AN OVERVIEW OF THE GBIF AND LIFEMAPPER DATABASES

INTRODUCTION

GBIF
Pros:
•Huge amount of data from all over the world
•Free access to the data
•Possibility to view most of the data in a map
Cons:
•Online data as a table is uncomfortable to work with
•There is a fair amount of redundancy in the database
•Some species have no entries
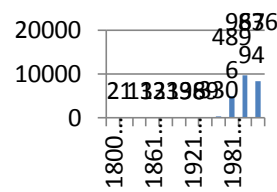•Some entries are incomplete

Lifemapper
Pros:
•Satellite based maps
•Offers the option to run climate models
•**Cons:**
•Does not have as much data regarding the species as GBIF
•Can not run both climate and species distribution maps at once
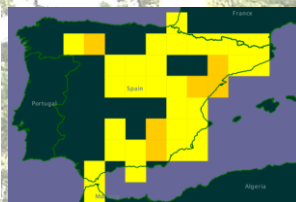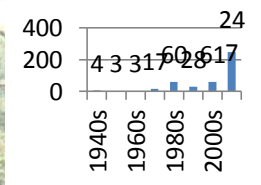•Number of entries differ between what is listed and what is mapped

Pinus nigra

•Least concern, spread through Europe
•23537 occurrences➔14573(61.91%) complete
•798 (3.39%)no coordinates no date
•7566 (32.15%)no date
•600 (2.55%)no coordinates
•Data goes back to the XIX century
•Redundancy
•Some big groups (100+ entries)
•Mostly occurs in entries with only one of the two datasets analyzed
•The GBIF Spain publisher is the one with the most redundancy, as well as the most entries
•Lifemapper does not have data on this species

Pinus nigra salzmannii

•Least concern, found in Spain
•Subspecies endemic to the Iberian Peninsula
•406 entries➔87 (21.43%) complete
•49 (12.07%) no coordinates no date
•198 (48.77%) only coordinates
•72 (17.73%) only date
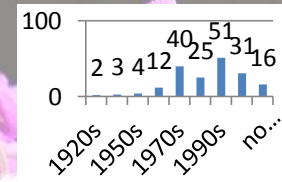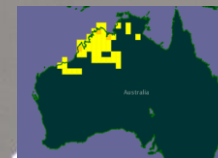•Redundancy: many small groups
•Lifemapper did not support this data.

Sorbus leptophylla

•Critically endangered species of England
•53 occurrences➔ 14 (26.42%) complete
•6 (11.32%) no date no coordinates
•3 (5.66%) no coordinates
•30 (56.60%) no date
•Redundancy: 3 big groups
•23 entries
•11 have different dates➔Monitoring
•12 no date➔redundancy
•9 entries➔only 1 with date
•6 entries➔2 dated
•~50% entries are redundant.
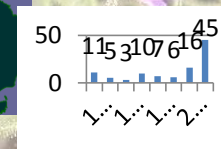•Lifemapper. does not support this species

Byblis filifolia

•Least concern, found in Australia
•184 occurrences➔167 (90.76%) complete
•1 (0.54%) no date no coordinates
•1 (0.54%) no coordinates
•15 (8.16%) no date
•Repeated coordinates through the years➔monitoring
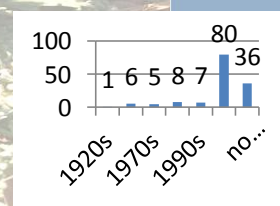•Lifemapper offers 144 hits of the 182 GBIF's map has.

Byblis gigantea

•Critically endangered, found in Australia
•103 entries➔48(46.60%) complete
•35 (33.98%) no date or coordinates➔many come from foreign museums
•10 (9.71%) no coordinates
•10 (9.71%) no date
•Lifemapper does not use all the entries with coordinates, leaves 12 out
•From the 46 points listed, 13 are displayed in the map

Coronopus navasii

•Critically endangered species of the Iberian Peninsula
•144 entries➔94 (65.28%) complete
•8 (5.56%) no date no coordinates
•14 (9.72%)no coordinates
•28 (19.44%)no date
•Redundancy:
•18 entries
•7 dated➔monitoring
•11 not dated➔redundant
•16 entries➔redundant
•28 entries➔redundant
•Lifemapper
•*Coronopus navasii PAU*➔ has entries in the sea
•Later this entry was deleted from Lifemapper
•*Coronopus navasii*➔ correct entries

DISCUSSION

GBIF
•The incomplete entries and the redundant ones should be dealt with either by removing them, completing them, or tagging them as such
•There should be an option to directly report incomplete or redundant data so that it could be fixed
•It should have the option to select entries from certain years, as it already has by countries, datasets and publishers.
•Rework the data table provided by the website, 20 entries per page is not enough, and knowing how many pages of entries the species has would be helpful too

Lifemapper
•Should import more data from the GBIF, as it is quite incomplete
•Being able to use the climate layers together with the species ones would add a lot of interest in this project
•The number of entries displayed on the list of species selection should be the same as the number of entries present in the map