



## General Information for the case study:

WRL reference	M02 D01	
Module	M02 Survey Techniques	
Data Set	D01 Population estimates of Hog Island Boa Constrictors	
Research questions	<ol style="list-style-type: none"> <li>Using the mark recapture data provided, estimate the population size of Boa constrictor on Cayo Menor.</li> <li>By how much do the estimates produced using the 2 year dataset and 3 year data set differ and what might this tell us about the possible benefits of using multiple years of data when conducting population estimates?</li> </ol>	
Keywords	Endemism; biodiversity hotspots; isolation; <b>conservation; human impact; mark-recapture</b> ; sampling; <b>survey techniques</b>	
Potential Curriculum links	<b>AQA</b>	3.4.1; 3.4.7
	<b>Edexcel</b>	App 10
	<b>IB</b>	G.4; G.5.3
	<b>Camb.Pre-U</b>	5.2
	<b>OCR</b>	2.3.4; 5.3.2; App D
	<b>WJEC</b>	5.8
	<b>SQA</b>	Case studies; HOAL; HOAM
	<b>CCEA</b>	2.2; 4.4; Maths and Stats knowledge
Summary	<p>he population of Hog Island Boa Constrictors (located in the Caribbean Sea) are estimated using mark-recapture techniques. The data is analysed using two different methods and the differing results compared and discussed.</p> <p>This study is an excellent example of how populations of animals can be estimated. It also allows a discussion to develop about the impacts of humans on island populations of animals and how scientific data can support conservation management programmes.</p> <p><b>Difficulty:</b>  <b>Research Q1 - Lincoln Peterson method 6/10</b>  <b>Research Q2 - Comparing methods (Schnabel method) 8/10</b></p>	

