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# BULLETIN

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## ISLAND LISTS OF WEST INDIAN AMPHIBIANS AND REPTILES

**Robert Powell and Robert W. Henderson, Editors**

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# ISLAND LISTS OF WEST INDIAN AMPHIBIANS AND REPTILES

Robert Powell<sup>1</sup> and Robert W. Henderson<sup>2</sup>, Editors

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## JAMAICA

Byron Wilson<sup>1</sup>, Thera Edwards<sup>2</sup>, and Robert Powell

Over 65 species of amphibians and reptiles have been documented on Jamaica and its satellites. Several species are extinct, many are threatened with extinction, and several others are not native to the area, but have become established on islands due to human activity. Besides sources noted in the Introduction, we relied on the overviews of Crombie (1999) and Wilson (2011) and a treatise by Lazell (1996).

Perimeters of cays and offshore islands were derived from tracing land areas, using either Garmin MapSource or Google Earth<sup>®</sup>. The preferred source was Google Earth<sup>®</sup>, as it provided a current satellite image of the land mass. Cays and islands that were not visible on Google Earth<sup>®</sup> were digitized in MapSource using BlueChart Americas v9.5 maps (Chart Gb383730, Chart Us26125 Portland Bight, Chart Us26127 (B) Approaches to Kingston, Morant Cays). In Map Source, the grid was set to UTM and the datum to WGS 84. The outline of the cay/island was traced and saved as a dxf file. CAD2Shape software was used to convert the dxf file to an ESRI ArcMap compatible shapefile. The shapefile was opened in a data frame set to UTM Zone 18N and assigned a UTM projection in ArcMap. The file was then re-projected into the JAD2001 datum. Cays and islands with perimeters traced in Google Earth<sup>®</sup> were saved as kml files. A JAD2001 dataframe set at decimal degrees and metric units was opened and the kml files and JAD2001 files were added. All individual shapefiles were merged into one shapefile. The XTools extension was used to calculate the area of each island/cay in hectares in the final merged shapefile. The central point of each island/cay was calculated using the “convert features to spherical centroids” tool in the Graphics and Shapes extension. Since the data frame was set to decimal degrees the centroid’s X and Y coordinates were returned as longitude and

latitude in decimal degrees. The attribute table was exported to Excel and the data converted to return results to two decimal places, and change hectares to square kilometres. The calculated areas were verified by selecting two random cays/islands and comparing those results to measures generated using the online Google Planimeter.

**JAMAICA BANK**

**JAMAICA** (18.15°/-77.30°) (10,829 km<sup>2</sup>)

*Eleutherodactylus alticola*  
*Eleutherodactylus andrewsi*  
*Eleutherodactylus cavernicola*  
*Eleutherodactylus cundalli*  
*Eleutherodactylus fuscus*  
*Eleutherodactylus glaucoreius*  
*Eleutherodactylus gossei gossei*  
*Eleutherodactylus gossei oligaulax*  
*Eleutherodactylus grabhami*  
*Eleutherodactylus griphus*  
*Eleutherodactylus jamaicensis*  
*Eleutherodactylus johnstonei* (I)  
*Eleutherodactylus junori*  
*Eleutherodactylus luteolus*  
*Eleutherodactylus nubicola*  
*Eleutherodactylus orcutti*  
*Eleutherodactylus pantoni amiantus*  
*Eleutherodactylus pantoni pantoni*  
*Eleutherodactylus pentasyringos*  
*Eleutherodactylus planirostris* (I)  
*Eleutherodactylus sisypodemus*  
*Leptodactylus fallax* (I, E)  
*Lithobates catesbeianus* (I)  
*Osteopilus crucialis*  
*Osteopilus marianae*  
*Osteopilus ocellatus*  
*Osteopilus* sp.  
*Osteopilus wilderi*  
*Rhinella marina* (I)  
*Trachemys terrapen*  
*Ameiva dorsalis*  
*Anolis garmani*  
*Anolis grahami aquarum*  
*Anolis grahami grahami*  
*Anolis lineatopus ahenobarbus*

