Methods in Spatial Research Spring 2021

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Colonial Western Algeria and Contemporary Population Distribution

In 1889 France was still in the process of colonizing Algeria. This 1889 map shows roads moving South with the expansion of French control. The 2015 human settlement data shows that these roads built for conquest have impacted where people have settled—over a century after the military map was published.

Sources:

Center for International Earth Science Information Network. High Resolution Settlement Layer: Algeria. New York City: Columbia University, 2015. https:// data.humdata.org/dataset highresolutionpopulationdensitymaps-dza.

Harvard Map Collection. Algeria, 1889-1895. France: Depot de la Guerre, 1889. Web. https://geodata. library.columbia.edu/catalog/ g8240\_s800\_f7\_sh1\_copya.

Algérie

Projection: EPSG:30792 - Nord Sahara 1959 / Sud

## Edible Wild Plants of the Silverstone Neighborhood (Updated)

Invasive eucalyptus forest

Edible wild plants

- African Bluebell Whalenbergia undulata
- Milk Plum Englerophytum magalismontanum
- Morning Glory Ipomoea
- Pennywort Centella asiatica
- Pigeonwood Trema orientalis
- Pink Sorrel Oxalis articulata
- Waterberry Syzygium cordatum

## Population density

Low

High



## Edible Wild Plants of the Silverstone Neighborhood

is a map of the wild edible plants in my neighborhood.

i walked by the river and snacked along the way

Pigeonwood is bitter — Pennywort's dull

i have to say my favorite is the big old Milk Plum

the one behind the big old rock

by the big old river

that's the one, that's my favorite

neither dull nor bitter

is the big old Milk Plum by the big old river

Sources:

Benzerga, Zohra. Edible Plants of the Mbuluzi. 2021.

WorldPop (www.worldpop.org - School of Geography and Environmental Science, University of Southampton; Department of Geography and Geosciences, University of Louisville; Departement de Geographie, Universite de Namur) and Center for International Earth Science Information Network (CIESIN), Columbia University (2018). Global High Resolution Population Denominators Project - Funded by The Bill and Melinda Gates Foundation (OPP1134076).

Projection: EPSG:3857 - WGS 84 / Pseudo-Mercator



Religious Groups, Movement and Numbers Sig, Algeria

This map pulls data from an 1884 map showing the movement and numbers of religious sects throughout Algeria. My version of the map zooms into the region of Sig in Western Algeria and displays the 1884 data in relation to 2016 data of built up areas. This overlay demonstrates some overlap in where religious groups congregated in 1884 and where there are towns today.

### Sources:

Rinn, Louis, and H Bissuel. Carte de l'Algérie: indiquant la situation, l' importance numerique et la marche, des orders religieux Musulmans. Alger.: lith. Adolphe Jourdan, 1884. Map. Retrieved from the Library of Congress, <www.loc.gov/item/2007630122/>.

International Steering Committee for Global Mapping. Built Up Areas (Polygons), Algeria, 2016. Shapefile. Retrieved from Stanford Digital Repository, <a href="https://purl.stanford.edu/tv474sv0968/">https://purl.stanford.edu/tv474sv0968/</a>.

Projection: EPSG:30493 - Voirol 1879 / Nord Algérie Vegetation Along Eswatini/South Africa Border Winter The Winter 2016 Drought and Winter 2020

Eswatini/South Africa Border



Vegetation Along Eswatini/South Africa Border Winter The Winter 2016 Drought and Winter 2020

Using Landsat 8 multispectral satellite imagery, this map shows types of vegetation at the border between Eswatini and South Africa. There is clearly a stark difference in land-use between these two countries. Many nations in the region depend on South Africa's industrial-scale agriculture. Eswatini is one of those nations.

It is interesting to also note the differences between 2016, one of the driest winters in recent years, and 2020—still dry but not yet a drought.

Sources:

Landsat 8 OLI LC08\_L1TP\_168079\_20160920\_20170321\_01\_T1, Landsat 8 OLI LC08\_L1TP\_168079\_20200814\_20200822\_01\_T1, August 22, 2020. Hijmans, Robert J., Boundary, Swaziland. University of California,

Projection: EPSG: 32636 - WGS 84 / UTM Zone 36N