**Habitat Covariate Candidates**

There are two basic factors we need to consider at this point, what scales do we want to focus on and within each scale what habitat covariates do we want to include. I discussed this a bit with Kim and the scale aspect is a somewhat open question at this point. But, for now we should probably think big-picture scale so these models will be more appropriate for predicting resource selection across large spatial scales (maybe ecoregion or something). Another issue we will have is how to deal with season. Perhaps we just can bin data by season within each study site and run models for each season…depending on what data we ultimately have…

-agriculture: types of crops, distance away from

- Caloric value of crop area?

-plant productivity: EVI

- Continuous measure

-forest canopy cover: mean value of canopy cover

-unvegetated area: bare land, urbanized/developed

Availability of wetlands: distance to water

* Gradient of “distance to water” on the landscape

Length of streams

-actual evapotranspiration

-potential evapotranspiration

-annual precip

-precip dry season

-precip wet season

-temperature corresponding to season(s) collared

-sex

-habitat type

-pressure

Ecoregion

Cross population-covariates

* Agriculture: converting into something that is comparable across populations
* Plant productivity: EVI, potentially consistent across populations?
* Forest canopy cover: Consistent across populations
* Distance to water? The distribution of this resource on the landscape will vary with season. Will we be able to account for this?
* Temperature: Dynamic environmental variable? Varies across time?
* Pig density as a gradient: How do pigs move in response to pig density?
* Ecoregion: Easy to get for all populations
* Pig attributes: For the broad-scale study, restrict to sex as we don’t have age-based data for all studies?

McClure covariates

* Days of 35 C
* Days below -4 C
* Snow depth
* Distance to water
* Forest cover
* Forage availability
* Heterogeneity index