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*Anolis lineatopus lineatopus*  
*Anolis lineatopus merope*  
*Anolis lineatopus neckeri*  
*Anolis opalinus*  
*Anolis reconditus*  
*Anolis sagrei* ssp. (I?)  
*Anolis valencienni*  
*Aristelliger praesignis praesignis*  
*Aristelliger titan* (F)  
*Celestus barbouri*  
*Celestus cruscus cruscus*  
*Celestus cruscus cundalli*  
*Celestus duquesneyi*  
*Celestus fowleri*  
*Celestus hewardii*  
*Celestus microblepharis* (PE)  
*Celestus molesworthi* (PE)  
*Celestus occiduus* (PE)  
*Cyclura collei*  
*Gonatodes albogularis notatus* (I?)  
*Hemidactylus mabouia* (I?)  
*Leiocephalus jamaicensis* (F)  
*Sphaerodactylus argus*  
*Sphaerodactylus dacnicolor*  
*Sphaerodactylus gilvitorques* (PE)

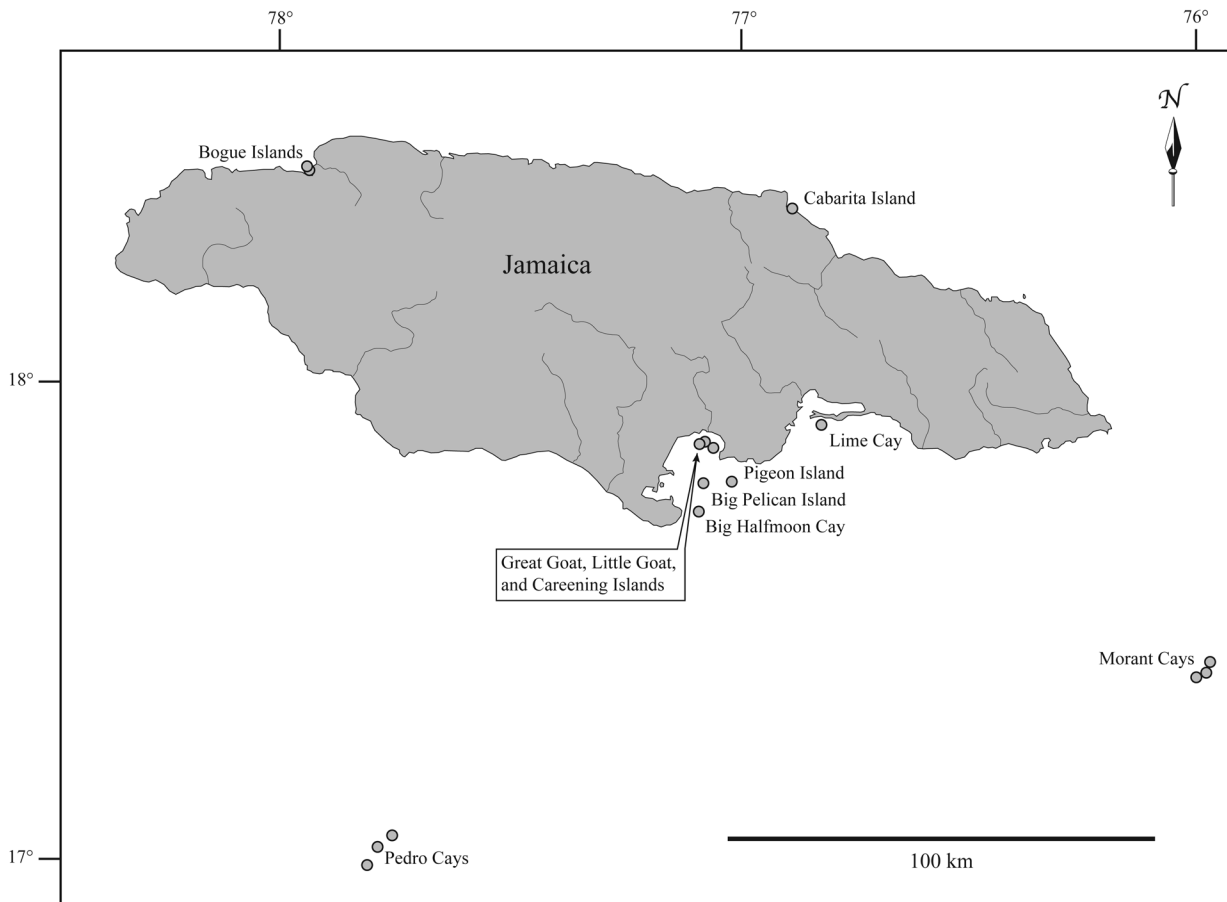
*Sphaerodactylus goniorhynchus*  
*Sphaerodactylus oxyrhinus*  
*Sphaerodactylus parkeri*  
*Sphaerodactylus richardsoni gossei*  
*Sphaerodactylus richardsoni richardsoni*  
*Sphaerodactylus semasiops*  
*Sphaerodactylus* sp.  
*Spondylurus fulgidus*  
*Tarentola albertschwartzi* (PE)  
*Epicrates subflavus*  
*Hypsirhynchus ater* (PE)  
*Hypsirhynchus callilaemus*  
*Hypsirhynchus funererus*  
*Hypsirhynchus polylepis*  
*Tropidophis jamaicensis*  
*Tropidophis stejnegeri*  
*Tropidophis stullae*  
*Typhlops jamaicensis*  
*Crocodylus acutus*

