

 <p>Agreement on the Conservation of Albatrosses and Petrels</p>	<p>Third Meeting of the Population and Conservation Status Working Group <i>La Serena, Chile, 5 – 6 May 2016</i></p> <p>Precision wildlife monitoring using unmanned aerial vehicles</p> <p>Jarrod C Hodgson, Shane M Baylis, Rowan Mott, Ashley Herrod and Rohan H Clarke</p>
---	---

A password is required to view the full text document

SUMMARY

Unmanned aerial vehicles (UAVs) represent a new frontier in environmental research. Their use has the potential to revolutionise the field if they prove capable of improving data quality or the ease with which data are collected beyond traditional methods. We apply UAV technology to wildlife monitoring in tropical and polar environments and demonstrate that UAV-derived counts of colony nesting birds are an order of magnitude more precise than traditional ground counts. The increased count precision afforded by UAVs, along with their ability to survey hard-to-reach populations and places, will likely drive many wildlife monitoring projects that rely on population counts to transition from traditional methods to UAV technology. Careful consideration will be required to ensure the coherence of historic data sets with new UAV-derived data and we propose a method for determining the number of duplicated (concurrent UAV and ground counts) sampling points needed to achieve data compatibility.

Citation: Hodgson JC, Baylis SM, Mott R, Herrod A and Clarke RH (2016). Precision wildlife monitoring using unmanned aerial vehicles. *Scientific Reports* 6: 22574. Available on the Internet: <http://www.nature.com/articles/srep22574> (doi:10.1038/srep22574).