This document is a guide to the scripts for bird analysis for Colombia. **Bold headings** break up the code base by topic. Solid bullets correspond to code files. Hollow sub-bullets indicate each script that produces objects (generally saved to disk, except in cases of scripts called via `source()`) required for the script to run. Scripts can be run in order of first appearance in this list without problems.

**Baseline species lists**

* species\_lists.R (baseline species list for Colombia; also creates birdlife range map objects that are used later)
* nf\_species\_list.R (baseline species list for neotropical forests)
  + species\_lists.R

**Sampling point data**

* GEE\_setup.sh (setup for Earth Engine)
* coord\_processing.R (import and process coordinates for all points)
  + GEE\_setup.sh
* points\_formatting.R # still need to do precipitation and wildlife-friendliness
  + GEE\_setup.sh
  + coord\_processing.R

**Survey data**

* bird\_import\_and\_cleaning.R
  + species\_lists.R
  + points\_formatting.R

**Species ranges**

* hydrosheds\_extraction.R (create polygons for biogeographic clipping)
* ayerbe\_maps.R
  + species\_lists.R
* combined\_bird\_maps.R
  + species\_lists.R
  + bird\_import\_and\_cleaning.R
  + hydrosheds\_extraction.R
  + ayerbe\_maps.R

**Species traits**

* birdlife\_scraper.R
  + nf\_species\_list.R
* parker\_standardization.R
  + nf\_species\_list.R
  + birdlife\_scraper.R
  + species\_lists.R
* elevations\_prep\_and\_exploration.R
  + species\_lists.R
* species\_covariate\_formatting.R
  + species\_lists.R
  + parker\_standardization.R # Still requires some additional checking by hand
  + combined\_bird\_maps.R
  + elevations\_prep\_and\_exploration.R
  + birdlife\_scraper.R
* migratory\_dates.R
  + species\_lists.R

**Format for analysis**

* format\_for\_analysis.R
  + combined\_bird\_maps.R
  + bird\_import\_and\_cleaning.R
  + elevations\_prep\_and\_exploration.R
  + points\_formatting.R
  + species\_covariate\_formatting.R
  + migratory\_dates.R

**Analysis**

* occupancyMod\_full.stan
* bird\_occupancy\_full.R
  + format\_for\_analysis.R