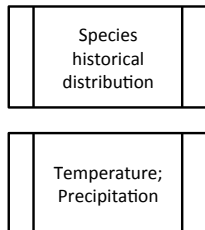


DATA

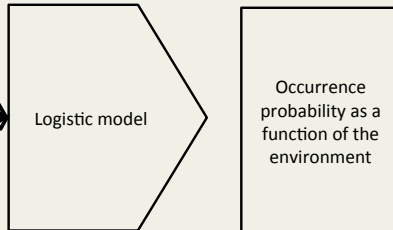
Coarse-scale observations

- Large spatial extent
- Within-normal range
- Raw data



MODEL

Correlative meta-model (SDM)



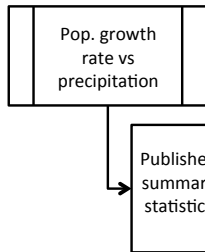
Obj: parameterize a statistical model best capturing the relationship between occurrence probability and the environment.

Uncertainty: high outside normal range of environmental variables

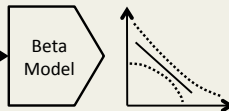
Management
Actions,
Monitoring, &
Data Collection

Fine-scale experiment

- Non spatial
- Beyond-normal range
- Literature based (not raw data)



Mechanistic sub-model



Obj: How populations of a species respond to precipitation

Uncertainty: low, but only for the specific ecological domain studied

Model constraint

Obj: reduce uncertainty when forecasting