habitat:** Can be found in any open areas from open woodlands, marshes, and mangroves to urban and suburban gardens, forest edges and residential areas.

**Behavior:** Noisy, bold, and curious birds that are comfortable around people. They can form large flocks and forage on the ground looking for seeds, insects, or small lizards. They will take handouts from people.

**Conservation Status:** The Greater Antillean Grackle is not listed at the federal/state level and does not have a NatureServe Ranking. It is listed as Least Concern by the IUCN redlist.

**Photo Credits:**

Most photos were taken on site at USAG Fort Buchanan. Eneilis Mulero-Oliveras took images of all non-bird animals unless otherwise noted. Loren Merrill took all photographs of the birds.

**Sources of Information:**

The list of books and websites are recommended for additional information.

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For a complete list of birds in Fort Buchanan use Wolff, P., DeGregorio, B., Rodriguez-Cruz, V., Mulero-Oliveras, E. and Sperry, J. 2017. Bird Community Assemblage and Distribution in a Tropical, Urban Ecosystem of Puerto Rico. *Tropical Conservation Science*, 11: 1 – 10.

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Map showing location of Ft. Buchanan, Guaynabo, 00966, Puerto Rico

