



WRL reference	M02 D03
Module	M02 Survey Techniques
Data set	D03 Comparison of bird survey techniques

Background to the research:

Field scientists and conservationists need to use effective survey techniques in order to develop strategies for protecting tropical forests - if you do not know which species inhabit an ecosystem then it is very hard to manage them! Ornithologists working in the tropics have a wide range of methods available to them. However not all methods are equally effective, and certain methods work better in different forest types and when targeting different types of birds. It is therefore important for tropical ornithologists to know the limitations of different survey techniques, and understand which methods are most appropriate for describing bird communities in different ecosystems. This can be difficult when working in poorly-explored forest types that have not been surveyed much in the past, such as Mesoamerican Cloud Forest.



Figure 1. Using fine mesh mist-nets to capture birds is a common ornithological method used in tropical forests.

While there are at least half a dozen different techniques used for surveying birds in tropical forest, by far the most common two are mist-netting and point counts. Mist-netting involves sampling birds by capturing individuals in fine mesh nets. Point counts involve completing a series of timed counts (usually 10 minutes) at points spaced regularly along a set route, and recording all species seen and heard during these counts. These are the methods we will compare in this exercise.





Figure 2. Barred Forest-falcon; an undergrowth species occasionally caught in mist-nets in Cusuco National Park

Additional reading:

For more background to this project please read Martin et al. 2010 which discusses the effectiveness of these two techniques for surveying birds in a Central American cloud forest ecosystem.

