Reptiles are a very diverse group with a long evolutionary history dating back 300 million years to the Pennsylvanian period. They have adapted to a wide range of habitats in environments ranging from temperate to arid. Compared to birds and mammals, reptiles often have very restricted distributions with specific microhabitat requirements; making them particularly vulnerable to anthropogenic environmental changes. As such, reptiles are a group of conservation concern. Of the 9084 described species of reptiles only 35% have been evaluated for the IUCN Red List of Threatened Species. While there are species-specific threats, there are several common factors that imperil all reptiles including habitat alteration/destruction, over-collection and introduced predators. Additionally, climate change is a critical factor threatening reptile populations. With temperature being important to not only the success of egg incubation for many taxa but also sex determination, increasing global temperatures may have a detrimental impact on numerous reptile populations.

Zoos can make valuable contributions to the scientific understanding of this fascinating group of animals as well as to their conservation. As many reptiles have cryptic behaviour, zoos have the unique opportunity to observe, record and publish basic information on their natural history. For example, it has only been in recent years that zoos maintaining Komodo dragons Varanus komodoensis documented for the first time that the species can reproduce parthenogenetically. Many zoos and aquariums have solid reptile husbandry experience and associated breeding programmes, which are essential to maintaining ex situ assurance colonies that can be used for augmentation and reintroduction programmes. A number of release programmes have benefited from reptiles bred in zoological facilities. The Association of Zoos & Aquariums (AZA) Mona/Virgin Islands Boa Epicrates monensis Species Survival Plan (SSP) is one such example. Forty-one Virgin Islands boas, bred in zoological facilities, released at a Puerto Rican site in 1993–1994 increased to nearly 500 snakes by 2003, demonstrating that reintroduction programmes can be successful.

The world’s zoos and aquariums are visited by more than 700 million people each year, providing us with the perfect platform to educate them about the threats reptiles are facing in a rapidly changing world. This volume of the International Zoo Yearbook will highlight the contributions that zoological facilities have made to reptile conservation.

Read the following free articles from the latest volume (2015) of International Zoo Yearbook:

**Introduction to Reptile Conservation**
Jeff Ettling & Fabian Schmidt

**The Aruba Island rattlesnake Crotaulus unicolor Species Survival Plan: a case history in ex situ and in situ conservation**
R. A. Odum & H. K. Reinert

G. Rich / R. H. Glew