



U.S. Fish & Wildlife Service

Critical Habitat Designations for Puerto Rico and the U.S. Virgin Islands

2014

List of Species with Critical Habitat Designations in
Puerto Rico and the U.S. Virgin Islands:

<u>Species</u>	<u>Federal Register Publication Date</u>
1. St. Croix Ground Lizard (<i>Ameiva polops</i>)	September 22, 1977
2. Culebra Island Giant Anole (<i>Anolis roosevelti</i>)	September 22, 1977
3. Yellow-Shouldered Blackbird (<i>Agelaius zanthomus</i>)	September 22, 1977
4. Golden Coqui (<i>Eleutherodactylus jasper</i>)	November 11, 1977
5. Mona Ground Iguana (<i>Cyclura stejnegeri</i>)	February 3, 1978
6. Mona Boa (<i>Epicrates monensis monensis</i>)	February 3, 1978
7. Leatherback Sea Turtle (<i>Dermochelys coriacea</i>)	September 26, 1978
8. Hawksbill Sea Turtle (<i>Eretmochelys imbricata</i>)	June 24, 1982
9. Monito Gecko (<i>Sphaterodactylus moccropitecus</i>)	October 15, 1982
10. Green Sea Turtle (<i>Chelonia mydas</i>)**	September 2, 1998
11. <i>Catesbaea melanocarpa</i>	August 28, 2007
12. Guajón (<i>Eleutherodactylus cooki</i>)	October 23, 2007
13. Coquí llanero (<i>Eleutherodactylus juanariveroi</i>)	October 4, 2012
14. <i>Agave eggersiana</i>	September 9, 2014
15. <i>Gonocalyx concolor</i>	September 9, 2014
16. <i>Varronia rupicola</i>	September 9, 2014

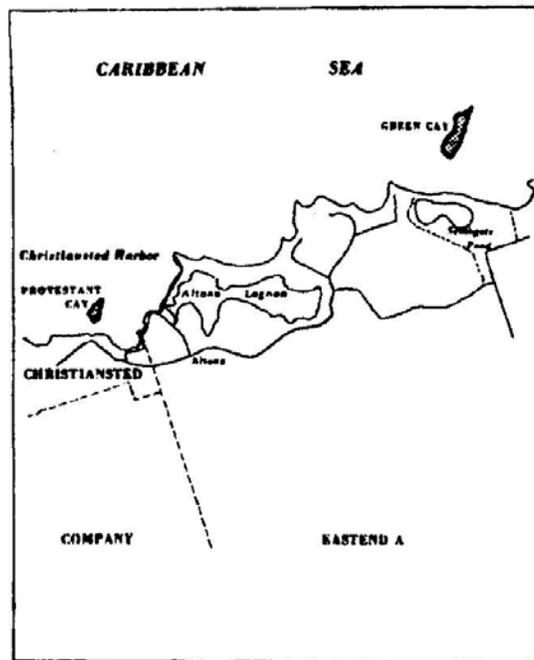
** Critical Habitat Designation by NOAA

US Fish and Wildlife Service

St. Croix Ground Lizard (*Ameiva polops*)

U.S. Virgin Islands. Protestant cay, roughly defined by the coordinates 64°42'15" N. and 17°45'7.5" W.; and Green Cay, roughly defined by the coordinates 67°37'30" N. and 17°45'15" W.

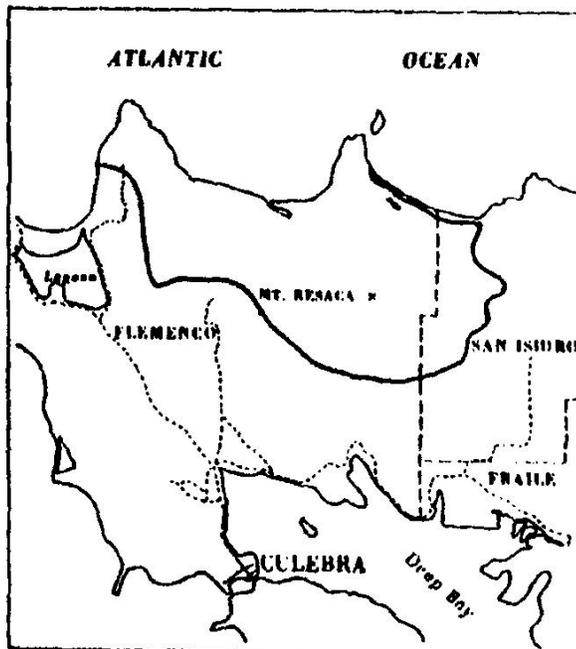
Note: Map follows:



US Fish and Wildlife Service

Culebra Island Giant Anole (*Anolis roosevelti*)

Note: No text. Map follows:



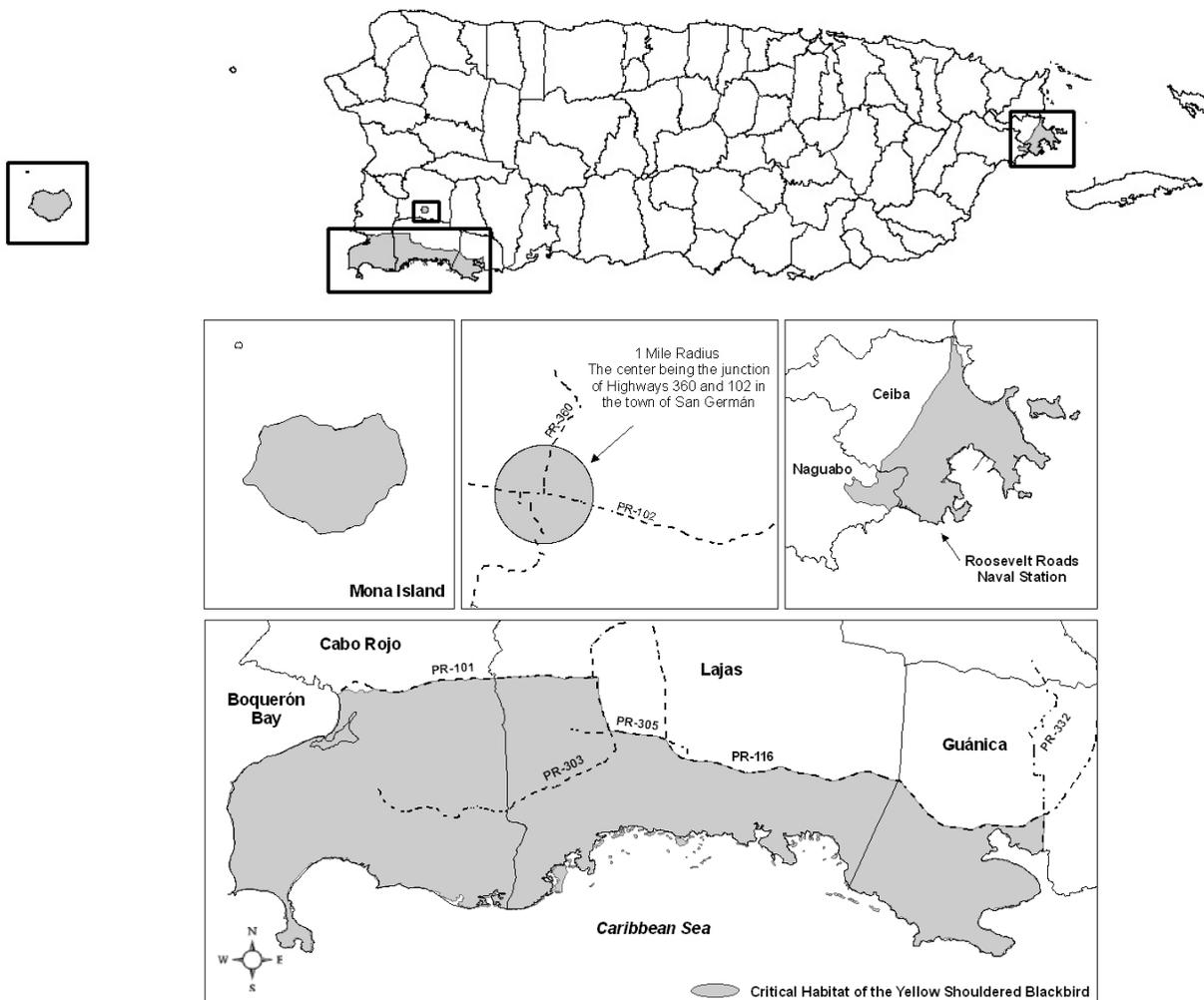
US Fish and Wildlife Service

Yellow-Shouldered Blackbird (*Agelaius zanthomus*)

Puerto Rico. Areas of land, water, and airspace with the following components: (1) All of Mona Island; (2) that portion of the main island of Puerto Rico within the following boundary: Beginning at a point where the Quebrada Boquerón joins the Bahía de Boquerón, thence proceeding southwesterly along coast to Cabo Rojo, thence eastward along the coast, including offshore cays, to the point where Highway 332 meets the Bahía de Guánica, thence northward on Highway 332 to its junction with Highway 116, thence westward on Highway 116 to its junction with Highway 305, thence westward on Highway 305 to its junction with Highway 303, thence northward on Highway 303 to its junction with Highway 101, thence westward on Highway 101 to the point where it crosses Quebrada Boquerón, thence along the Quebrada Boquerón to the point where it joins the Bahía de Boquerón; (3) a circular portion of the main island of Puerto Rico with a one mile radius, the center being the junction of Highways 360 and 102 in the town of San German; (4) Roosevelt Roads Naval Station, southeast of Ceiba.

Note: No map

Note: The following maps are only a representation of the text above. They are not official.



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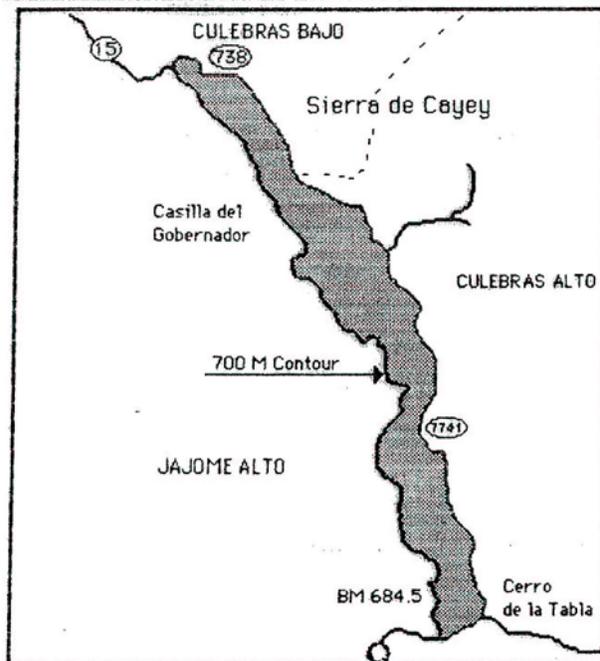
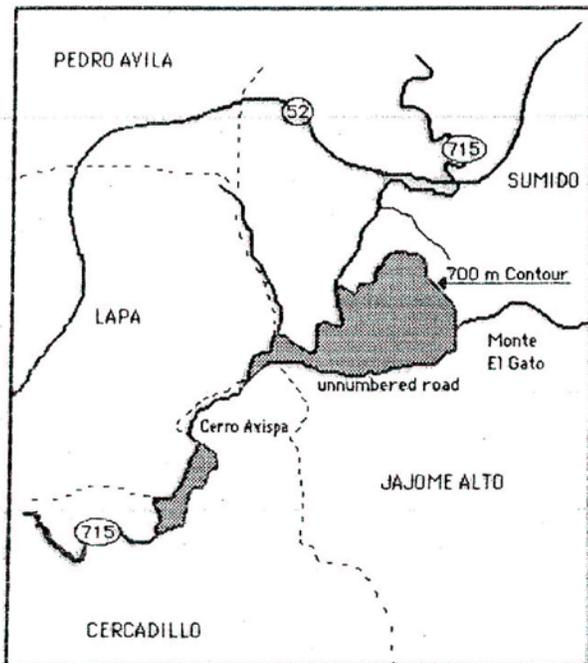
GOLDEN COQUI (*Eleutherodactylus jasper*)

Puerto Rico. Areas of land, water and airspace with the following components: (1) Cerro Avispa-elevation above 700 meters on the south and southeastern slope of the mountain: from the northern junction of Highway 715 and an unnumbered dirt road southeast and southwest along Highway 715 to the southern junction with the same unnumbered dirt road and Highway 715, north and northeast along the unnumbered dirt road just below the southeast facing crest of Cerro Avispa to its junction with Highway 715.

(2) Monte el Gato-entire summit above 700 meters: from the junction of Highway 715 to the junction of Highway 715 and the 700 meter contour interval west along Highway 715 to the junction of Highway 715 and an unnumbered road, north and northeast along this road to where it crosses the 700 meter contour interval, and east along the 700 meter contour interval to where it crosses Highway 715.

(3) Sierra de Cayey-elevations above 700 meters: southeast from the junction of Highways 738 and 15 along Highway 15 to point .5 kilometer south of Benchmark 684.5. northeast from this point in a line to a point on Highway 7741 two kilometers south of the junction of Highway 738 and 7741, north and northwest along Highway 7741 to its junction with Highway 738, and northwest from the junction of Highways 7741 and 738 along Highway 738 to its junction with Highway 15.

NOTE: Map follows:

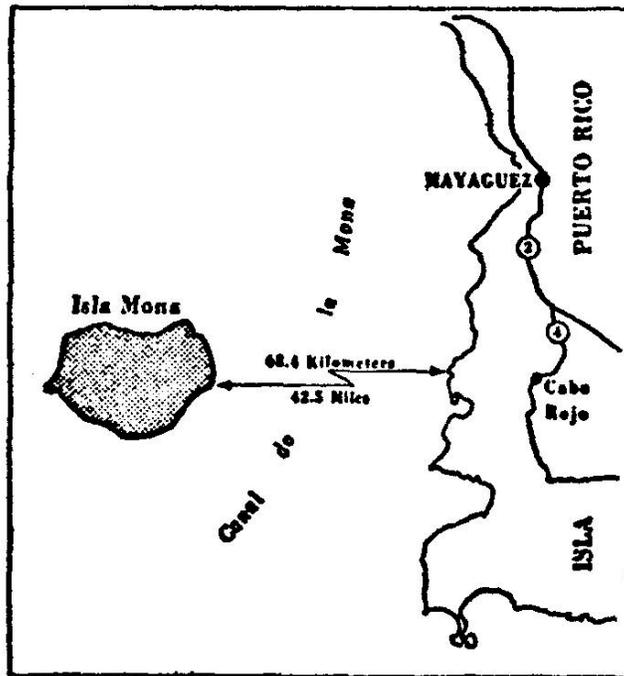


US Fish and Wildlife Service

Mona Ground Iguana (*Cyclura stejnegeri*)

Commonwealth of Puerto Rico. Mona Island- entire island.

Note: Map follows:



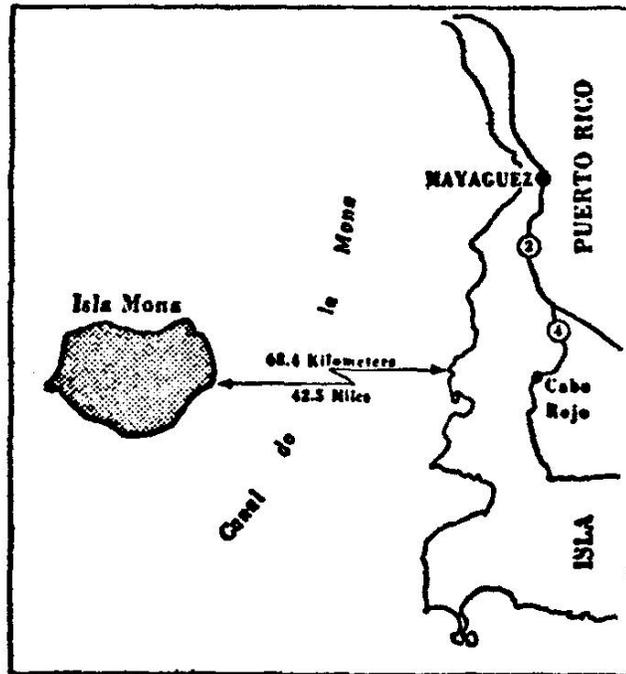
Federal Register/ Vol. 43, No. 24 / Friday, February 3, 1978 (4618-4621)

US Fish and Wildlife Service

Mona Boa (*Epicrates monensis monensis*)

Commonwealth of Puerto Rico. Mona Island- entire island.

Note: Map follows:

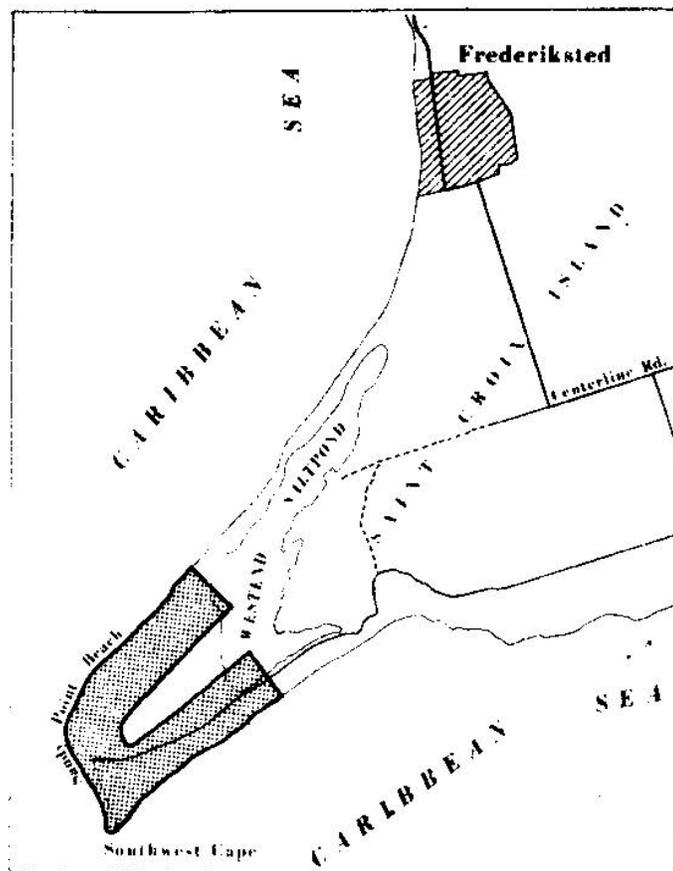


US Fish and Wildlife Service

Leatherback Sea Turtle (*Dermochelys coriacea*)

U.S. Virgin Islands-A strip of land 0.2 mile wide (from mean high tide inland) at Sandy Point Beach on the western end of the island of St. Croix beginning at the southwest cape to the south and running 1.2 miles northwest and then northeast along the western and northern shoreline, and from the southwest cape 0.7 mile east along the southern shoreline.

