Appendix 2: Additional details on methodology

The research described in this paper is based on an applied methodology with an action research component, and was undertaken as part of a PhD based at the Lancaster Environmental Centre at Lancaster University. The fieldwork was carried out during four key periods in Bolivia, including a reconnaissance visit January-February of 2012 (one month), a preliminary fieldwork period June-December of 2012 (six months), a main fieldwork stage May-December 2013 (6.5 months), and a period of validation of data/preliminary dissemination stage June-August in 2014 (2 months), which included some documentary filming of interviews previously conducted. A final dissemination stage was carried out between September-November of 2015 with a large percentage of the involved participants/actors mentioned in the research.

Interviews and participant observation

Unstructured and semi-structured interviews were carried out with researchers (n=24). local leaders and community members (n=42), park guards and administrators (n=27), and staff of government ministries and/or other conservation NGOs (n=9). An additional 35 interviews were conducted in 2012 in the Takana 1 indigenous territory with local people who had been involved in a hunter/fisher self-monitoring project. Interviews were focused on understanding the main issues involved with scientific research and the management of natural resources in the Madidi region, specifically regarding experiences with park management, main concerns of community regarding conservation activities in the region, and awareness of existing scientific research and monitoring. Most interviews lasted between 20-40 minutes, but some discussions with key individuals continued over many hours or even days due to close proximity. Other interviews were conducted very briefly (15 minutes) to ask about a person's specific perception of a given situation or project. The latter was especially the case for the interviews conducted with Takana and Tsimane'-Mosetén hunters and fishers who had previously participated in self-monitoring projects with the Wildlife Conservation Society. Questions focused on how decisions about natural resources use are made at local, regional and national levels, the role of scientific research in those decisions, micro and macro-level politics and encounters around the production and dissemination of scientific research. See Appendix B. Some of these interviews were also repeated and filmed in 2014, and two short documentaries were created as a result, Bolivian Perspectives on Research, and the Park Guards of Madidi.

Alongside interviews, I used participant observation to better understand the regional context as well as the daily activities of protected area staff, researchers, and local community members. Particular focus was directed at two different areas: 1) the ranger-based integral monitoring programme, run by the National Service of Protected Areas with technical support from the Wildlife Conservation Society (WCS) in Bolivia; and 2) interactions in the field through wider projects between conservation science / biological research institutions (Wildlife Conservation Society Bolivia, Conservation International) and leadership councils and communities of indigenous territories in region (Takana, Lecos de Apolo, San Jose de Uchupiamonas and Tsimane'-Moseten). In addition, on several occasions I accompanied researchers (both social and natural

scientists) on trips, workshops and social encounters in local communities in protected areas and bufferzone.

Workshops

Workshops were carried out with three stakeholder groups – park guards, indigenous communities, and scientists. In the case of the park guards, the workshops were structured in part around the systematic analysis of past research conducted in the protected area. The main aim was to discuss what had been done previously and to what extent those studies had been disseminated/ implemented for management, and in the case of Madidi, to develop a specific regulation for research in the protected area. A total of 30 park guards from Madidi and Pilón Lajas participated in 3 workshops in 2013.

Workshops were also held in two 'over-researched' indigenous communities, and were organized around a proposal to create a community norm to negotiate their relations with researchers in the future (i.e. ethical protocols). Between 2014-2015 these norms were revisited with local leaders, and although they were said to provide a 'reference' for the communities with regards to research, their usefulness was very limited. A more effective approach would be longer-term and community-led, but this was not possible due to the time and budgetary constraints of the PhD, in addition to the fact that the communities had much more pressing issues to deal with at the time.

Two 'communication and dissemination training' workshops were also held with students and staff of the National Herbarium (a botanical institute) in La Paz. These were developed and carried out by request of the Herbarium's director, and attended by 40+ participants. Activities included individual and collective reflection, role play and group discussion. Between December of 2012 and August of 2014 feedback sessions were held with: Madidi NP/NAIM, a group of Bolivian researchers from various institutions, and the Takana, San Jóse de Uchupiamonas, and Tsimane'-Mosetén indigenous councils. Additional meetings to present findings and materials were held with the Wildlife Conservation Society, Pilón Lajas BR/IT, SERNAP, and the Vice-Ministry of the Environment's Department of Biodiversity.