Overarching idea:

Understanding resource use by Andean Condors and potential habitat threats within their distribution/flyways

1. How do landscape features and environmental variables affect the choice of Andean Condors for roosting/nesting sites?

I could do an experiment to test for this using other vultures data. Maybe Hawk Mt?

1. How do landscape elements and environmental variables affect the movement of Andean Condors along their flyways?
2. How do different socio-economic and cultural factors affect relate to human-Condor interactions in southern Peru?
3. How do landscape features affect the choice of Andean Condors for roosting/nesting sites?

Test with a resource selection function whether slope, thermal and updraft availability are important factors on the selection of nesting/roosting sites. This will be done for all of South America using available data. Many roosting and nesting sites are already known, and data can be presented in a map.

To complement this analysis, we can test use of thermals/uplifts around these nesting and roosting sites using GPS movement data, and if possible, test frequency of use or availability within their homerange.

What we have: all the data is available, but we need to request and organize it

What we need: organize the data

1. How can landscape elements affect the movement of Andean Condors in their flyways?

Test how the presence of elements could affect movement choice for Andean Condors. Homerange analysis and comparison of presence of these elements within and outside their HR (powerlines, towers and wind power mainly).

What we have: layers for powerline and windpower are available for Peru. Need to check in other countries.

What we need: movement data of Andean Condors. It can be possible to access it via collaborations.

1. If there was the possibility to determine feeding grounds…

What potential threats are there between nesting/roosting areas and feeding grounds that can be a threat to Andean Condors?

Landscape assessment in the areas between these two sites using movement ecology data.

What we have: Landscape layers are available for all the countries.

What we need: movement data of Andean Condors. It can be possible to access it via collaborations, and check if feeding ground data would be available based on movement locations.

1. Is there a correlation between cattle density and Andean Condor population, and between cattle density and Human-Condor conflicts in southern Peru?

Surveys will be conducted to estimate cattle abundance per local community across Ayacucho, Abancay and Cusco, and with this information we will get an estimate of cattle density. Complementary, we will collect information on economic activity of people, frequency of encounters with Andean Condors, type of interaction, perception of value, and relation to culture.

What we have: funding to do fieldwork

What we need: Conduct surveys.

1. What are the main causes of Andean Condor injuries across its distribution?

Data from zoos, captive breeding and rehabilitation facilities will be collected to test for the most frequent causes and areas with highest proportion of injured individuals.

What we have: all the data is available, but we need to request and organize it

What we need: organize the data