Note: Map follows:



US Fish and Wildlife Service

Hawksbill Sea Turtle (*Eretmochelys imbricata*)

Puerto Rico: (1) Isla Mona. All areas of beachfront on the west, south, and east sides of the island from mean high tide inland to a point 150 meters from shore. This includes all 7.2 kilometers of beaches on Isla Mona. (2) Culebra Island. The following areas of beachfront on the north shore of the island from mean high tide inland to a point 150 meters from shore Playa Resaca, Playa Brava, and Playa Larga. (3) Cayo Norte. South beach, from mean high tide inland to a point 150 meters from shore. (4) Isla Culabrta. All beachfront areas on the southwest facing shore, east facing shore, and northwest facing shore of the island from mean high tide inland to a point 150 meters from shore.

Note: Maps follows.

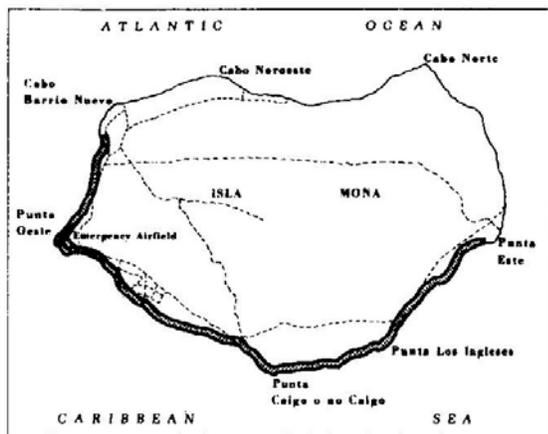
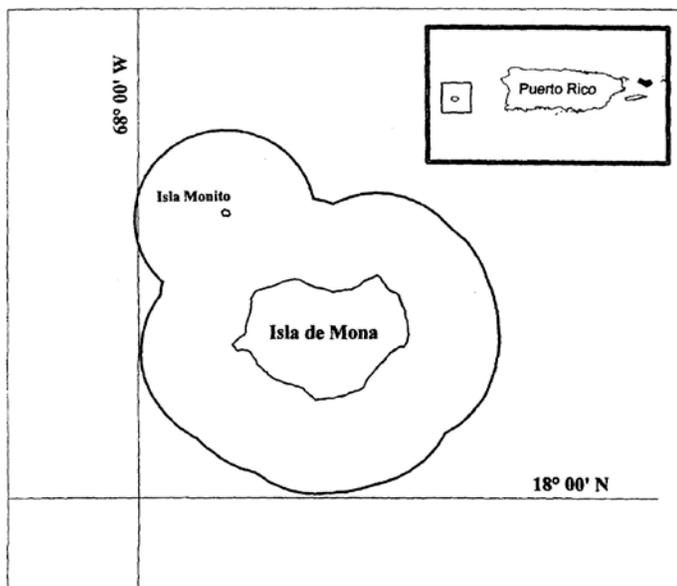


Figure 2—Critical Habitat for Hawksbill Turtles. Critical Habitat Includes Waters Extending Seaward 3 nm (5.6 km) From the Mean High Water Line of Isla de Mona (Mona Island) and Isla Monito (Monito Island), Puerto Rico



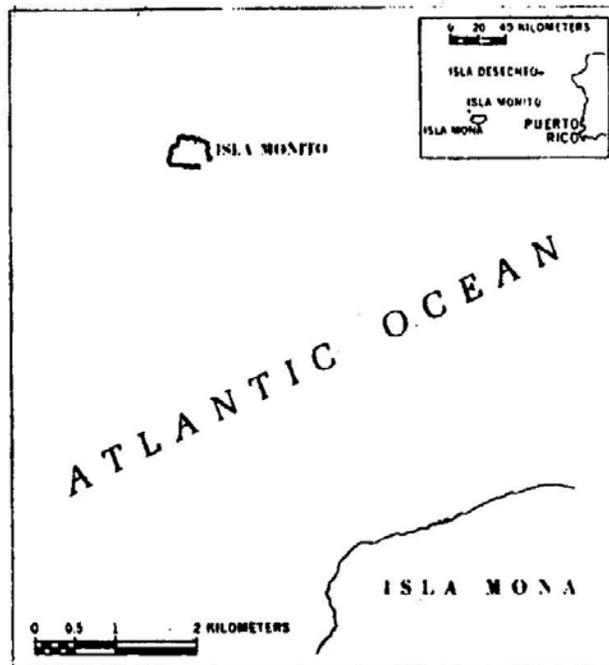
Federal Register/ Vol. 47, No. 200 / Friday, October 15, 1982 (46090-46093)

US Fish and Wildlife Service

Monito Gecko (*Sphaterodactylus mocropitecus*)

Puerto Rico. Isla Monito- entire island.

Note: Map follows:



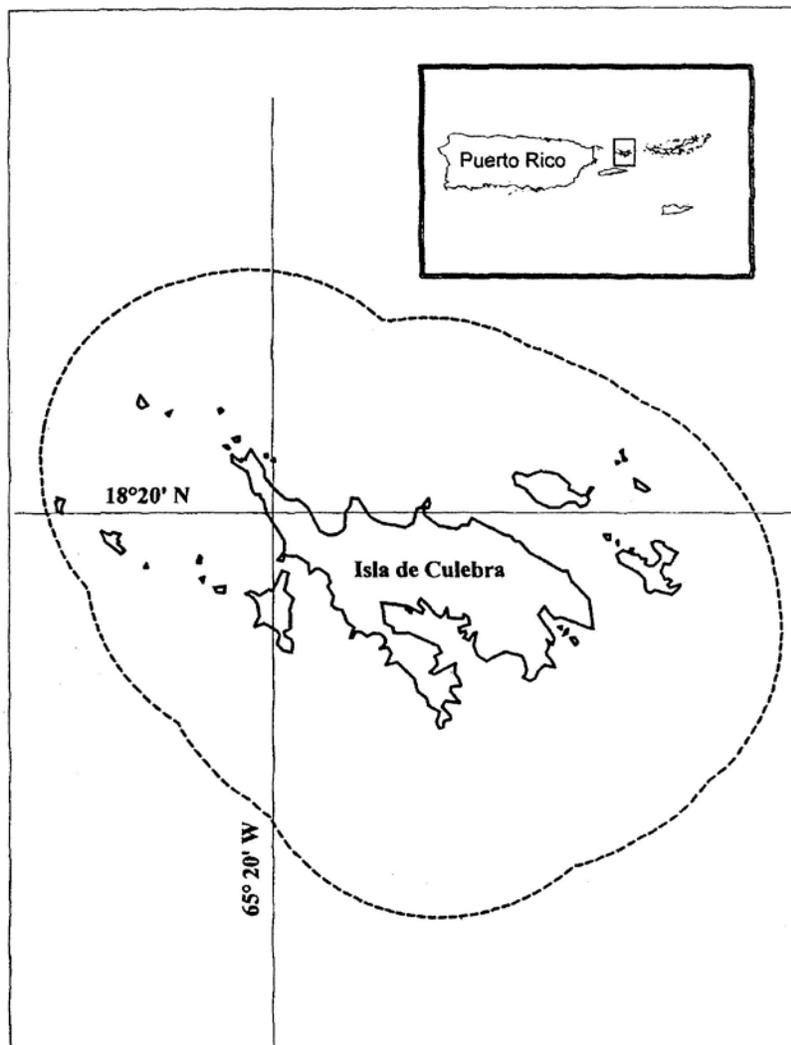
US Fish and Wildlife Service

Green Sea Turtle (*Chelonia mydas*)

Culebra Island, Puerto Rico- Waters surrounding the island of Culebra from the mean high water line seaward to 3 nautical miles (5.6 km). These waters include Culebra's outlying Keys including Cayo Norte, Cayo Ballena, Cayos Geniqui, Isla Culebrita, Arrecife Culebrita, Cayo de Luis Peña, Las Hermanas, El Mono, Cayo Lobo, Cayo Lobito, Cayo Botijuela, Alcarraza, Los Gemelos, and Piedra Steven.

Note: Map follows.

Figure 1—Critical Habitat for Green Turtles. Critical Habitat Includes Waters Extending Seaward 3 nm (5.6 km) From the Mean High Water Line of Isla de Culebra (Culebra Island), Puerto Rico

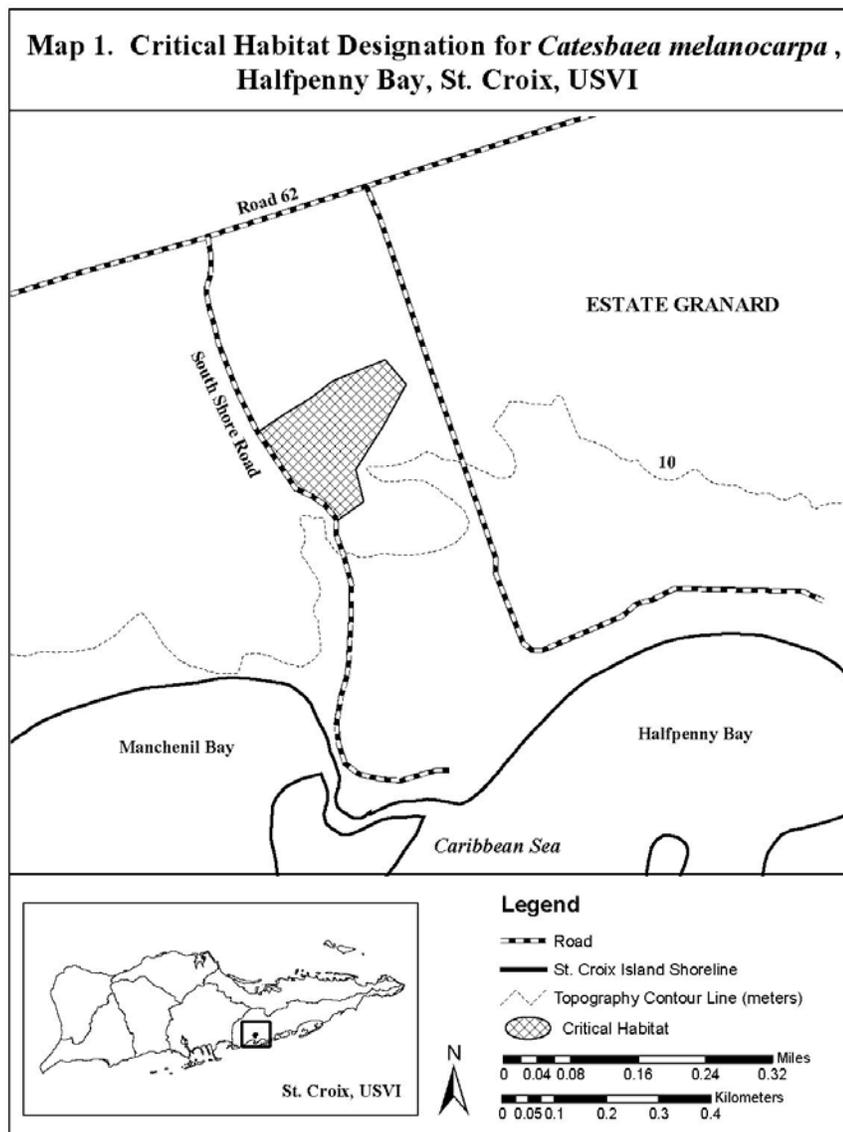


US Fish and Wildlife Service

Catesbaea melanocarpa

Halfpenny Bay, St. Croix, US Virgin Islands: The Halfpenny Bay unit consists of approximately 10.5 ac (4.3 ha) on privately owned property located about 2.48 mi (4 km) south of Christiansted, St. Croix, US Virgin Islands. The designated unit is located east of South Shore Road, approximately 342 m (1,122 ft) south of Road 62, approximately 600 m (1,968 ft) north of the Halfpenny Bay coast, and 70 m (230 ft) west of a local road to Halfpenny Bay.

Note: Map follows:

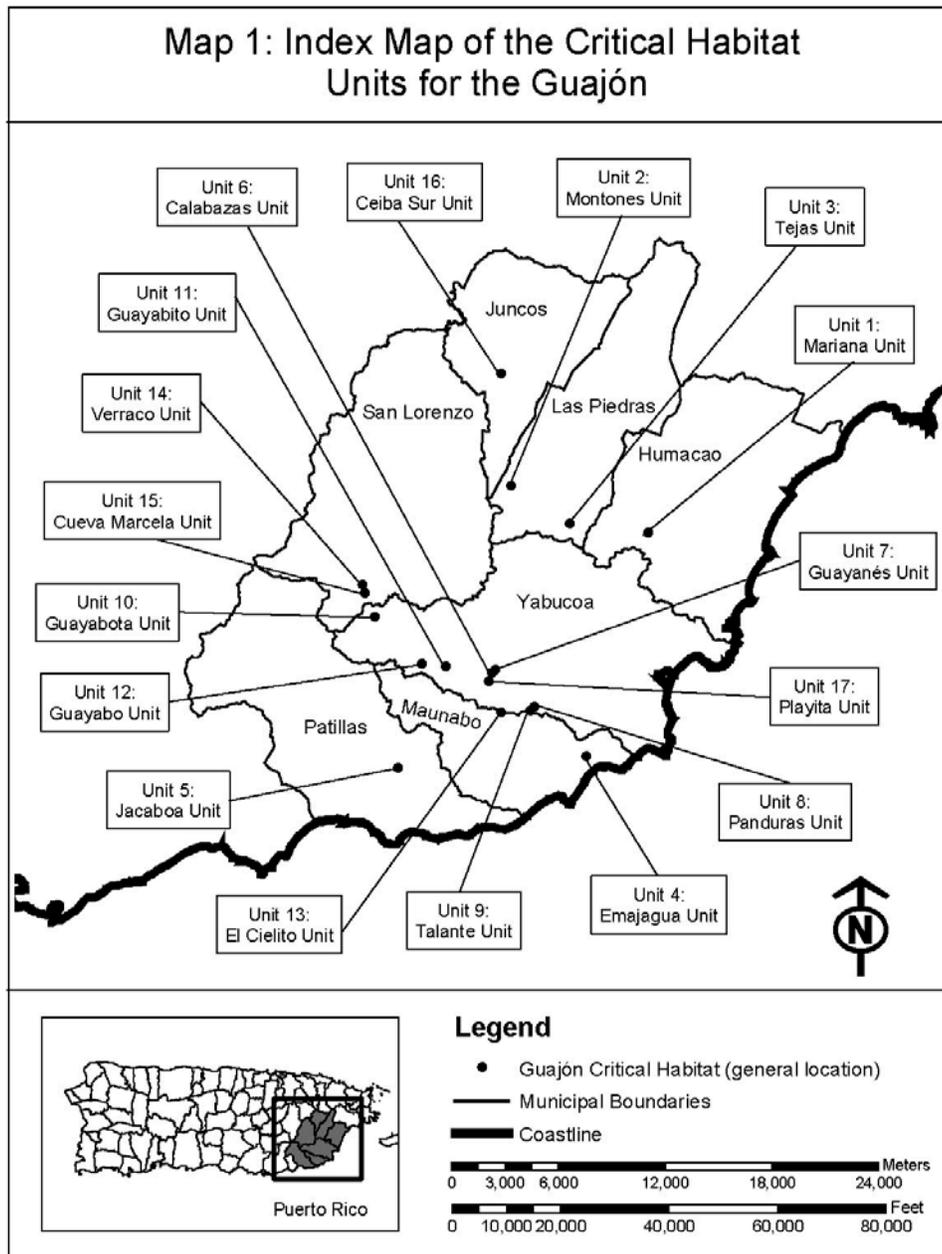


US Fish and Wildlife Service

Guajón (*Eleutherodactylus cooki*)

Puerto Rico: (1) Critical habitat units are depicted for Humacao, Juncos, Las Piedras, Maunabo, Patillas, San Lorenzo and Yabucoa.