**Big Halfmoon Cay** (17.74°/-77.09°) (0.04 km<sup>2</sup>)

*Ameiva dorsalis*

**Big Pelican Cay** (17.80°/-77.02°) (0.03 km<sup>2</sup>)

*Ameiva dorsalis*



**Figure 6.** Map of Jamaica and surrounding small islands and cays.

**Bogue Islands** (18.45°/-77.94°) (0.16 km<sup>2</sup> for three cays combined)

*Aristelliger praesignis praesignis*

**Cabarita Island** (18.37°/-76.88°) (0.02 km<sup>2</sup>)

*Anolis grahami grahami*

*Anolis lineatopus merope*

*Sphaerodactylus goniorhynchus*

**Careening Island** (= Crane Island) (17.88°/-77.08°) (0.21 km<sup>2</sup>)

*Anolis grahami grahami*

*Anolis lineatopus lineatopus*

**Goat Island** (= Great Goat Island) (17.87°/-77.05°) (2.20 km<sup>2</sup>)

*Anolis grahami grahami*

*Anolis lineatopus lineatopus*

*Anolis opalinus*

*Cyclura collei* (PE)

*Sphaerodactylus argus*

*Epicrates subflavus* (?)

**Lime Cay** (17.92°/-76.82°) (0.02 km<sup>2</sup>)

*Ameiva dorsalis*

**Little Goat Island** (17.89°/-77.07°) (1.04 km<sup>2</sup>)

*Anolis grahami grahami*

*Anolis lineatopus lineatopus*

*Anolis opalinus*

*Cyclura collei* (PE)

*Sphaerodactylus argus*

**NE Morant Cay** (17.42°/-75.97°) (0.07 km<sup>2</sup>)

*Aristelliger praesignis praesignis*

*Sphaerodactylus notatus atactus* (I?)

**NE Pedro Cay** (= Top Cay) (17.05°/-77.75°) (0.04 km<sup>2</sup>)

*Sphaerodactylus argus*

**Pigeon Island** (17.80°/-77.07°) (0.18 km<sup>2</sup>)

*Ameiva dorsalis*

**SE Morant Cay** (17.39°/-75.98°) (0.09 km<sup>2</sup>)

*Aristelliger praesignis praesignis*

**SW Morant Cay** (= Rocky Morant Cay) (17.39°/-76.00°) (0.02 km<sup>2</sup>)

*Aristelliger praesignis praesignis*

**SW Pedro Cay** (= Bird Cay) (16.99°/-77.81°) (0.17 km<sup>2</sup>)

*Aristelliger praesignis praesignis*

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