AMERICAN MUSEUM OF NATURAL HISTORY
CENTER FOR BIODIVERSITY AND CONSERVATION

Mapping Bigfoot

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Bigfoot

Bigfoot habitat assessment

- We can find where Bigfoot is likely to be found through a series of masks
- Calculate the area of likely habitat to search for the elusive blurry Wood-ape in New York State

Bigfoot

Bigfoot habitat

- Cool: lots of hair
- Heavily forested: shelter/ food
- Near water sources: bathing/wallowing
- Remote: prefers solitude. Hates cameras and vehicles

Bigfoot

Bigfoot habitat assessment

- We will need a land cover shapefile:

https://cugir.library.cornell.edu/catalog/cugir-008190

- Bigfoot occurrences (from Git repo)
- We will also need Roads from naturalearthdata.com
- And mean annual temperature (previously downloaded from Worldlim.org)
- USA states shapefile from previous exercise

Bigfoot

Bigfoot habitat

- Using the USA shapefile:
  - create a new file of just NYS
- Use NYS shape to mask temperature raster
- Do this again with Bigfoot occurrences
- Using Point Sampling Tool plugin:
  - Extract values of Bigfoot occurrences
    - Remember the unit conversion!

Bigfoot

Bigfoot habitat

- Using raster calculator & temperature:
  - Remove temperatures above highest and below lowest observed Bigfoot occurrence
    - (raster@1 > low)*raster@1 AND (raster@1 < high)*raster@1
    - GDAL translate to set 0=no data
    - Convert to polygon and delete polygons that are ! = 1

Bigfoot

Bigfoot habitat

- Create new shapefile of only landcovers likely suitable for Bigfoot
    - i.e., remove Commercial, Beaches, Cropland
- Buffer Roads Layer by 2 miles

- Mask layers
- Calculate area using attribute table
    - Remember to check projection