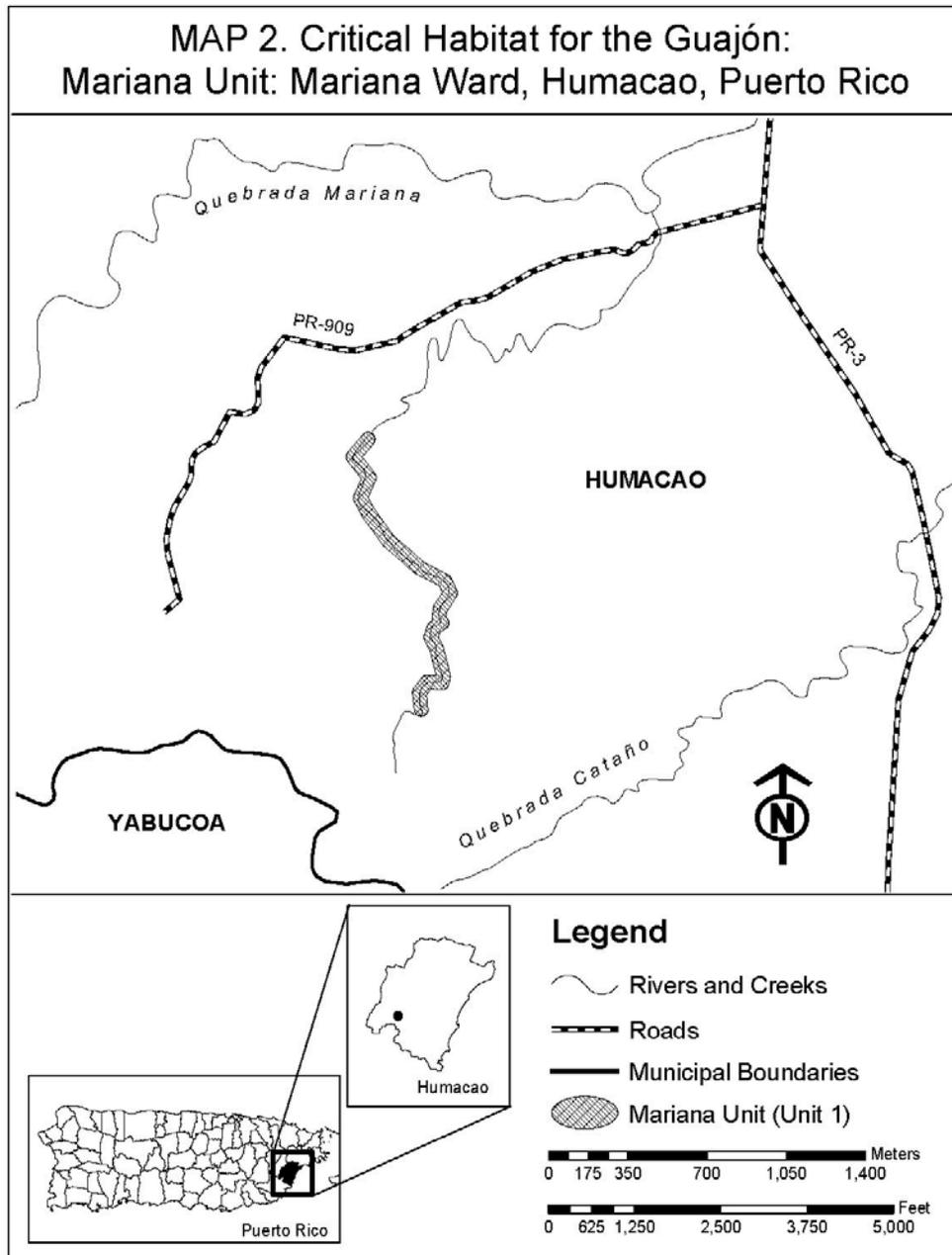
Note: Index map (Map 1) follows:



Unit 1: Mariana, Humacao, Puerto Rico.

General Description: Unit 1 consists of approximately 23.6 acres (ac) (9.6 hectares (ha)) located south of Road PR-909, west of Road PR-3, and north of Quebrada Cataño within Mariana Ward, Humacao.

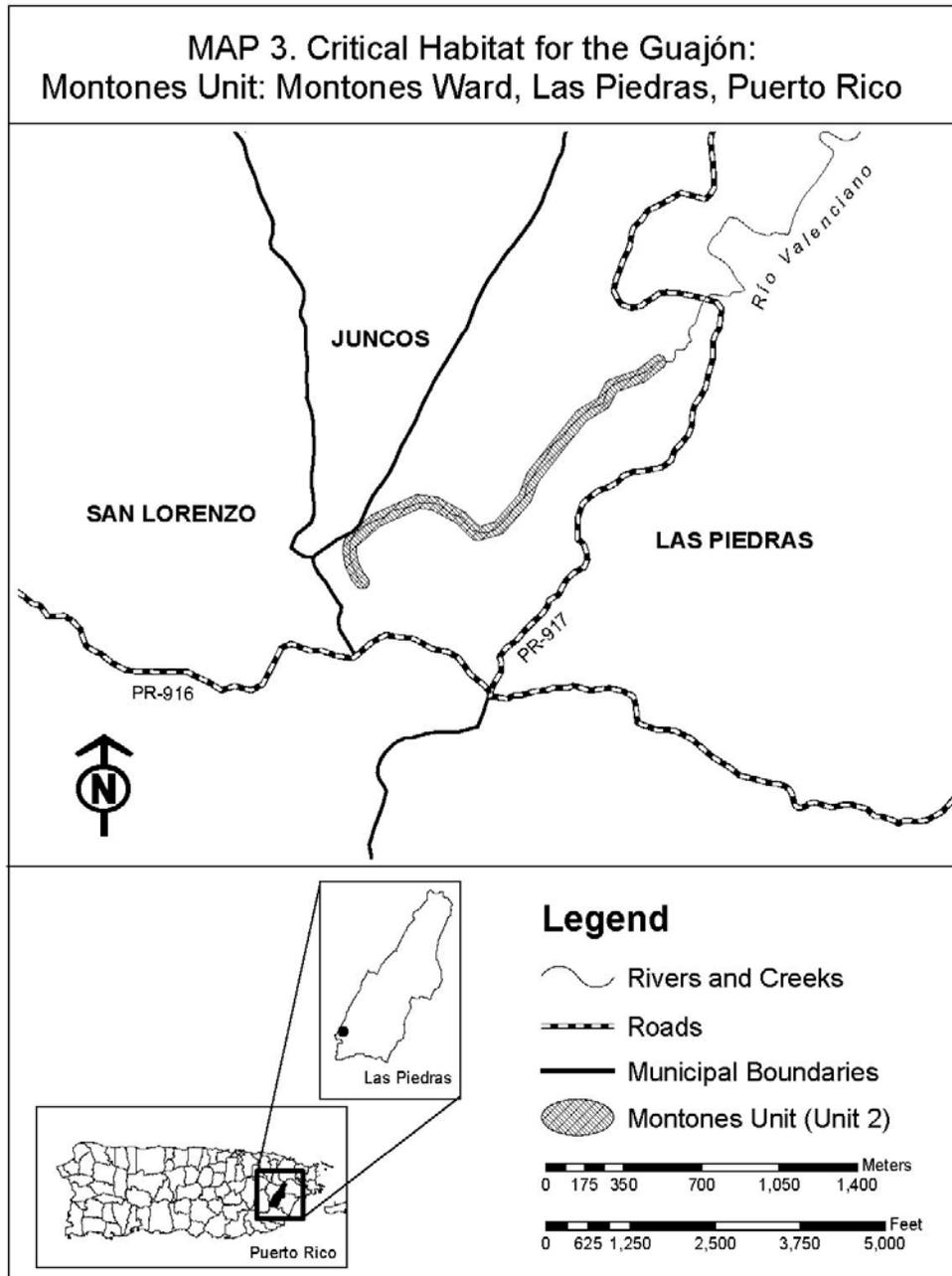
Note: Map of Unit 1 (Map 2) follows:



Unit 2: Montones, Las Piedras, Puerto Rico.

General Description: Unit 2 consists of approximately 31.1 ac (12.6 ha) along the headwaters of the Valenciano River at PR 917 Km 9.7, Montones Ward, Las Piedras.

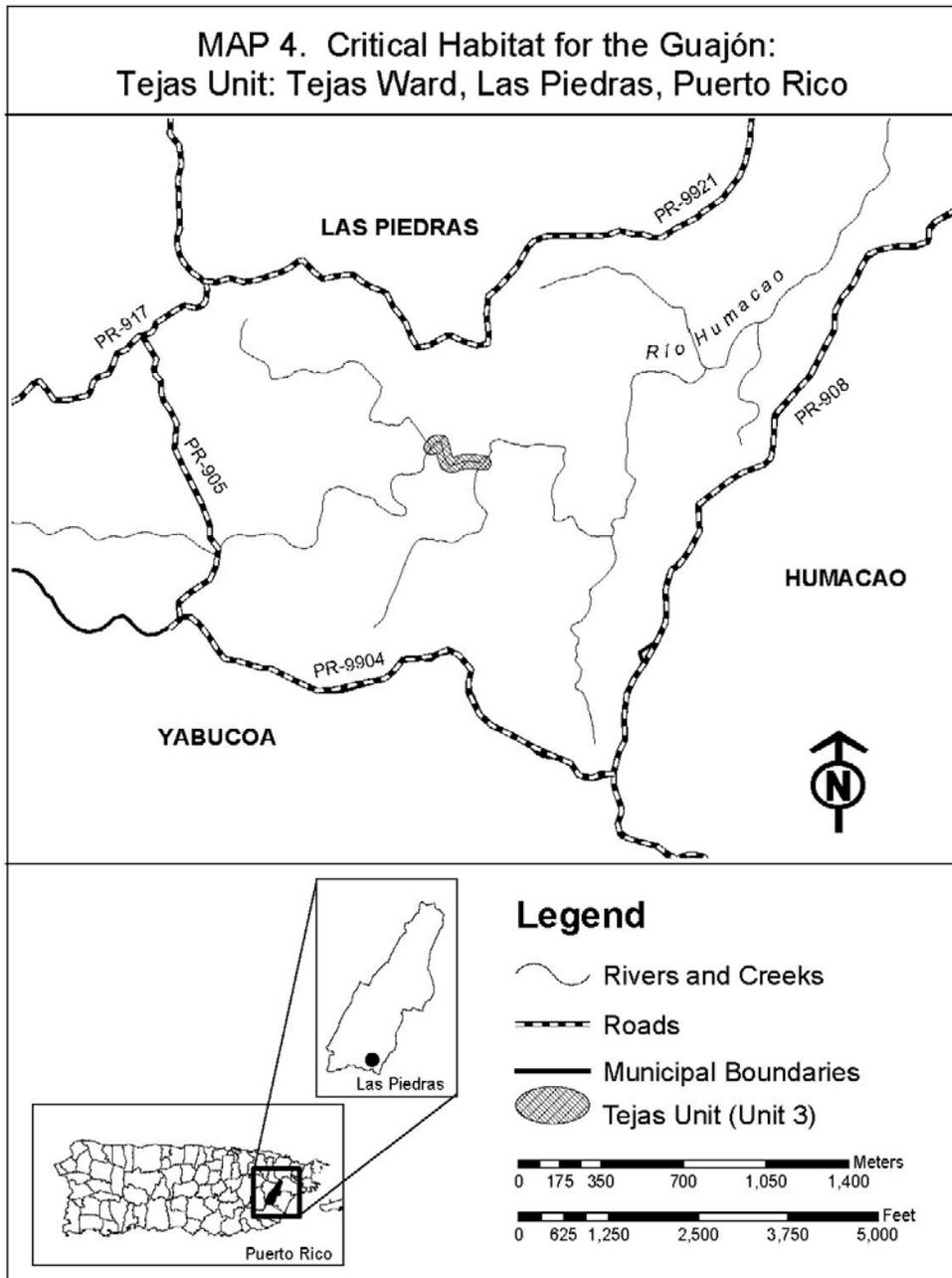
Note: Map of Unit 2 (Map 3) follows:



Unit 3: Tejas, Las Piedras, Puerto Rico.

General Description: Unit 3 consists of approximately 5.2 ac (2.1 ha) between Road PR-905 to the east, Road PR-908 to the west, Road PR-9921 to the north, and Road PR-9904 to the south within Tejas Ward, Las Piedras.

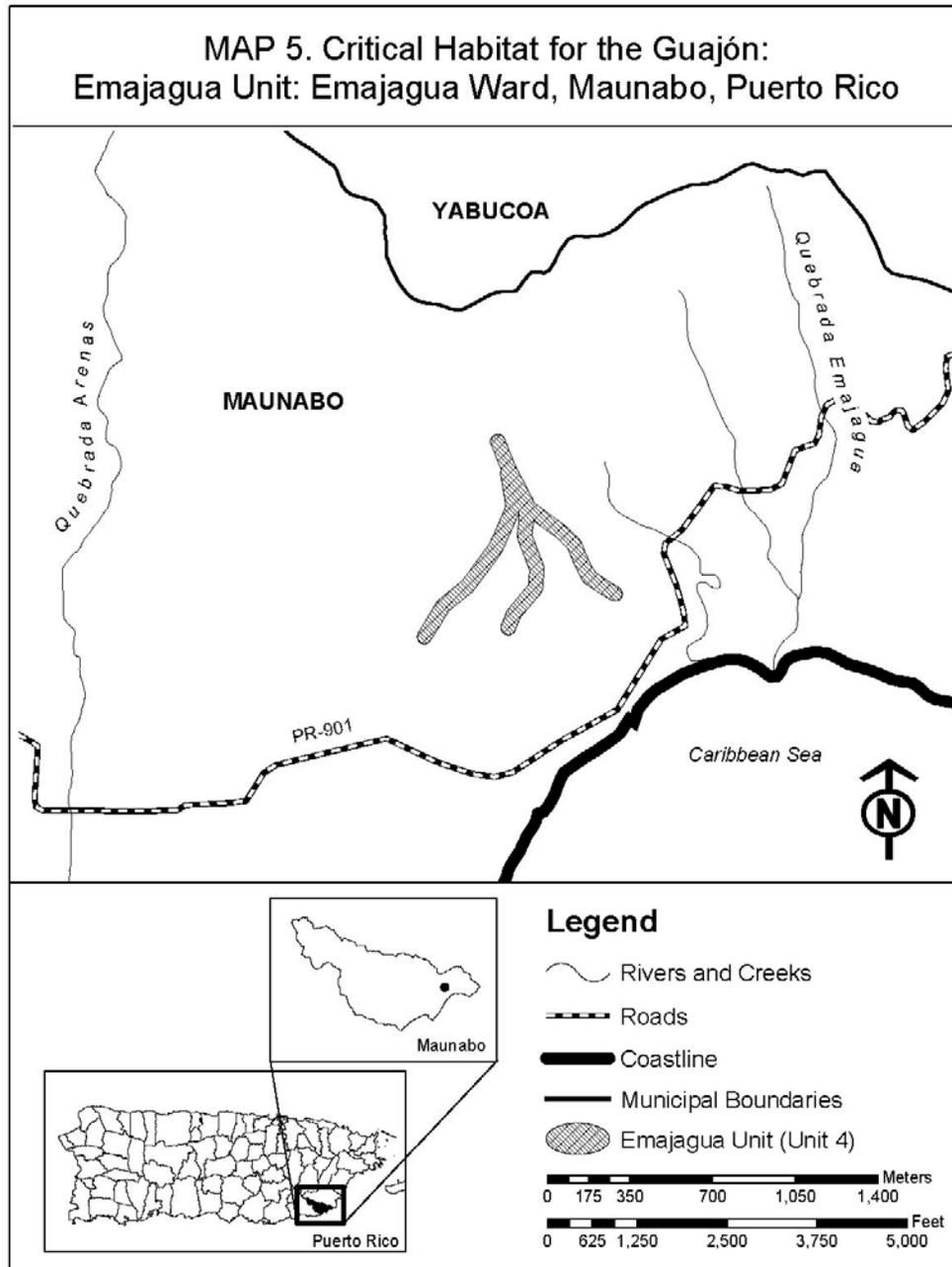
Note: Map of Unit 3 (Map 4) follows:



Unit 4: Emajagua, Maunabo, Puerto Rico.

General Description: Unit 4 consists of approximately 33.0 ac (13.4 ha) between Quebrada Arenas and Quebrada Emajagua, north of Road PR—901 within Emajagua Ward, Maunabo.

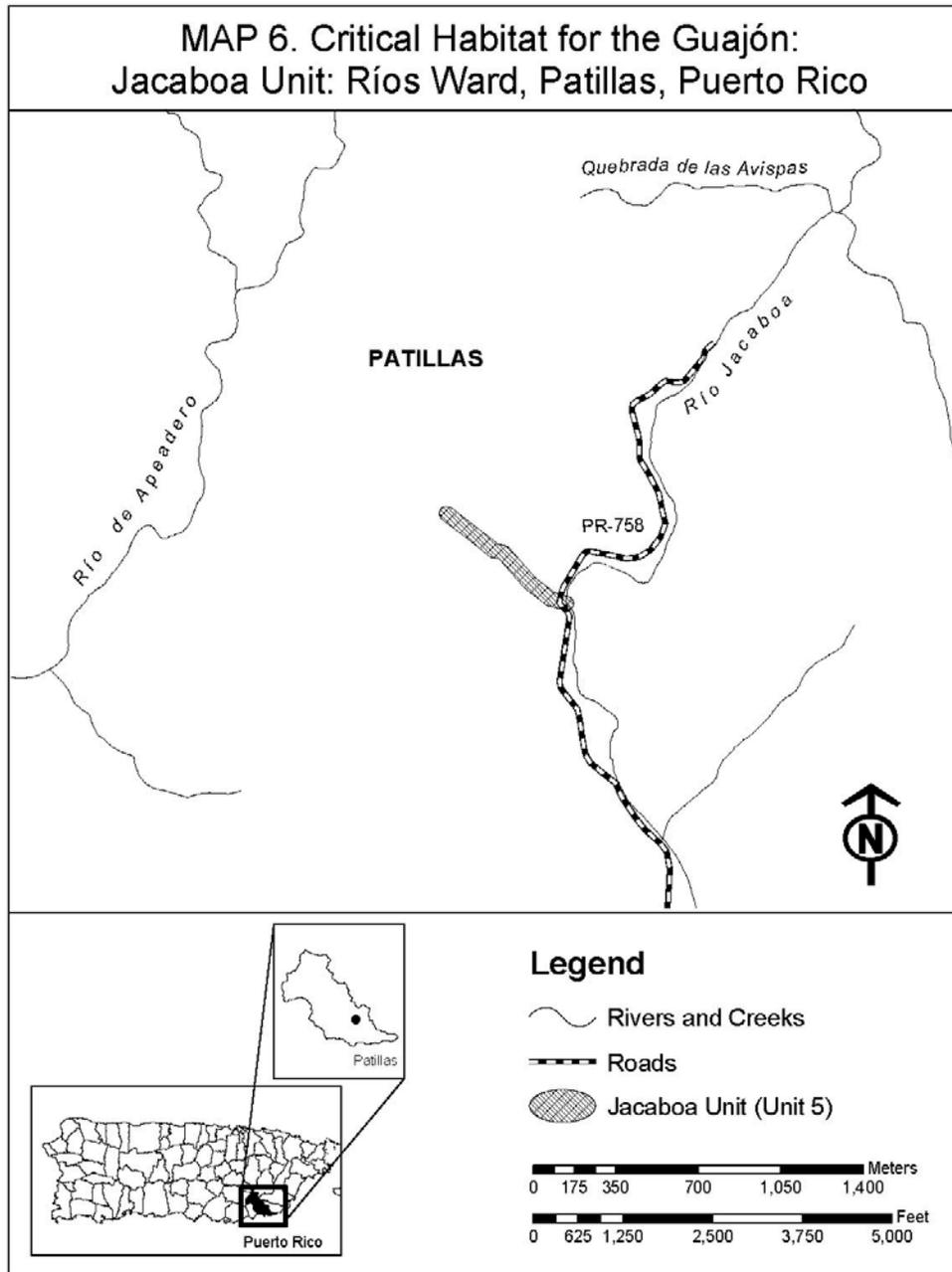
Note: Map of Unit 4 (Map 5) follows:



Unit 5: Jacoboa, Patillas, Puerto Rico.

