WARNING: Do not run two parallel sessions on the same species

Outputs

● Criteria estimate
→ SIS-compatible file
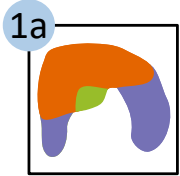
Charge / edit distribution:

1) Either
- Reuse the Red List published range map
- Upload your distribution shapefile

2) Select polygons to use (presence / seasonal / origin)

3 - optional) Restrict to a single country   For National or Regional Red Listing you can enter the name of one country (or "Europe", "EU27" or "Mediterranean")
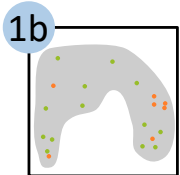
Create distribution map:

1) Download occurrence records
- GBIF   Limited to 2000 records (if more data we download a spatially representative sample)
- OBIS   All records (for marine species; default: ticked if species last assessed in marine system)
- Red List   Use data points from Red List assessment (default: ticked if data available)
- Upload   Upload your own points with a csv (2 mandatory columns: 'longitude' and 'latitude')
- Synonym   Synonyms to download (for GBIF, OBIS, Red List). If several synonyms, split with semicolumn
- Restrict to a country   For National or Regional Red Listing you can enter the name of one country (or "Europe", "EU27" or "Mediterranean") to restrict the distribution

2) Filter occurrence records
- Automated filter   Use CoordinateCleaner (e.g., records at countries' centroid, at coords 0,0)
- Year   Filter out data anterior to this date (+ tick to exclude data with no year)
- Uncertainty   Filter out data with high coords. uncertainty (+ tick to exclude data with no uncertainty)
- Extent   Filter out data outside a specific extent (lon/lat)
- Sea/Land   Filter out data made at sea / at land

→ Point range map (.csv)

3) Create polygon range map
- Choose a starting point   "Show examples" will help you choose betweeen 1,2,3,4
  - 1) 'Minimum Convex Polygon' will draw a convex polygon including all points
  - 2) 'AlphaHull' will draw an alpha convex hull. Please specify tension parameter below
  - 3) 'Kernel' will draw kernels. Please specify probability parameter below
  - 4) 'Individual localities' will draw a buffer around each occurrence. Please specify buffer distance
  - 5) 'Coast' will draw the coast around points. Please specify buffer distance and crop by land or sea
  - 6) 'Hydrobasins' will map all hydrobasins level 8/10/12 with at least one occurrence, or all hydrobasins of level 8 overlapping with the Minimum Convex Polygon
- Buffer   (in km)
- Crop by land or sea
- Crop by altitude   Click on "Extract" to visualise the elevation of occurrence records
- Merge with published map   Will merge the polygon created with the published polygon range map (if it exists)

→ Polygon range map (.shp)

→ Hydrobasins (.csv)

4) Smooth polygon range map
- Choose a smoothing parameter   0 if you do not want to smooth
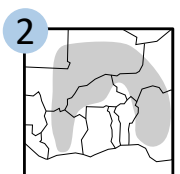
Extract Countries of Occurrence:

1) Select one or several domains

2) Extract realms + countries   National / subnational entities following the Red List classification. For marine species, EEZs are used

3) Visualise countries   Explore countries that are extracted by zooming / clicking. Cannot edit for now.

→ Countries of Occurrence (.csv)
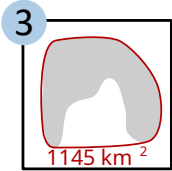
3 Calculate extent of occurrence:

1) Map Minimal Convex Polygon around range
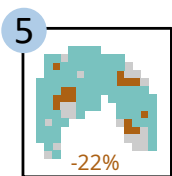2) Calculate EOO

1145 km²

● Extent of occurrence (B1)
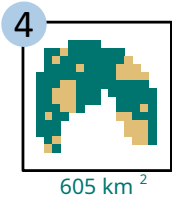
4 Calculate Area of Habitat:

1) Enter / reuse species information: You can provide uncertainty in elevation limits or density as value1-value2 and in habitat by clicking a box twice
   - Habitat preferences Default from Red List (marginal or unknown grouped as "Marginal_Unknown")) Click on "Extract" to visualise the habitat distribution of occurrence records
   - Elevation preferences Default Red List; if absent we calculate and provide min / max elevation in range
   - Average density Enter manually or use calculator. Default density in occupied habitat provided for mammals and birds.
2) Calculate lower bound of AOO (if distribution from occurrence records) Calculate the area of 2x2km pixels that include known occurrence records
3) Calculate current AOH Using the ESA-CCI land-cover map with Lumbierres et al. (2022) crosswalk
4) Rescale AOH at 2x2km to get an upper bound of AOO
5) Multiply AOH and density to estimate population size

605 km²

→ Habitat preferences (.csv)

● Area of occupancy (B2)
● Population size (C-D)

5 Calculate Trends in Area of Habitat:

1) Enter / reuse generation length If available, we display the GL from the Red List (mean when range provided)
2) Calculates trends in AOH in last 10 years / 3 generations If 3 generations length brings before 1992, we use 1992 data and make an exponential extrapolation to estimate total AOH loss

-22%

● Population decline (A2)
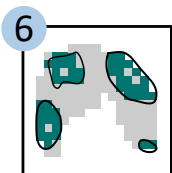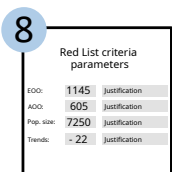
6 Calculate habitat fragmentation:

1) Provide isolation distance Distance above which subpopulations are considered isolated (this could include uncertainty by typing value1-value2
2) Map and calculate population fragmentation
3) Determine severe fragmentation Depending on what is 'small' subpopulation
4) Determine max subpopulation size and proportion

● Severe fragmentation (B)
● C2a subparameters
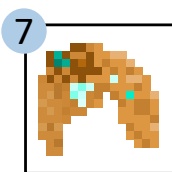
7 Calculate trends in remote-sensed products

1) Select the remote-sensed product Forest cover, Human modification index, or Human density
2) Calculate trends Provides current value, absolute trends, relative trends

8 Edit estimates and text:

Red List criteria parameters

EOO:	1145	Justification
AOO:	605	Justification
Pop. size:	7250	Justification
Trends:	- 22	Justification

1) Fill or edit taxonomy, parameters and justifications
2) Visualise triggered category and criteria
3) Download zip file Download, edit files if necessary, upload to SIS Connect. Leave fields empty to avoid overwriting in SIS

→ allfields (.csv)
→ assessments (.csv)
→ references (.csv)
→ sRedList_report (.html)
→ Output log (.csv)