Table of Contents: Chapter 3 file

* THE MOST IMPORTANT FILES WITH MODELING STATISTICS ARE FOUND IN
* SCRIPTS/STRICT
  + Occ\_points\_strict
    - Making the microhabitat polygons
    - Making the microhabitat point files
  + Maxent
    - Running the models and the predictions
  + Reciprocal\_suit\_strict
    - Summary statistics and overlap values
    - Also where the niche ID test is run
  + Maxent\_output – file with all output from maxent
  + Points – points used in the maxent files
  + Polygons – polygons used to make points and get the overlap statistics
  + Predictions – the predicted maps of suitability after the model is done
* SCRIPTS/7M\_7L
  + Occ\_points\_7M\_7L
    - Making the microhabitat polygons
    - Making the microhabitat point files
  + Maxent
    - Running the models and the predictions
  + Reciprocal\_suit\_strict
    - Summary statistics and overlap values
    - Also where the niche ID test is run
  + Maxent\_output – file with all output from maxent
  + Points – points used in the maxent files
  + Polygons – polygons used to make points and get the overlap statistics
  + Predictions – the predicted maps of suitability after the model is done
* SCRIPTS/LEN\_M1\_M2
  + Occ\_points\_LM1M2
    - Making the microhabitat polygons
    - Making the microhabitat point files
  + Maxent
    - Running the models and the predictions
  + Reciprocal\_suit\_Len\_M1\_M2
    - Summary statistics and overlap values
    - Also where the niche ID test is run
  + Maxent\_output – file with all output from maxent
  + Points – points used in the maxent files
  + Polygons – polygons used to make points and get the overlap statistics
  + Predictions – the predicted maps of suitability after the model is done
* SCRIPTS/SUBSTRATE\_STRICT\_LEN
  + Occ\_points\_strict
    - Making the microhabitat polygons
    - Making the microhabitat point files
  + Maxent
    - Running the models and the predictions
  + Reciprocal\_suit\_strict
    - Summary statistics and overlap values
    - Also where the niche ID test is run
  + Maxent\_output – file with all output from maxent
  + Points – points used in the maxent files
  + Polygons – polygons used to make points and get the overlap statistics
  + Predictions – the predicted maps of suitability after the model is done
* Climate Files
  + Alt\_2-5m\_bil\_elevation\_raw
  + Bio\_2-5m\_bil
  + Cloud\_cover
  + Elevation
  + NewWorld\_current2
  + NewWorld\_current\_2\_PET
  + Output\_for\_Analysis
  + SDM
  + Wc2
  + Wc2\_bioclim\_clipped
  + Wc2\_raw\_bioclim
  + Wc2\_WVP
  + Scripts/Climate
    - Climate\_in\_Polygons
      * This is for making files to summarize over entire polygons. Also used for standard normal deviates analysis to decide which variables to use in the models
    - Climate\_Wrangle
      * This is for going in the polygons and asking for the climate and the summary statistics
    - Cloud\_cover\*\*
      * Rescaling the raster file to be in percent and to be a 2.5 arc-min resolution
    - MainClimacticAnalyses
      * This is ericas standard normal deviates analysis and deciding which variables to use in maxent model
    - WVP\_PET
      * Exploring the variables when we first decided we wanted to use them – not associated with anything
* Phylogeny
  + Data – Pruned – BBPleth.tre
  + Erica sent to me February 1st 2019
* Maxent files from output
  + ENM – Maxent\_Files
    - Labeled Microhabitat\_classification
* Maxent prediction maps
  + ENM – Prediction
    - Labeled microhabitat\_prediction\_classification
    - All the numbered ones are the ‘folds’ so you can open the specific runs if you so wish
* Making EOO distributions
  + Used Borders files to cut out oceans
  + Vertnet lat/long files in Polygons folder
  + Vernet polygons made in Polygons folder
* Species polygons that was aggregated into the niche polygons
  + In Polygons folder
* Points from distributions
  + In the Points folder labeled with the microhabitat\_classification
    - Ressmall is the correct point files
* Documents
  + Resolution tests – AUC scores for strict, lenient
  + AUC\_scores for making box/whisker plot
  + Variable contributions for every maxent run
  + Extras
    - Alternative names
    - Redlist guidelines and extra powerpoint
    - Maxent flag meanings and default settings
    - Lauren poster stuff
    - Methods for variables
    - Overlap data from niche/distributions
    - Package tutorials
    - Paper outline – all edits are saved and history
    - Papers found here that I read/cited and useful?
    - Writing word choice document for editing
* Papers
  + Docs – Papers
  + All cited papers that I cite are found here
* Results
  + Strict
    - Scripts-Strict
      * The points script
      * The maxent script
      * The reciprocal suitability script
      * The points/polygons/prediction files used
      * The niche ID output
  + Lenient/M1/M2
    - Scripts – Len\_M1\_M2
      * The points script
      * The maxent script
      * The reciprocal suitability script
      * The points/polygons/prediction files used
  + Substrate Strict/Lenient
    - Scripts – Substrate\_Strict\_Len
      * The points script
      * The maxent script
      * The reciprocal suitability script
      * The points/polygons/prediction files used
* IUCN Distributions
  + Downloaded January 2019 CAUDATA file
* Scripts and descriptions found at the top of each script
  + Figures
    - This is used to make figures for the posters and any other figures mainly exploratory
  + IUCN\_Poly\_RE
    - This is making Lauren’s polygons and aggregating all the polygons into the microhabitat polygons – for the file *AllPolysforanalysis*
  + LM+IUCN\_Polys
    - This was using lauren’s polygons and combining with IUCN polygons (looks identical to the IUCN\_Poly\_RE script, so I will parse through these two scripts and combine into one)
  + MapCode\_OG
    - This is ericas original code she gave lauren before lauren changed everything. Used to test if the original code worked and what about laurens didnt
  + MAPS
    - This is a script to make maps and has the leaflet code at the bottom
  + ModelProj
    - This is a script to set up future model projections – we never did this but it is ready to

Lauren\_Extra\_Scripts – not used in any analysis

* + Auto\_Thought
    - From tutorial and not used in our methodology
  + BioGeographyPlot
  + Figs\_script
  + Leaflet
    - Making leaflet maps
  + ModelProj
  + Occ\_script\_blueprint
    - Nicks original script sent to us, didn’t use
  + Recip\_Suit
  + SDM Ficus petiolaris
    - Finns script we were working on
  + SDM\_FINN
    - Finns script using maxent we were working on
  + SDM
  + Species Occurrence Data
  + Recip\_Suit\_MH
    - This is to find distribution/model overlap statistics – EXPLORATORY – not associated to any analysis
    - Used as template to the other scripts
  + Recip\_Suit\_sub
    - This is to find distribution/model overlap statistics – EXPLORATORY – not associated to any analysis
    - Used as template to the other scripts
  + Recip\_Suit
    - This is to find distribution/model overlap statistics – EXPLORATORY – not associated to any analysis
    - Used as template to the other scripts
  + SDM
    - This is an exploratory script to use other models such as other algorithms – we didn’t use this and probably never will
  + Poly\_Overlap
    - This is to find distribution/model overlap statistics – EXPLORATORY – not associated to any analysis
  + Occ\_points
    - This is to make points from polygons – EXPLORATORY ONLY – not attached to any analysis
  + Maxent
    - Maxent model script – EXPLORATORY ONLY – not attached to any analysis
  + MapCode
    - This is laurens broken code to try and make the figure to connect phylogeny and map