General Description: Unit 5 consists of approximately 10.3 ac (4.2 ha) northwest of road PR-758 within Ríos Ward, Patillas.

Note: Map of Unit 5 (Map 6) follows:



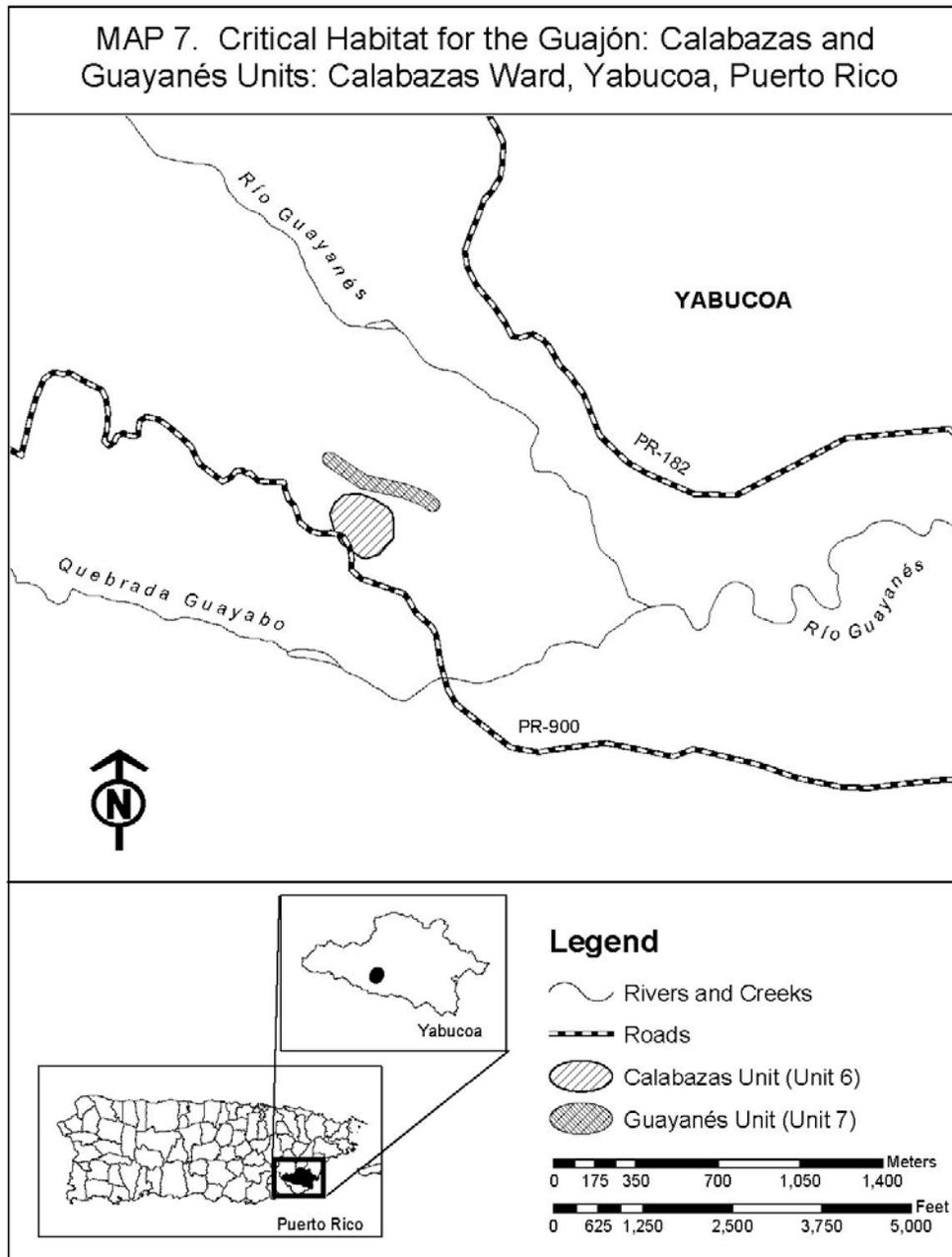
Unit 6: Calabazas, Yabucoa, Puerto Rico.

General Description: Unit 6 consists of approximately 13.8 ac (5.6 ha), including lands northeast of road PR-900, between Quebrada Guayabo to the south and Río Guayanés to the north, and south of Guayanés Unit, within Calabazas Ward, Yabucoa.

Unit 7: Guayanés, Yabucoa, Puerto Rico.

General Description: Unit 7 consists of approximately 7.9 ac (3.2 ha) northeast of Road PR-900 between Quebrada Guayabo to the south and Río Guayanés to the north, and north of Unit 6, within Calabazas Ward, Yabucoa.

Note: Map of Units 6 and 7 (Map 7) follows:



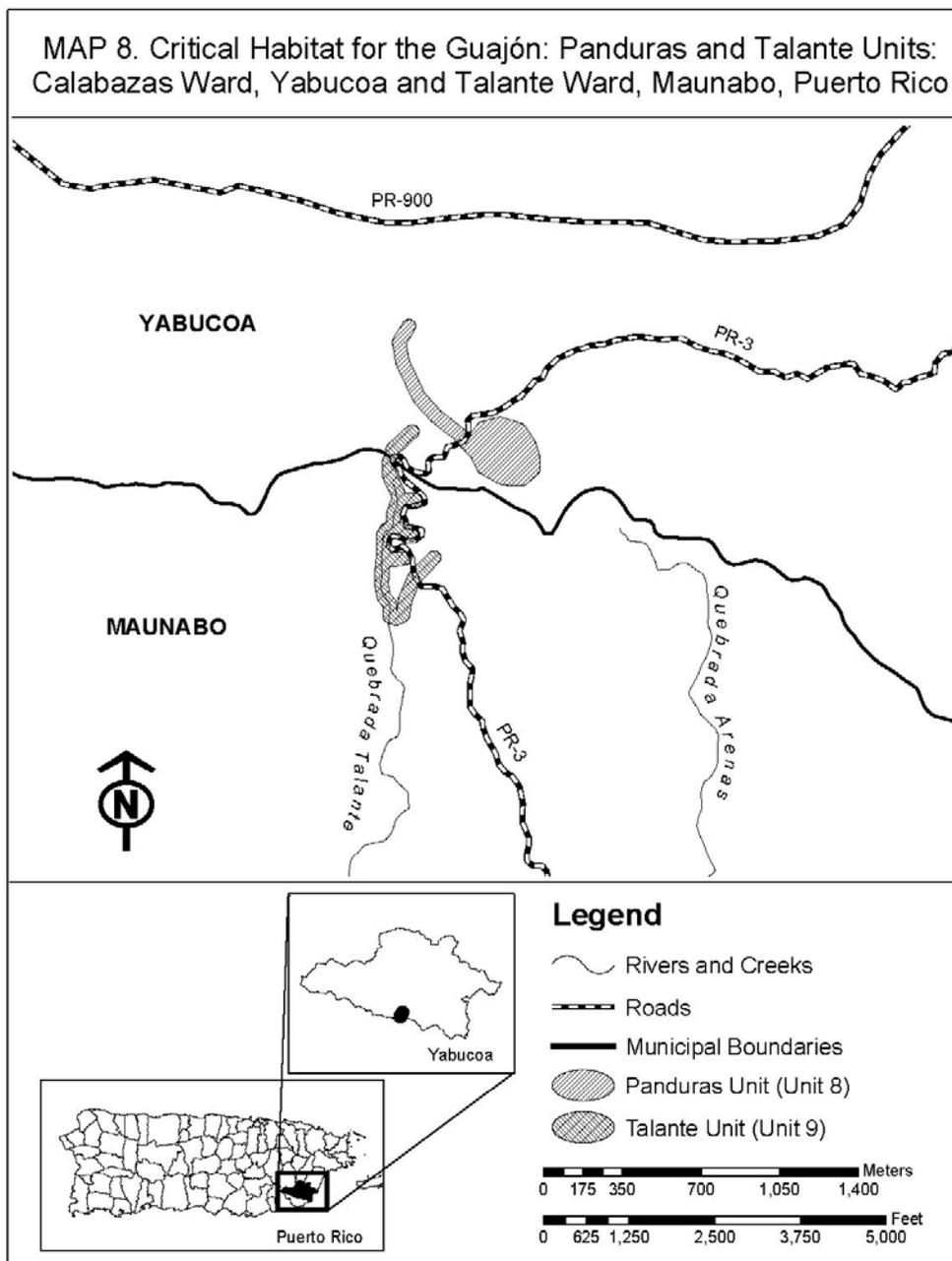
Unit 8: Panduras, Yabucoa, Puerto Rico.

General Description: Unit 8 consists of approximately 28.6 ac (11.6 ha) to the northwest and southeast of Road PR-3 within Calabazas Ward, Yabucoa, and 18.2 ac (7.4 ha) of lands owned by the Puerto Rico Conservation Trust near the top of Cerro La Pandura.

Unit 9: Talante, YabucoaMaunabo, Puerto Rico.

General Description: Unit 9 consists of approximately 23.5 ac (9.5 ha) east of Road PR-3, including the headwaters of the Talante Creek and five unnamed drainages. About 2.8 ac (1.1 ha) of Unit 9 are located within Calabazas Ward, Yabucoa, and the remaining 21.6 ac (8.7 ha) are located within Talante Ward, Maunabo.

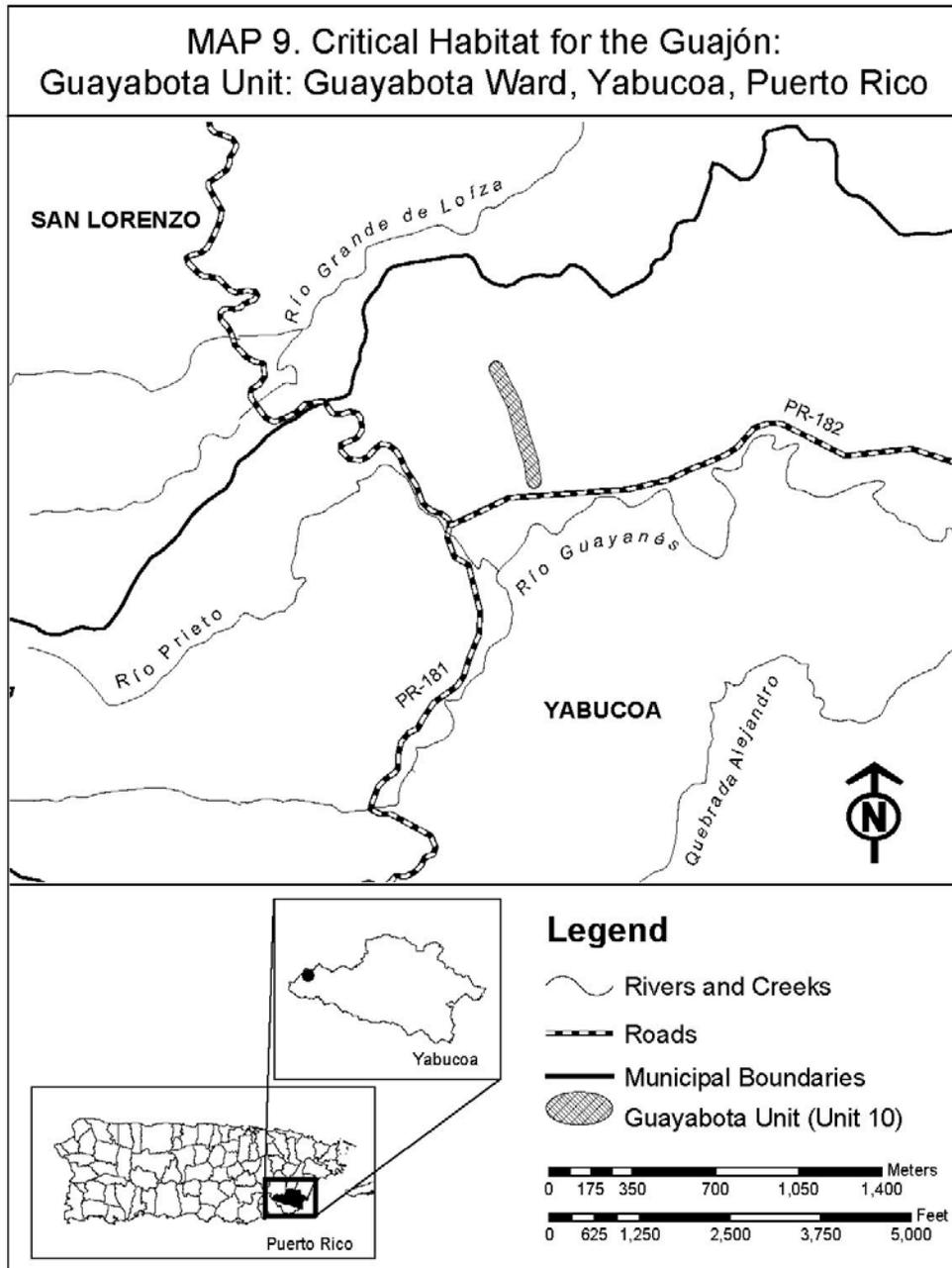
Note: Map of Units 8 and 9 (Map 8) follows:



Unit 10: Guayabota, Yabucoa, Puerto Rico.

General Description: Unit 10 consists of approximately 13.1 ac (5,3 ha) to the northeast of intersection of roads PR-181 to the east, and PR-182 and Río Guayanés to the south, and south of the municipal boundary with San Lorenzo, within Guayabota Ward, Yabucoa.

Note: Map of Unit 10 (Map 9) follows:



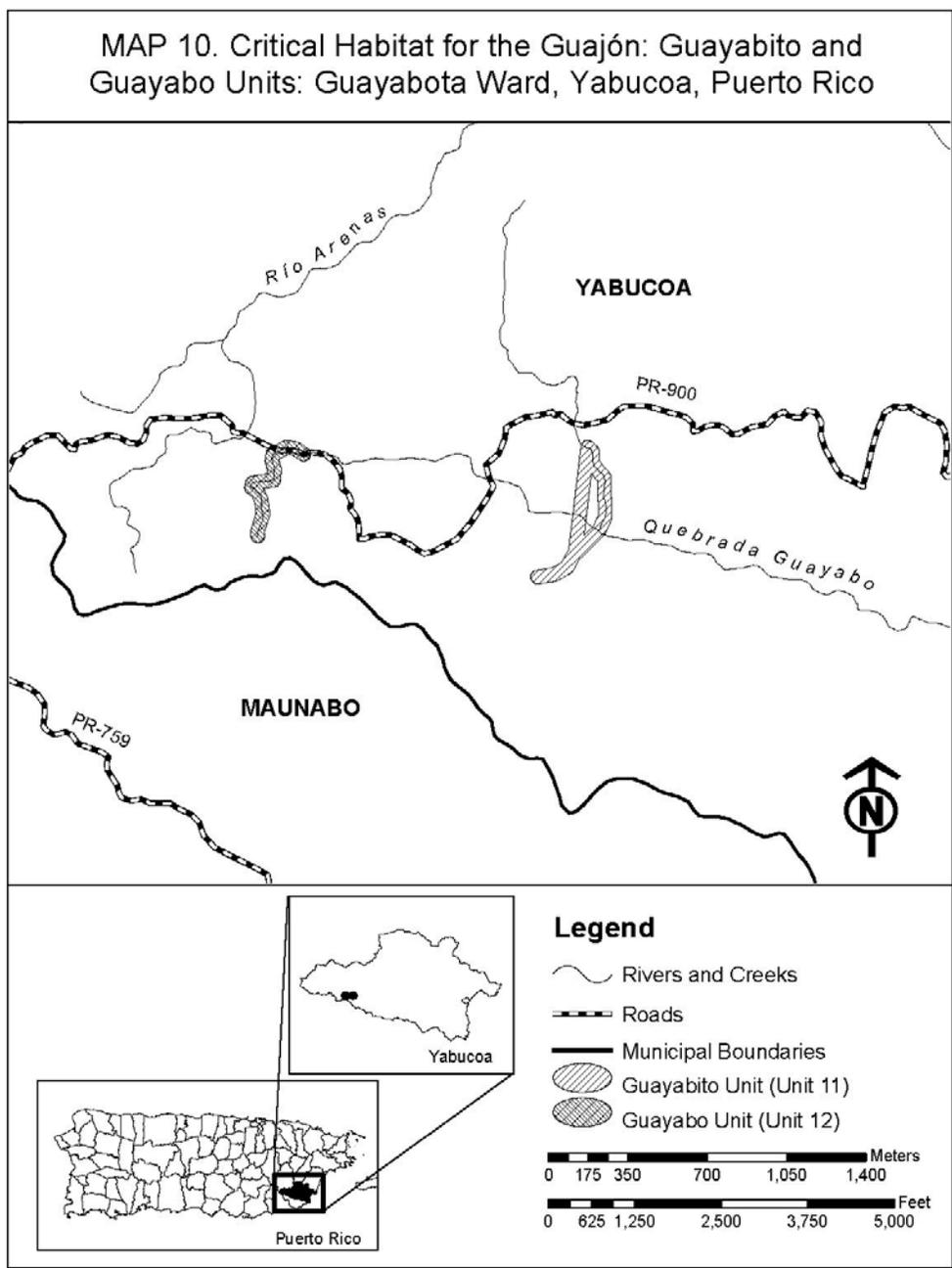
Unit 11: Guayabito, Yabucoa, Puerto Rico.

General Description: Unit II consists of approximately 17.3 ac (7.0 ha) south of Road PR-900 and north of the Maunabo boundary, within Guayabota Ward, Yabucoa.

Unit 12: Guayabo, Yabucoa, Puerto Rico.

