Conservation status of reptiles and amphibians in the U.S. Virgin Islands

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Abstract. The United States Virgin Islands (USVI) are situated along the Puerto Rico Bank near the eastern terminus of the Greater Antilles in the northern Caribbean, and comprise four major inhabited islands and more than 50 satellite cays. The small sizes of the islands, their relative isolation, and unpredictable weather events such as hurricanes make natural populations vulnerable to human-induced impacts of habitat loss and the introduction of invasive exotic species. There are currently 30 extant species of reptiles and amphibians in the USVI, 24 of which are native. Four species have been extirpated from all or part of their former distribution, four species are endangered, one is threatened, and eight are considered data deficient. Five reptiles and amphibians are fairly recent (within the last 150 years) introductions. Species of particular conservation concern are the St. Croix ground lizard (Ameiva polops), Virgin Islands tree boa (Epicrates monensis granti), and sea turtles, and recovery efforts are underway for these species. Habitat protection and reduction of exotic predators are important conservation actions required to protect herpetofauna, combined with ecological studies and population monitoring.

Key words: Amphibians; conservation; reptiles; sea turtles; US Virgin Islands.

Introduction

Located near the eastern terminus of the Greater Antillean chain of islands in the northern Caribbean Sea, the United States Virgin Islands (USVI) comprise four major inhabited islands and more than 50 smaller offshore cays with a total land area of about 353 km² (fig. 1). St. Thomas (74 km²) and St. John (50 km²) are the two major islands to the north, situated on the Puerto Rico Bank to the east of Puerto Rico and its eastern offshore islands (Culebra and Vieques), and west of the British Virgin Islands (BVI). Separated by a distance of roughly 3 km, both islands are...
Figure 1. Location of U.S. Virgin Islands.

mountainous (up to 477 m high on St. Thomas, 387 m on St. John), thus attracting a moderate amount of precipitation, ca. 110 cm/yr at Trunk Bay, St. John (R.H. Boulon, unpubl. data) and 97 cm/year in Red Hook, St. Thomas (Division of Fish and Wildlife data 2001-2005). Their coastlines are irregular with numerous small bays and offshore cays. Water Island comprises a land mass of 2 km² located at the mouth of St. Thomas harbor. The more isolated St. Croix (217 km²), ca. 64 km to the south, is generally flatter (up to 355 m high in the hilly northwest) and drier, with fewer bays and offshore cays. Combined, all offshore cays comprise about 3% of the territory’s area (12 km²).