CONDATIS TRAINING WORKSHOP

Wednesday 28th November 2018

Institut Pertanian Bogor, Java

TIME	CONTENT	SESSION
08:30 – 09:00	REGISTRATION + REFRESHMENTS	
09:00 – 09:30	Introduction to Condatis	1
09:30 - 10:00	Data requirements for Condatis	2
10:00 – 10:30	BREAK	
10:30 - 11:15	Running a FLOW analysis	3
11:15 - 12:00	Running a DROPPING analysis	4
12:00 - 12:30	Discussion on Condatis outputs; Q&A	5
12:30 - 13:00	Introduction to TNGHS project & presentation of results	6
13:00	MEETING CLOSE	

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Data requirements for Condatis

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INSTITUT PERTANIAN BOGOR, JAVA • 28TH NOVEMBER 2018

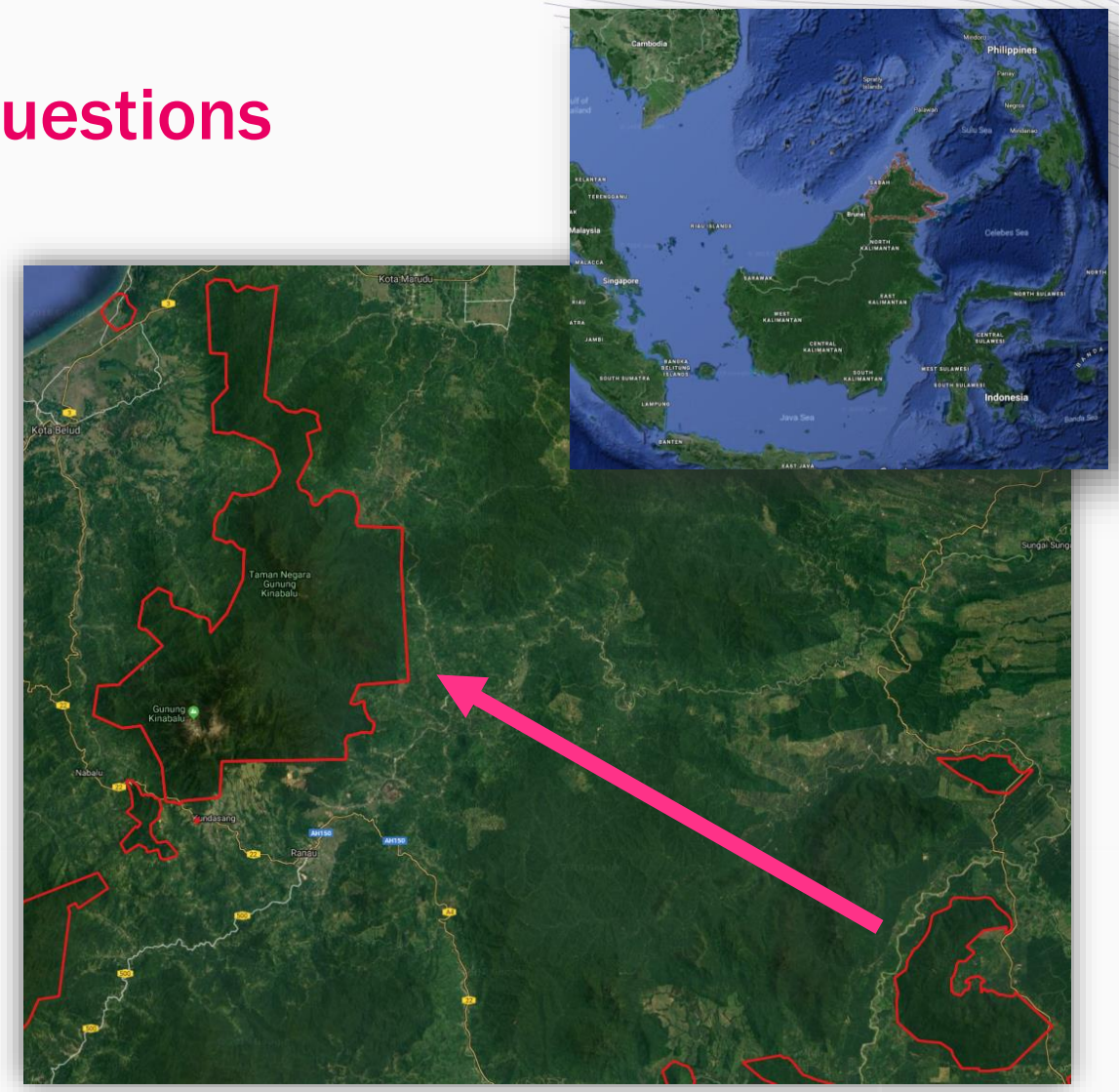
Key Conservation Questions

*What **species** need to move in this landscape?*

*Between which **sources and targets**?*

*What constitutes **habitat** for those species?*

*Where is **additional potential habitat** that they could move through?*



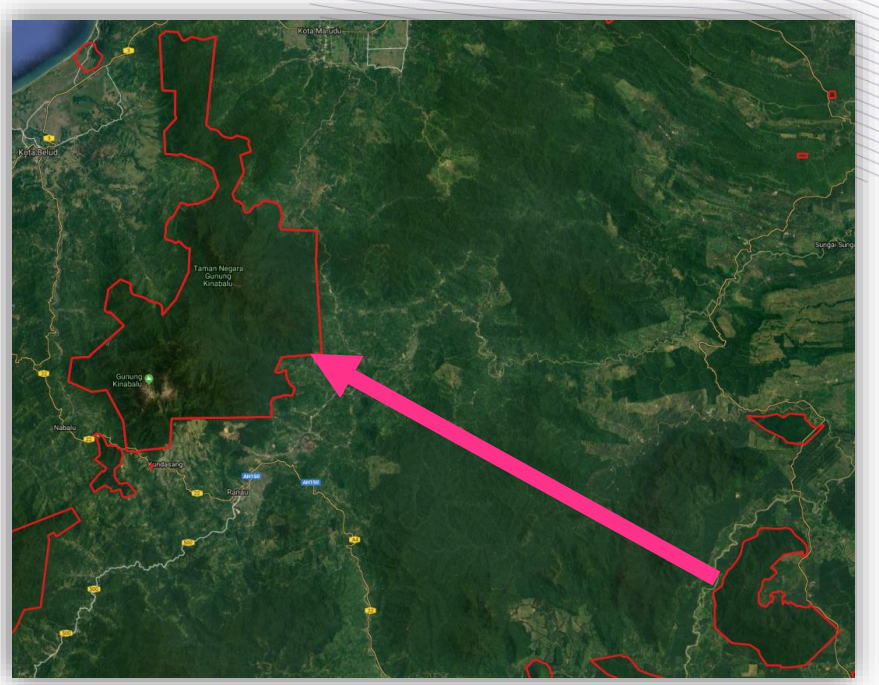
Case study example: movement of a large-winged invertebrate in response to climatic change, from a lowland Protected Area (PA) to higher elevation habitat in Mount Kinabalu National Park.