General Description: Unit 12 consists of approximately 9.8 ac (3.9 ha) within Guayabota Ward, Yabucoa, crossing Road PR-900, north of the Maunabo boundary, and about 3,025 ft (922 m) west of Unit 11.

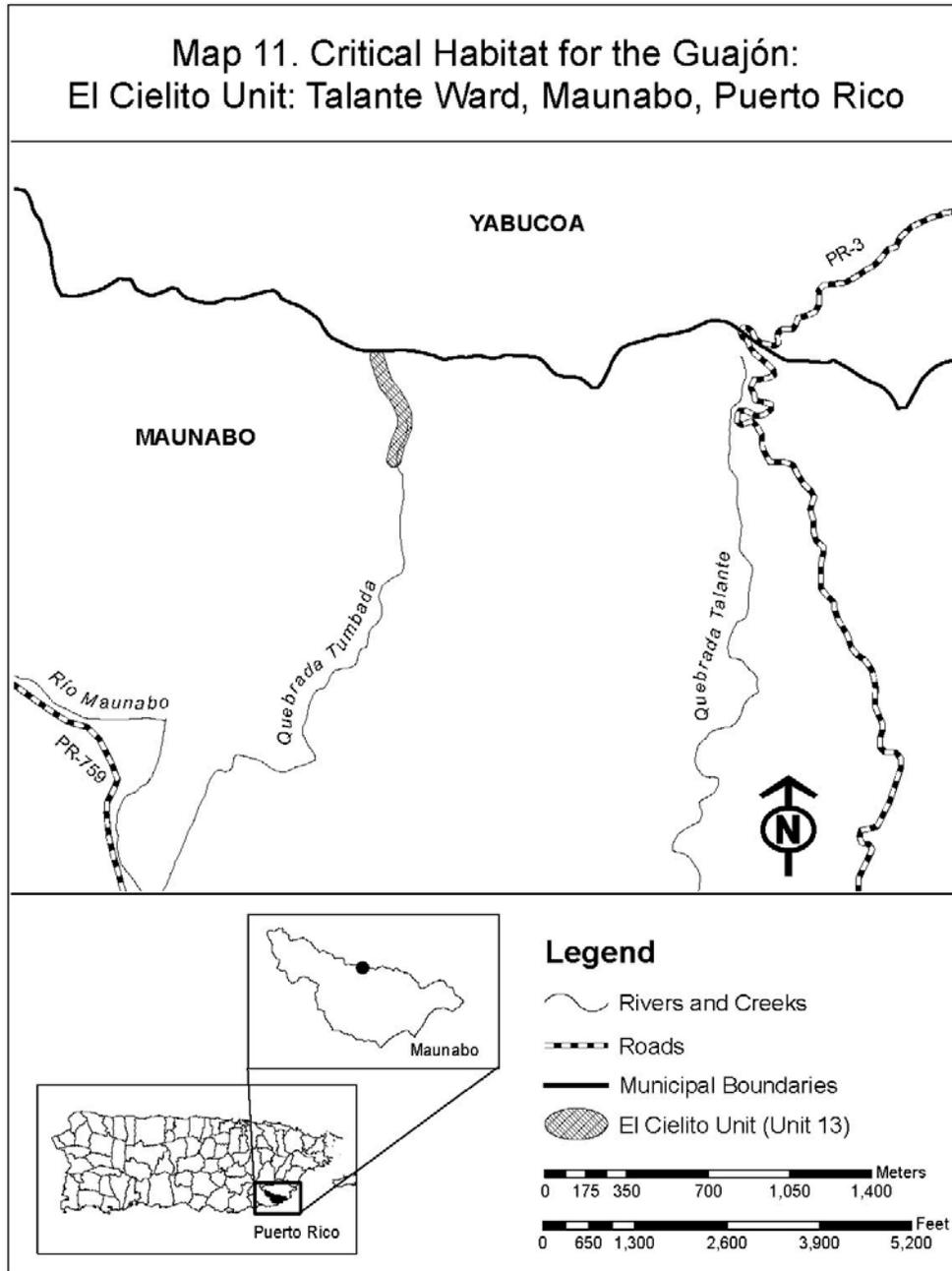
Note: Map of Units 11 and 12 (Map 10) follows:



Unit 13: El Cielito, Maunabo, Puerto Rico.

General Description: Unit 13 consists of approximately 7.84 ac (3.17 ha), between the municipal boundary of Yabucoa to the north, PR-759 to the south and west, and PR-3 to the east, within Talante Ward, Maunabo.

Note: Map of Unit 13 (Map 11) follows:



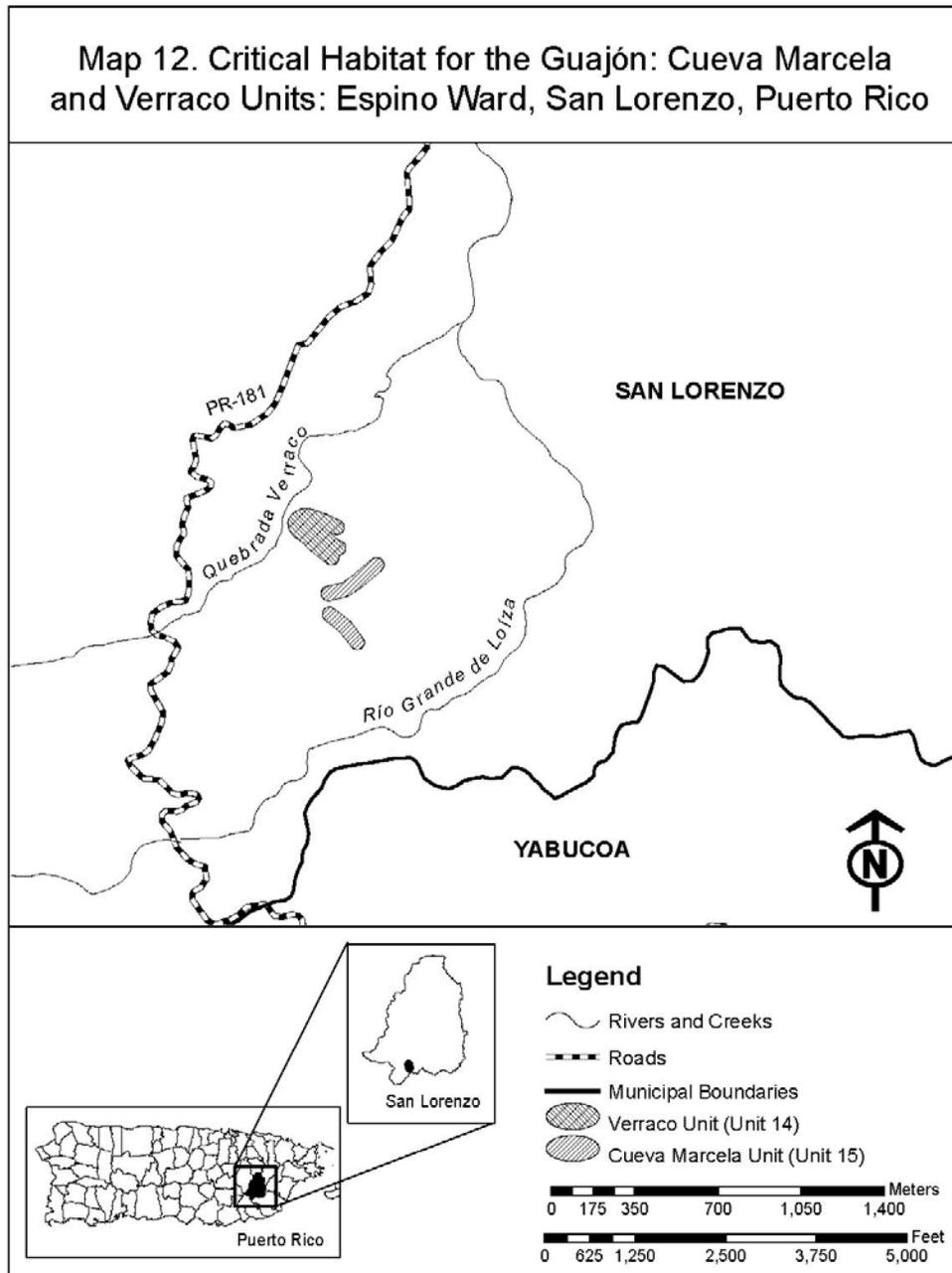
Unit 14: Verraco, San Lorenzo, Puerto Rico.

General Description: Unit 14 consists of approximately 8.9 ac (3.6 ha), between PR-181 to the north and west, Río Grande de Loíza to the east and south, and the municipal boundary of Yabucoa to the south, within Espino Ward, San Lorenzo.

Unit 15: Cueva Marcela Unit, San Lorenzo, Puerto Rico.

General Description: Unit 15 consists of approximately 7.47 ac (3.02 ha), between PR-181 and Quebrada Verraco to the north, PR-181 to the west, and Río Grande de Loíza and the municipal boundary of Yabucoa to the south, within Espino Ward, San Lorenzo.

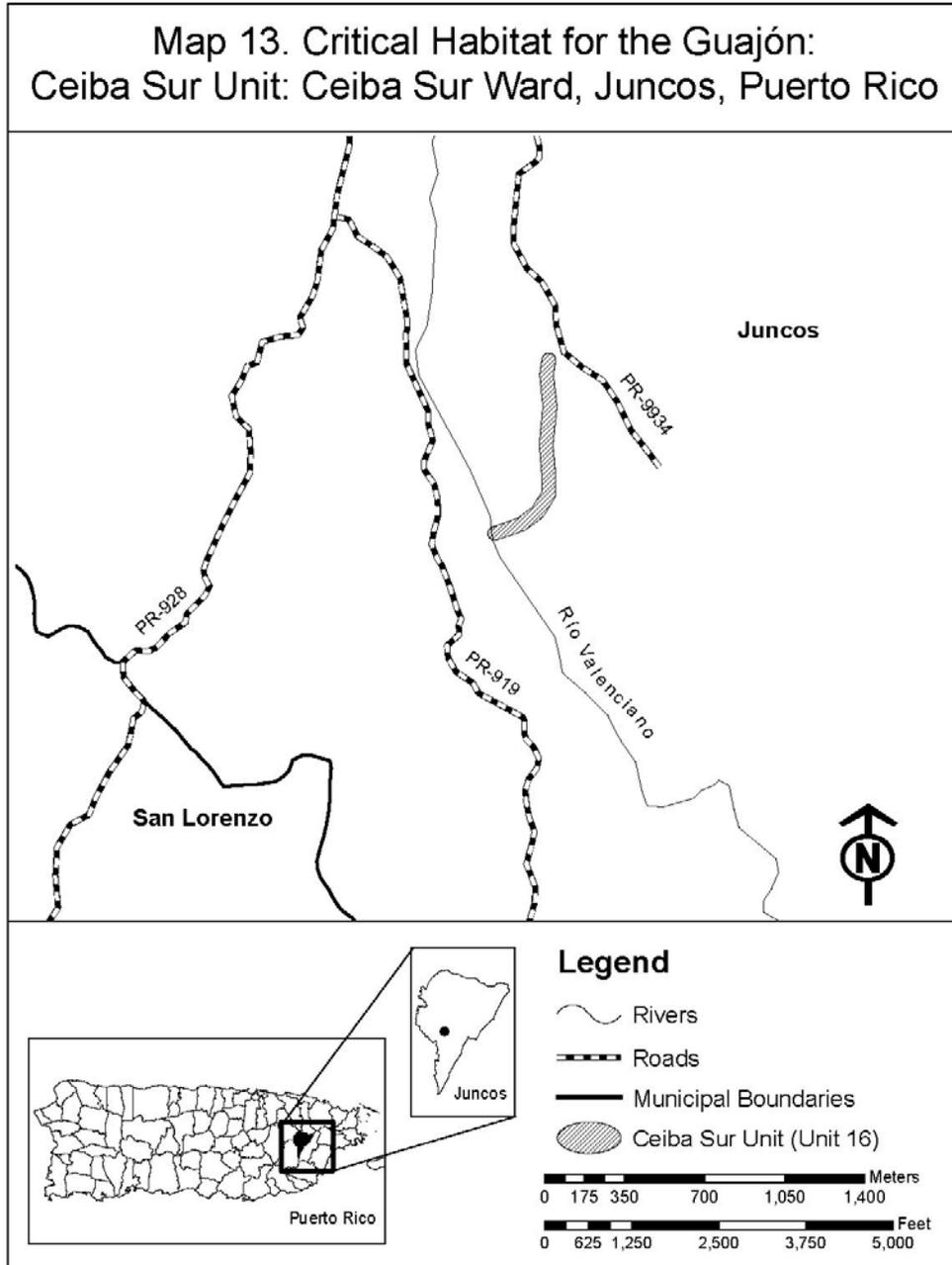
Note: Map of Units 14 and 15 (Map 12) follows:



Unit 16: Ceiba Sur Unit, Juncos, Puerto Rico.

General Description: Unit 16 consists of approximately 13.92 ac (5.63 ha) between Road PR-9934 to the east, and Road PR-919 to the west within Ceiba Sur Ward, Juncos.

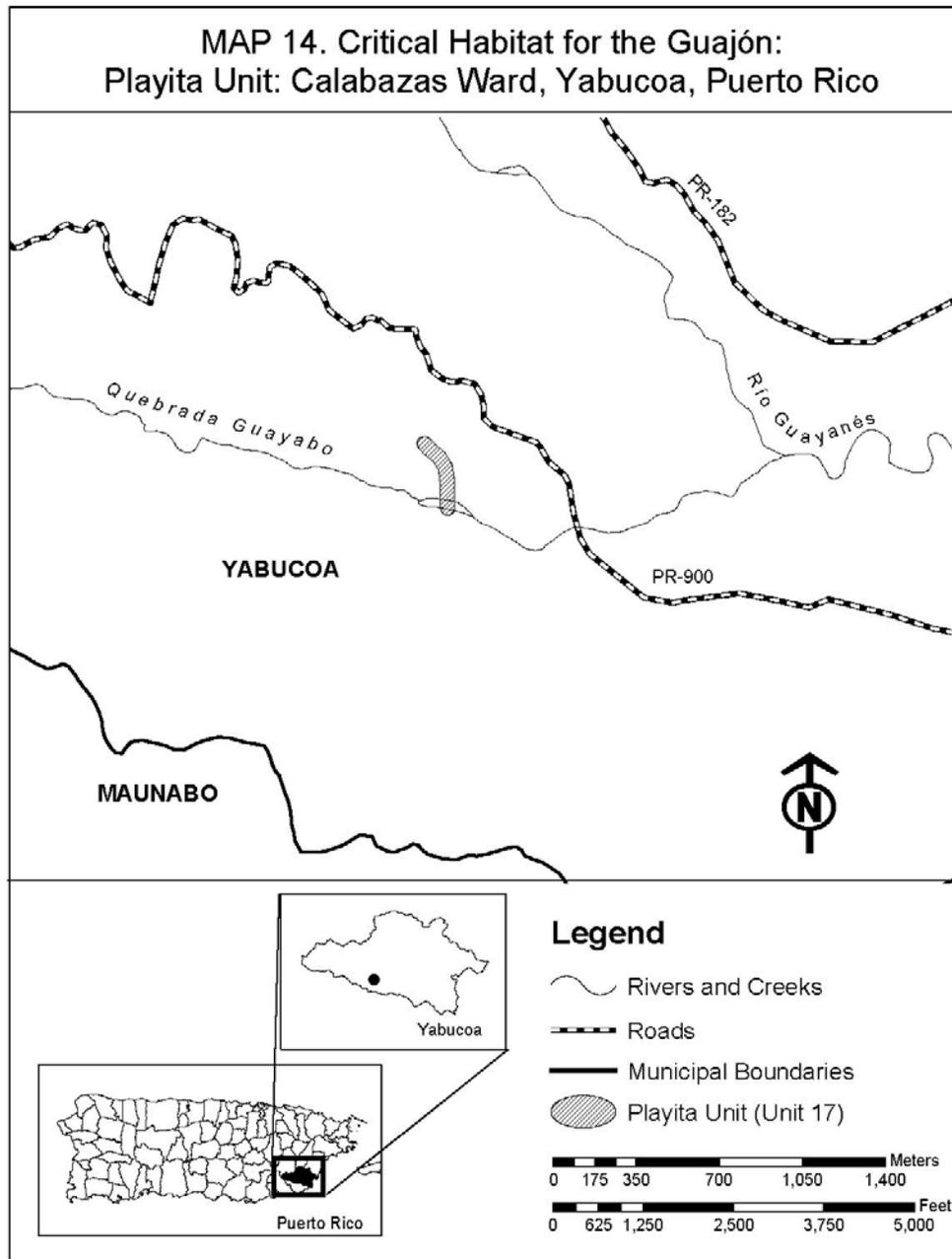
Note: Map of Unit 16 (Map 13) follows:



Unit 17: Playita Unit, Yabucoa, Puerto Rico.

General Description: Unit 17 consists of approximately 5.27 ac (2.13 ha), between PR-900 to the north and east and the municipal boundary of Maunabo to the south, within Calabazas Ward, Yabucoa.

