

Quick reference sheet for the Condatis web app exercises

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PART OF THE WORKSHOP: CONDATIS CONNECTIVITY ANALYSIS
TO PLAN RESILIENT HABITAT NETWORKS, SEPTEMBER 2025

General outline for any Condatis web app analysis

1. Open Condatis webpage & sign in
2. Create new job
3. Choose correct type of analysis, e.g. include prioritisation
4. Fill out data input boxes
5. Check job information and confirm the submission after the 'pre-flight' checks
6. You can log out if needed and your job will continue to be processed
7. Open Results html page
8. Download zip file

Sabah example with protected areas and unprotected forest

We will perform two example analyses:

1. **Flow/bottlenecks analysis** asks: How easy is it currently for forest species to travel from lowlands to mountains in Sabah? Where are the bottlenecks?
2. **Prioritisation** analysis asks: Which currently unprotected forest habitats are a priority for long-term connectivity between our lowland protected area and Mount Kinabalu?

Flow/bottlenecks analysis

Settings:

Data/files	Name
Folder	sabah_data
Habitat layer	ForestEx1.tif
Source/target layer	SourceTarget1.tif
Reproductive rate	2000 individuals per km²
Dispersal distance	1.5 km
Bottlenecks	Yes (up to 200)

Flow/bottlenecks analysis take-home messages

- We learnt how to analyse flow with bottlenecks
- We saw some obvious features bottlenecks tend to have – bridging the worst gaps along a route that species are 'forced' to take if they are to reach the target

- We noted that the bottlenecks in this particular landscape are difficult in practice to bridge
- The more interesting question is how to ensure we preserve the high connectivity through the unprotected forest – hence we move on to the prioritisation analysis

Prioritisation analysis

Settings:

Data/files	Name
File package	sabah_data
Source/target layer	SourceTarget1.tif
Habitat layer	Forestundrop.tif
Prioritisation layer	Forestdrop.tif
Reproductive rate	2000 individuals per km²
Dispersal distance	1.5 km
Bottlenecks	No
Number of stages for dropping	10 (rough guide) or 50
Dropping stage Type	Flow based

Prioritisation analysis take-home messages

- We learnt what ‘Prioritisation by Dropping’ does
- The landscape starts with a high connectivity (“speed”), and it would be possible to preserve much of this with a small amount of conserved corridor forest
- Just looking at flow alone in these landscapes would not have given such clear priorities of areas to save from logging
- The end speed is virtually zero, because there are large distances between the existing protected areas