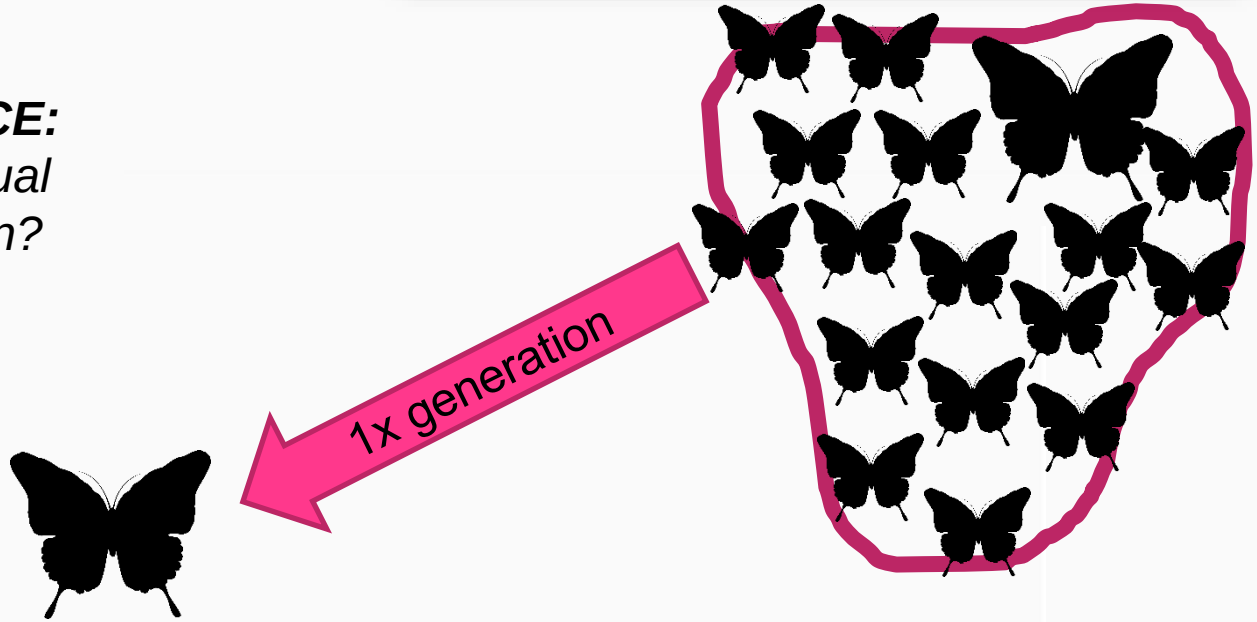
Species Data

*What is the **species/taxa of interest?***

REPRODUCTIVE RATE:
How many emigrants could the species produce in one generation, in one km^2 of habitat?

DISPERSAL DISTANCE:
How far can an individual travel in one generation?