Note: Map of Unit 17 (Map 14) follows:

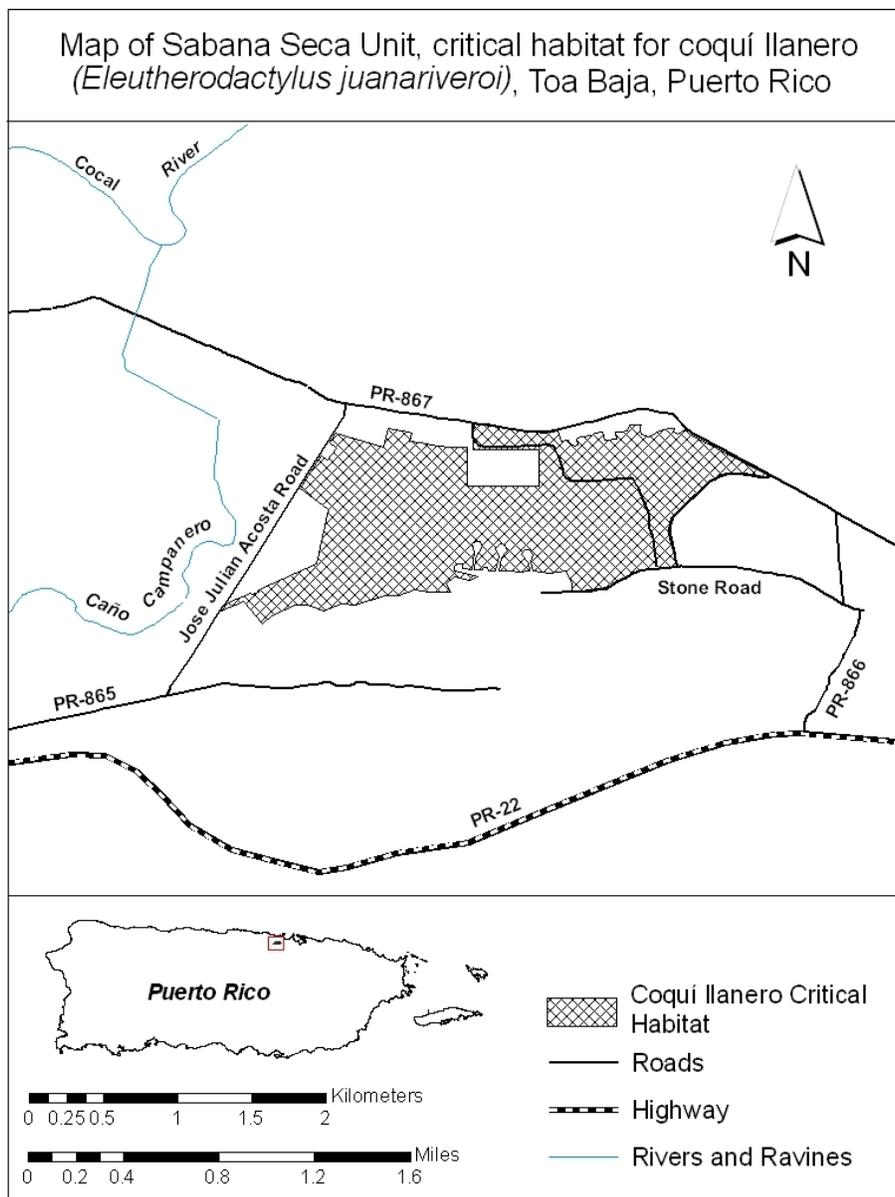


US Fish and Wildlife Service

Coquí llanero (*Eleutherodactylus juanariveroi*)

General Description: The Sabana Seca Unit consists of approximately 615 ac (249 ha) located south of State Road PR-867, west-southwest of Ramón Ríos Román Avenue, east of José Julián Acosta Road, and north of the limestone hills located north of Highway PR-22 in the municipality of Toa Baja, Puerto Rico.

Note: Map follows:

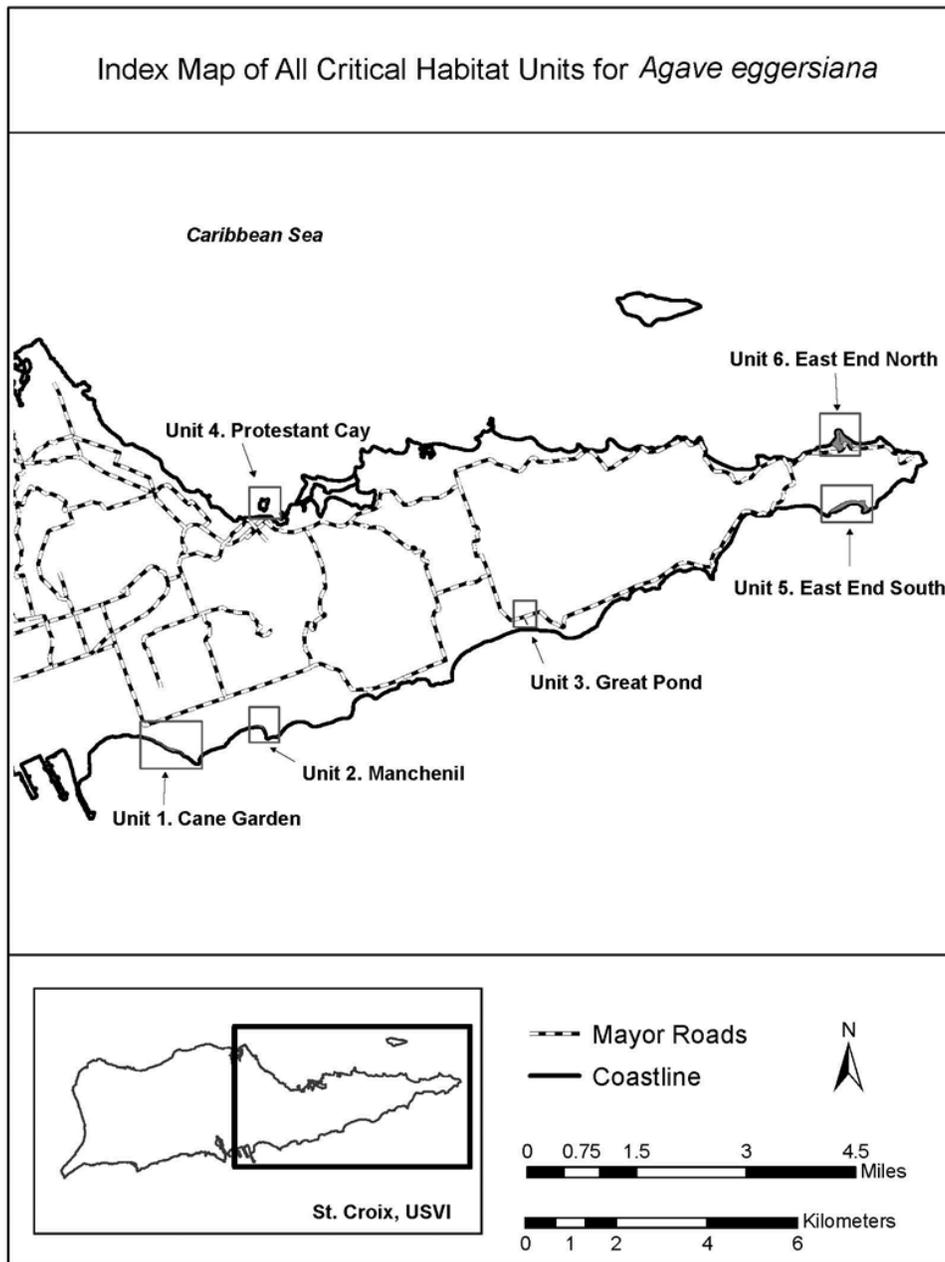


US Fish and Wildlife Service

Agave eggerisana (no common name)

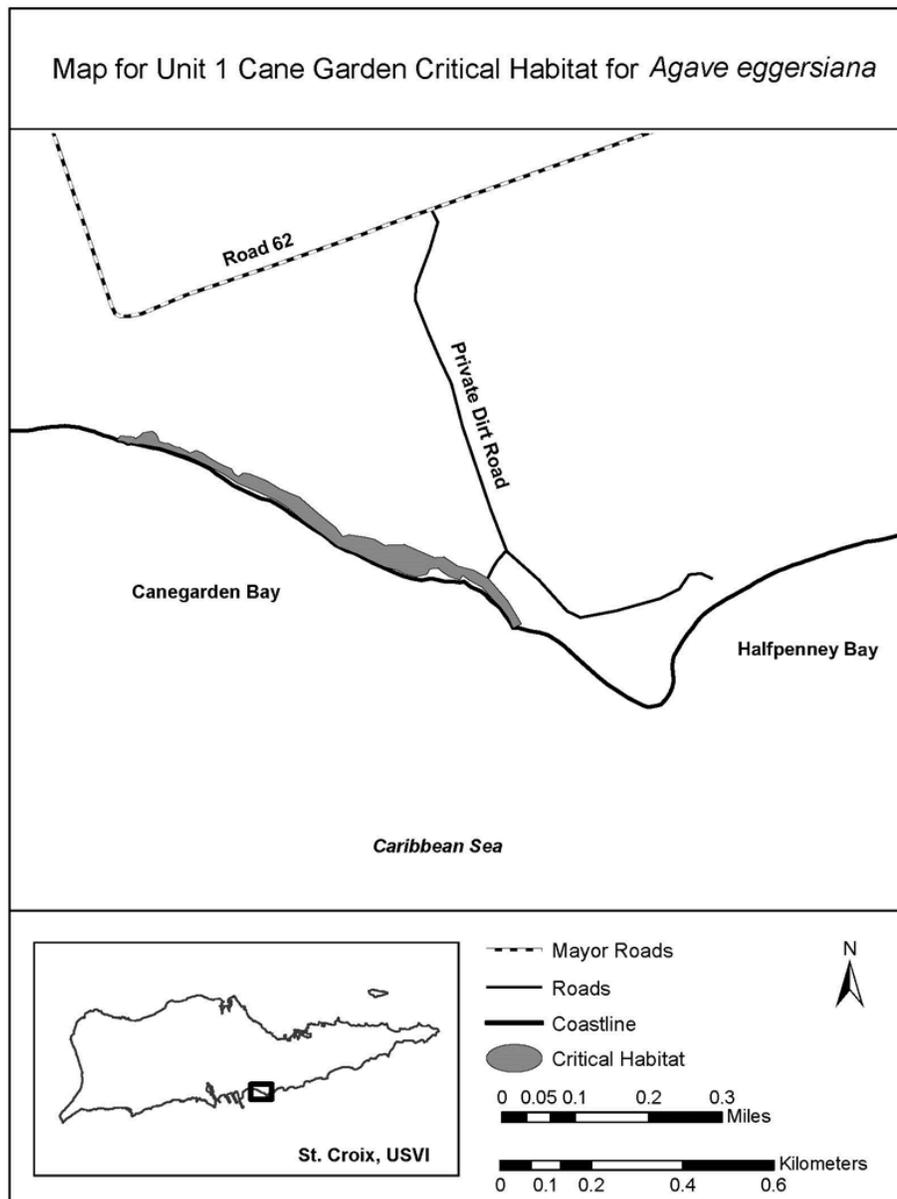
General Description: A total of six units were designated for *Agave eggersiana* in St. Croix, USVI.

Note: Index map of critical habitat units for *Agave eggersiana* follows:



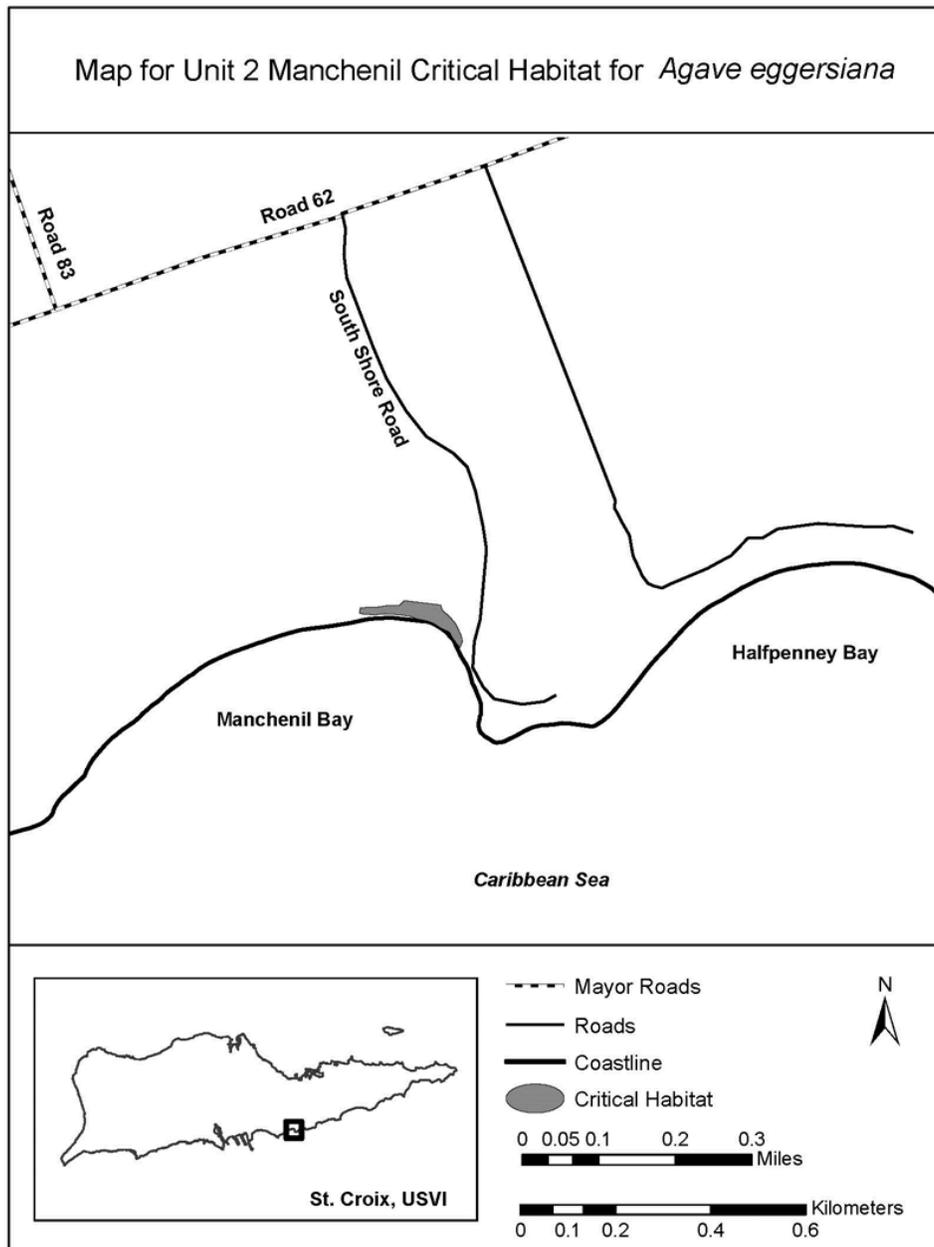
Unit 1: Cane Garden - consists of 6.9 ac (2.8 ha) of privately owned lands located at Estate Cane Garden and Estate Peters Mindle, Christiansted, St. Croix, USVI. This unit is located in the south-central portion of the island, approximately 0.17 mi (0.27 km) south of Road 62 and approximately 0.2 mi (0.3 km) northeast of Vagthus Point, along the northeast coast of Canegarden Bay and south of a private trail. It is within the geographical area occupied at the time of listing. This unit contains all the PCEs. The PCEs in this unit may require special considerations to address threats of nonnative plant species, effects of hurricanes (i.e., storm surge and erosion), and habitat modification (e.g., trails expansion).

Note: Map follows:



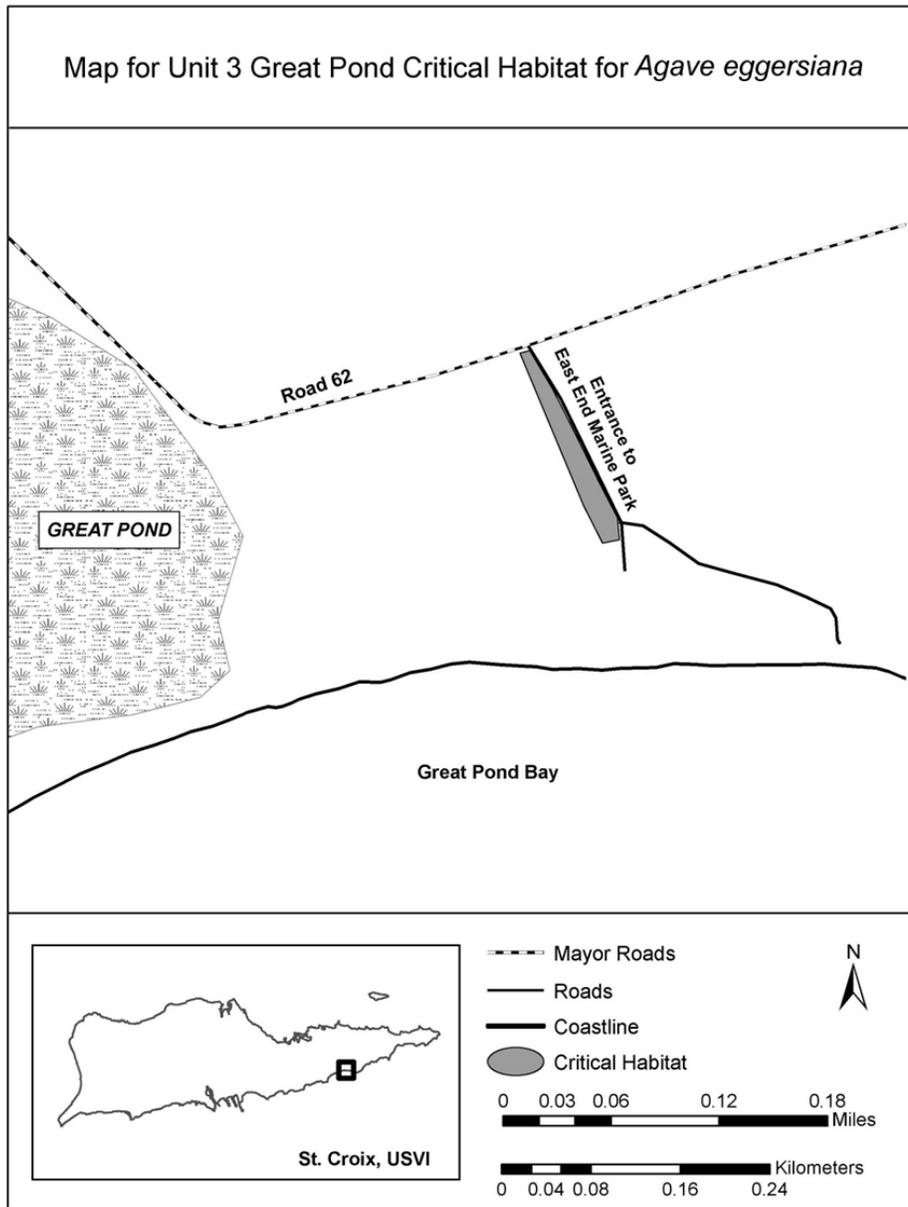
Unit 2: Manchenil - consists of 1.5 ac (0.61 ha) of privately owned lands located at Estate Granard, Christiansted, St. Croix, USVI. This unit is located in the south-central portion of the island, approximately 0.50 mi (0.82 km) south of Road 62 and approximately 0.02 mi (0.03 km) east of South Shore Road, along the northeast coast of Manchenil Bay. It is within the geographical area occupied at the time of listing. This unit contains all the PCEs. The PCEs in this unit may require special considerations to address threats of fires, nonnative plant species, effects of hurricanes (i.e., storm surge), and habitat modification.

Note: Map follows:



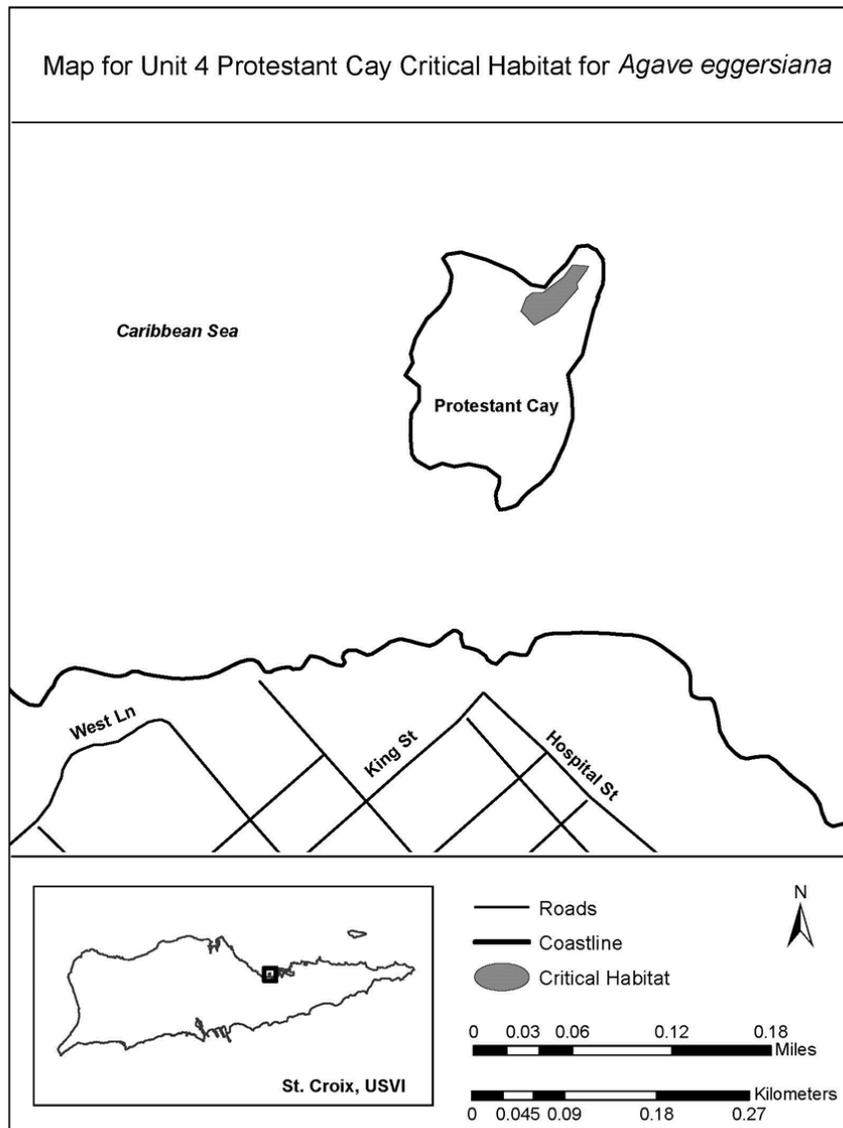
Unit 3: Great Pond - consists of 0.8 ac (0.32 ha) of territory-owned land located at Estate Great Pond, Christiansted, St. Croix, USVI. This unit is located in the south of the island, approximately 6.5 ft (2 m) south of Road 62 and east of the entrance of East End Marine Park offices. It is within the geographical area occupied at the time of listing. This unit contains all the PCEs. The PCEs in this unit may require special considerations to address threats of fire, nonnative plant species, and habitat modification (i.e., landscaping).

Note: Map follows:



Unit 4: Protestant Cay - consists of 0.4 ac (0.16 ha) of territory-owned lands that are leased to a private party and are located at Protestant Cay, St. Croix, USVI. The Cay is located approximately 0.33 km (0.20 mi) north of Christiansted town. The unit is located on the northeast side of the Cay. It is within the geographical area occupied at the time of listing. This unit contains all the PCEs. The PCEs in this unit may require special considerations to address threats of nonnative plant species, effects of hurricanes (i.e., storm surge and erosion), and habitat modification (i.e., hotel landscaping and maintenance).

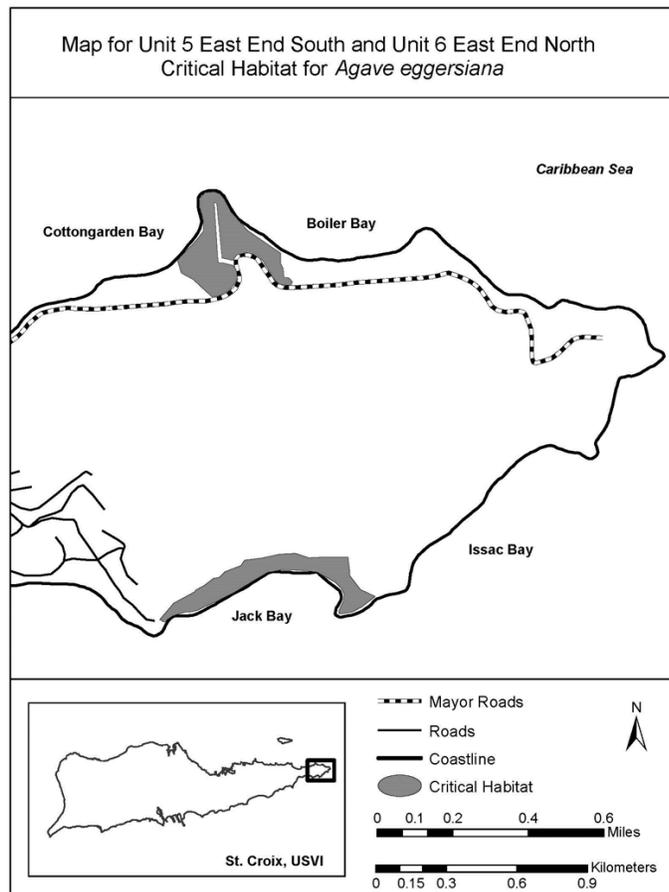
Note: Map follows:



Unit 5: East End South - consists of 19 ac (7.7 ha) of privately owned lands located at Estate Jack's Bay and Estate Isaac's Bay, Christiansted, St. Croix, USVI. This unit is located south of the eastern end portion of the island, approximately 0.93 mi (1.5 km) southwest of Point Udall, approximately 0.02 mi (0.04 km) east of Point Road, along the north coast of Jack's Bay, and south of a Jack's and Issac's Bay Preserve trail. It is owned by The Nature Conservancy and managed as conservation land. This unit is not occupied at the time of listing. However, it is part of the historical range of the species. This unit is essential for the conservation of the species because it contains the PCEs and because its designation will safeguard other established populations in case of any stochastic event that occurs within habitats currently occupied by the species.

Unit 6: East End North - consists of 22 ac (8.9 ha) of territory-owned land located at Estate Cotton Garden, Christiansted, St. Croix, USVI. This unit is located north of the eastern end portion of the island, approximately 0.86 mi (1.4 km) northwest of Point Udall, north of Road 82 along the eastern coast of Cotton Garden Bay and western coast of Boiler Bay. This unit is not occupied at the time of listing. However, it is part of the historical range of the species. This unit is essential for the conservation of the species because it contains the PCEs and because its designation will safeguard other established populations in case of any stochastic event that occurs within habitats currently occupied by the species.

Note: Map follows:

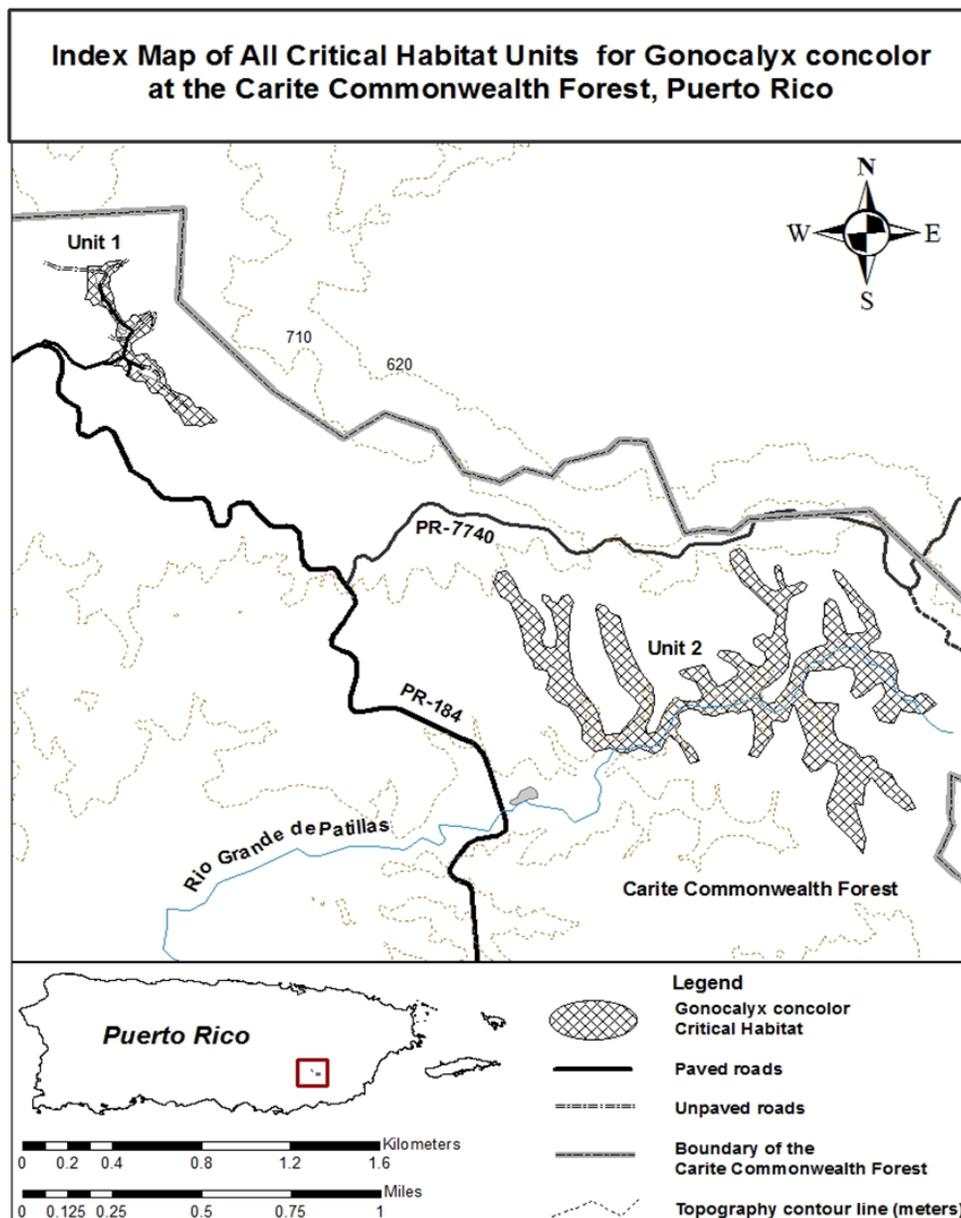


US Fish and Wildlife Service

Gonocalyx concolor (no common name)

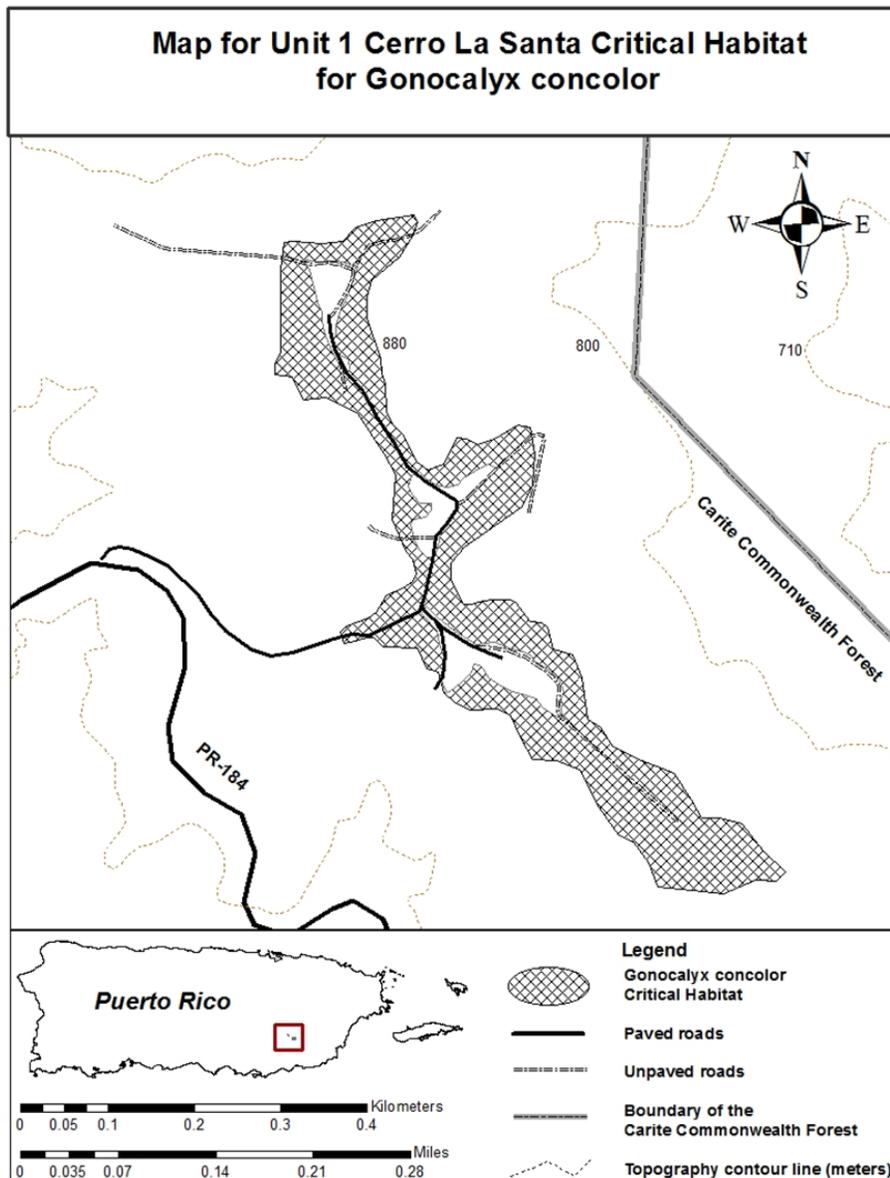
General Description: A total of two units were designated for *Gonocalyx concolor* in Puerto Rico.

Note: Index map of critical habitat units for *Gonocalyx concolor* follows:



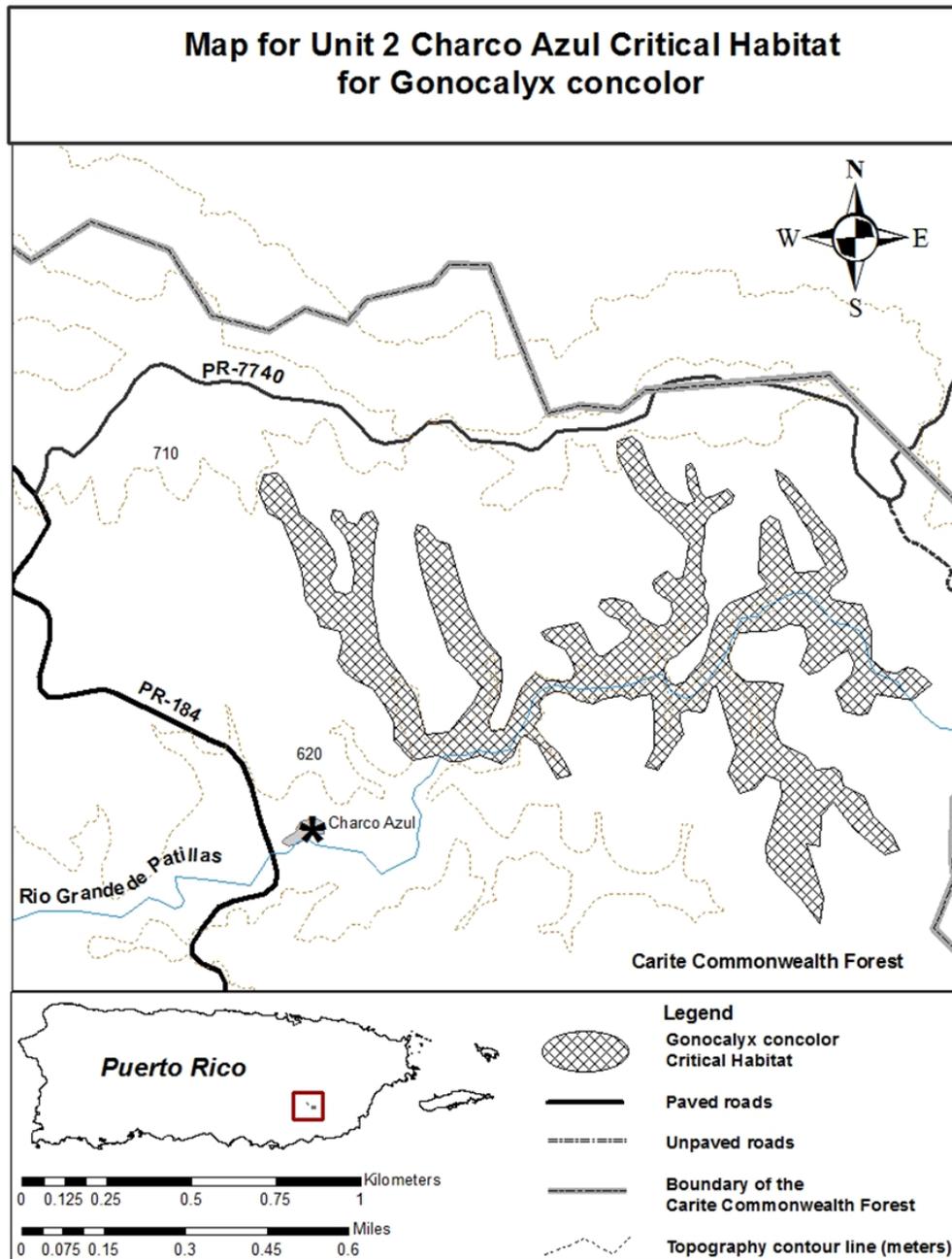
Unit 1: Cerro La Santa - consists of 18.8 ac (7.6 ha) of elfin forest located on exposed peaks and ridges of Cerro La Santa, above 2,890 ft (880 m) in elevation from sea level. This unit is located in the Sierra de Cayey on Road PR 184, Km 27.1 in Espino Ward, between the Municipalities of Cayey and San Lorenzo. This unit is within the geographical area occupied by the species at the time of listing. This unit contains all PCEs. The PCEs in this unit may require special considerations to address threats of habitat modification resulting from maintenance and potential expansion of existing telecommunication facilities, human-induced fires, invasive species, and degradation of forest quality.