Generating Species Data

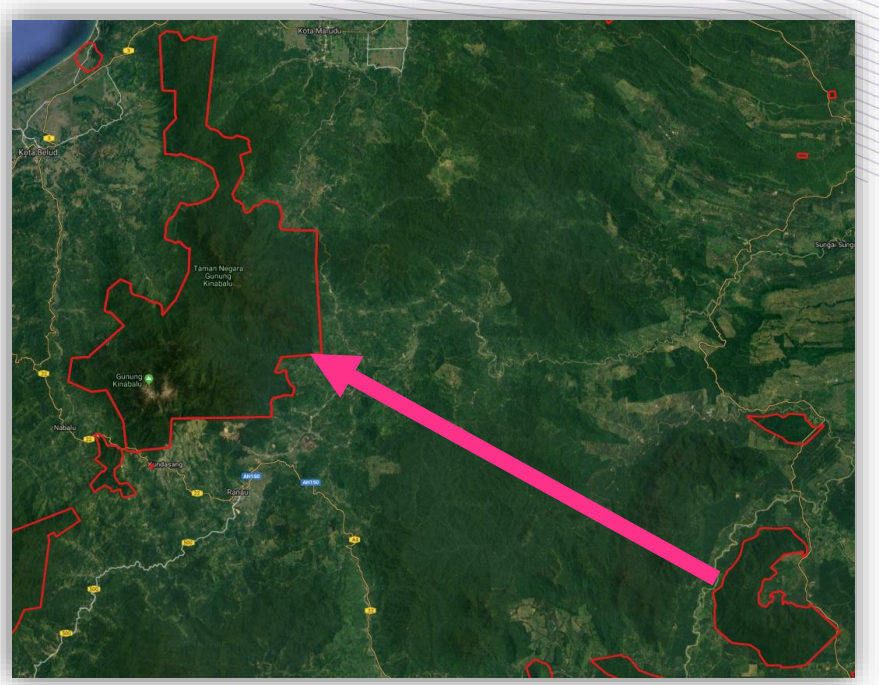
REPRODUCTIVE RATE: *How many emigrants could the species produce in one generation, in one km² of habitat?*

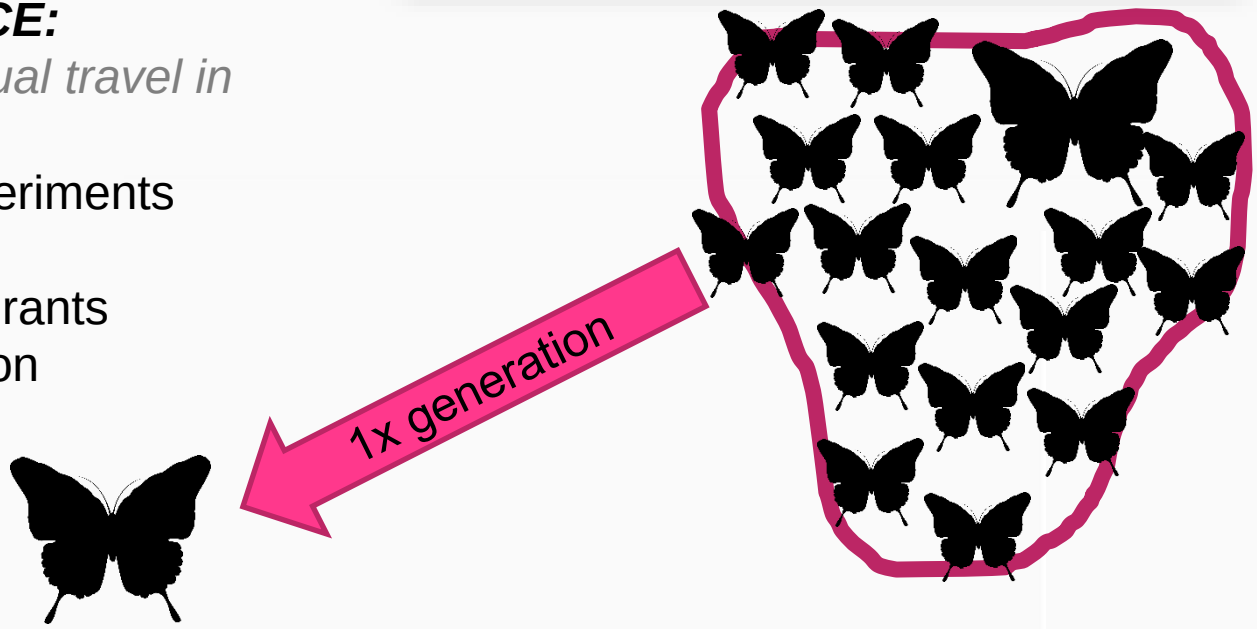
- Number of offspring per individual
- Number of reproductive individuals per km²