Note: Map follows:



Unit 2: Charco Azul - consists of 179.2 ac (72.5 ha) of ausubo forest located along the Rio Grande de Patillas River basin between 2,030 ft (620 m) and 2,330 ft (720 m) in elevation from sea level. This unit is approximately 2.0 mi (3.2 km) southeast of Unit 1. This unit is within the geographical area occupied by the species at the time of listing. This unit contains all PCEs. The PCEs in this unit may require special considerations and protection to address threats of habitat modification resulting from human-induced fires, invasive species, and degradation of forest quality.

Note: Map follows:

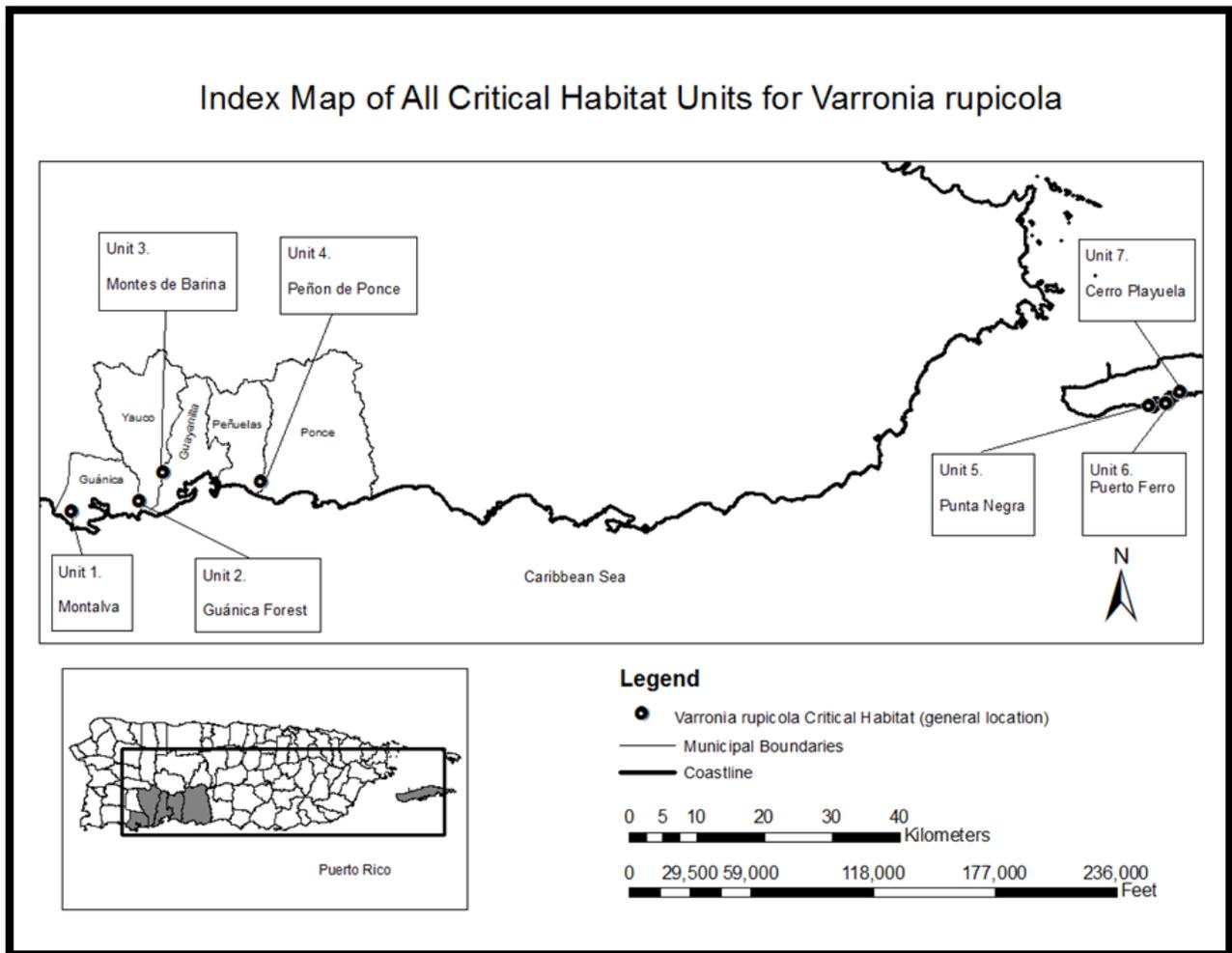


US Fish and Wildlife Service

Varronia rupicola; a (no common name)

General Description: A total of seven units were designated for *Varronia rupicola* in Puerto Rico.

Note: Index map of critical habitat units for *Varronia rupicola* follows:



Unit 1: Montalva - consists of 992 ac (401 ha) of Commonwealth-owned lands located at Montalva Ward in the Municipality of Guánica, Puerto Rico. This unit is located just south of State Highway PR 324 and the Town of Guánica, and includes Cerro Montalva. It is within the geographical area occupied by the species at the time of listing. Due to the marginal agricultural value, these forests were minimally impacted by other land use practices (e.g., charcoal production and ranching). Therefore, the prime and essential habitat for the species has maintained its unique features, such as the dry coastal shrubland habitat PCEs and PBFs, including suitable climate, substrates, and associated native plants and forest structure. Despite its conservation status the habitat has been affected by human-induced fires and maintenance of access roads and rights-of-way. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, hurricanes, and habitat modification (e.g., urban development).

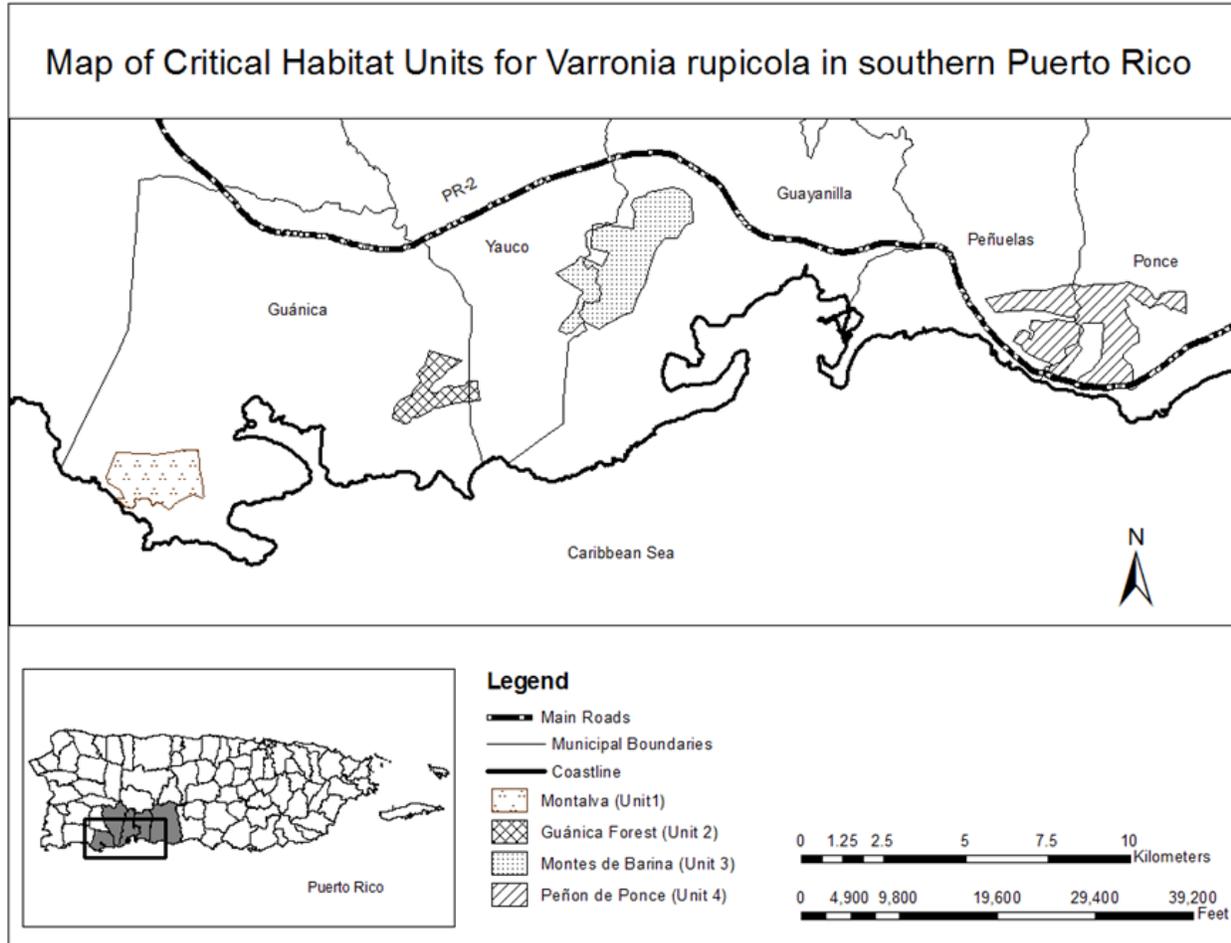
Unit 2: Guánica Commonwealth Forest - consists of 584 ac (236 ha) of Commonwealth-owned lands located within Carenero and Barina Wards in the municipalities of Guánica and Yauco, Puerto Rico. This unit is located within the core of the east section of the Guánica Commonwealth Forest. The forested habitat in this unit was minimally impacted by other land use practices like charcoal production and ranching due to its marginal agricultural value; hence, it has maintained its unique features. It is within the geographical area occupied by the species at the time of listing and contains the dry coastal shrubland habitat PCEs and PBFs, including suitable climate, substrates, and associated native plants and forest structure. Despite its conservation status, the habitat has been affected by human-induced fires and maintenance of access roads and rights-of-way. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, hurricanes, and habitat modification (e.g., urban development and right-of-way maintenance).

Unit 3: Montes de Barina - consists of 2,002 ac (810 ha) of privately owned lands primarily located along Indios Ward in the municipality of Guayanilla. A small section of this unit falls within the Barinas Ward in Yauco, Puerto Rico. This unit is located just south of State Highway PR 2. The forested habitat in this unit was minimally impacted by other land use practices like charcoal production and ranching due to its marginal agricultural value; hence, it has maintained its unique features. The unit is within the geographical area occupied by the species at the time of listing and contains the dry coastal shrubland habitat PCEs and PBFs, including suitable climate, substrates, and associated native plants and forest structure. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, hurricanes, and habitat modification (e.g., urban development).

Unit 4: Peñón de Ponce - consists of 2,174 ac (880 ha) of privately owned lands located along Encarnación and Canas Wards in the municipalities of Peñuelas and Ponce, Puerto Rico. This unit is located just north of State Highway PR 2 in the area known as Punta Cucharas. The forested habitat in this unit was minimally impacted by other land use practices like charcoal production and ranching due to its marginal agricultural value; hence, it has maintained its unique features. It is within the geographical area occupied by the species at the time of listing and contains the dry coastal shrubland habitat PCEs and PBFs, including suitable climate, substrates, and associated native plants and forest structure. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, hurricanes, and habitat modification (e.g.,

urban development).

Note: Map follows:



Unit 5: Punta Negra - is a small peninsula that consists of 291 ac (117 ha) of Commonwealth-owned lands located within Puerto Real Ward on the island of Vieques, Puerto Rico. This unit is located about 1.5 mi (2.5 km) east of the town of Esperanza and west of Puerto Ferro, Vieques National Wildlife Refuge (NWR). This natural area is managed by the Puerto Rico DNER as part of the Puerto Mosquito Natural Reserve. The forested habitat in this unit was minimally impacted by other land use practices like charcoal production and ranching due to its marginal agricultural value; hence, it has maintained its unique features. It is adjacent to an area currently occupied by the species (Unit 6), forming a continuous habitat and contains the dry coastal shrubland habitat PCEs and PBFs, including suitable climate, substrates, and associated native plants and forest structure. However, there is no specific record of the species within this unit. This unit is essential for the conservation of the species because it contains the PCEs and because its designation will safeguard other established populations in case of any stochastic event that occurs within habitats currently

occupied by the species.

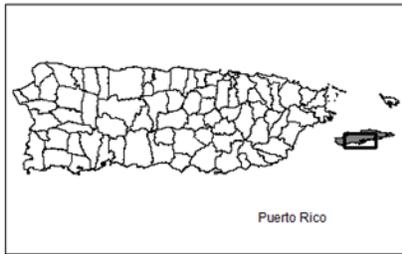
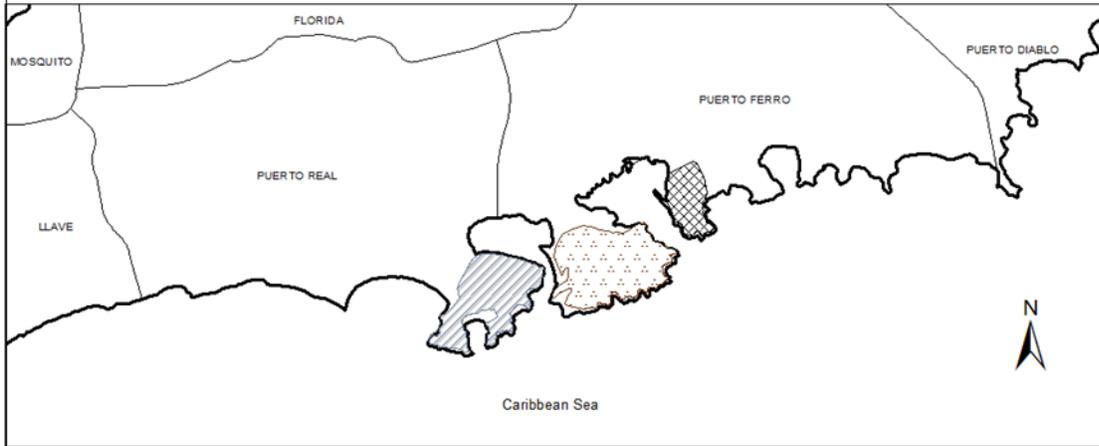
Further, we consider Units 5, 6, and 7 to be a single ecological unit. The species is expected to occur within this area, and ecological interactions and genetic flow between this area and Units 6 and 7 may be essential for the recovery of the species. It was not included as a single unit with Units 6 and 7 because these peninsulas are united by a narrow mangrove forest that does not provide habitat for the species. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, and hurricanes.

Unit 6: Puerto Ferro - is a small peninsula that consists of 381 ac (154 ha) of federally owned lands managed by the Service as the Vieques NWR, and is located within the Puerto Ferro Ward on the island of Vieques, Puerto Rico. This unit is located about 4 km (2.5 mi) east of the town of Esperanza. It is located just between Unit 5 and Unit 7, forming a continuous habitat and contains the dry coastal shrubland habitat PCEs and PBFs, and therefore we consider Units 5, 6, and 7 to be a single ecological unit. The forested habitat in this unit was minimally impacted by other land use practices like charcoal production and ranching due to its marginal agricultural value; hence, it has maintained its unique features. It is within the geographical area occupied by the species at the time of listing and contains the dry coastal shrubland habitat PCEs and PBFs, including suitable climate, substrates, and associated native plants and forest structure. It was not included as a single unit with Units 5 and 7 because these peninsulas are united by a narrow mangrove forest that does not provide habitat for the species. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, and hurricanes.

Unit 7: Cerro Playuela - is a small peninsula that consists of 123 ac (50 ha) of federally owned lands managed by the Service as the Vieques NWR, and is located within Puerto Ferro Ward on the island of Vieques, Puerto Rico. This unit is located about 0.5 km (0.31 mi) south of the former airport of Campamento García (Vieques NWR). The forested habitat in this unit was minimally impacted by other land use practices like charcoal production and ranching due to its marginal agricultural value; hence, it has maintained its unique features. It is adjacent to an area currently occupied by the species (Unit 6), forming a continuous habitat. However, there is no specific record of the species within this unit. This unit is essential for the conservation of the species because it contains the PCEs and because its designation would safeguard other established populations in case of any stochastic event that occurs within habitats currently occupied by the species. Further, we consider Units 5, 6, and 7 to be a single ecological unit. The species is expected to occur within this area, and ecological interactions and genetic flow between this area and Unit 6 may be essential for the recovery of the species. It was not included as a single unit with Units 5 and 6 because these peninsulas are united by a narrow mangrove forest that does not provide habitat for the species. The PCEs in this unit may require special considerations to address threats of nonnative plant species, human-induced fires, and hurricanes.

Note: Map follows:

Map of Critical Habitat Units for *Varronia rupicola* on Vieques Island, Puerto Rico



Legend

- Ward Boundaries
- Coastline
-  Punta Negra (Unit 5)
-  Puerto Ferro (Unit 6)
-  Cerro Playuela (Unit 7)

0 0.5 1 2 3 4 Kilometers

0 2,125 4,250 8,500 12,750 17,000 Feet