DISPERSAL DISTANCE:

How far can an individual travel in one generation?

- Mark-recapture experiments
- Ecological surveys
- Observations of vagrants
- Anecdotal information



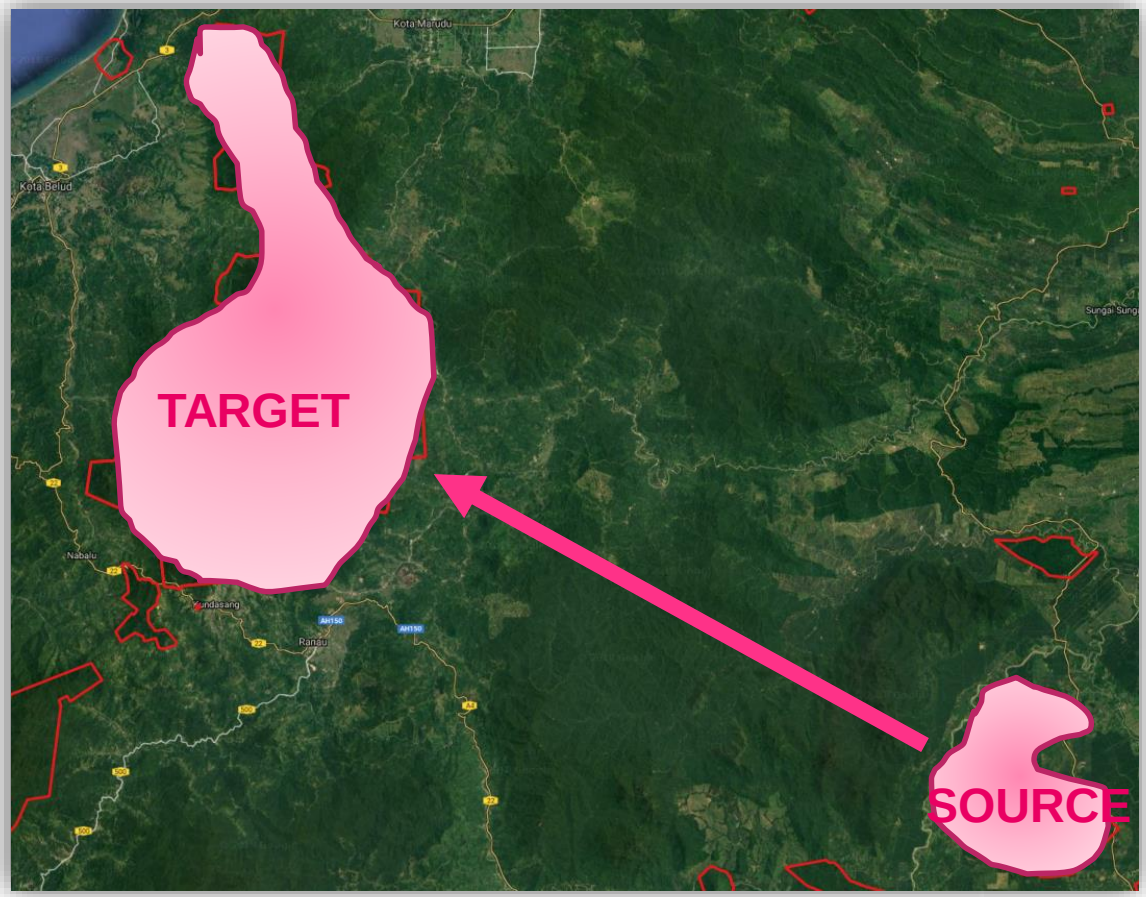


Movement direction – Source/Target

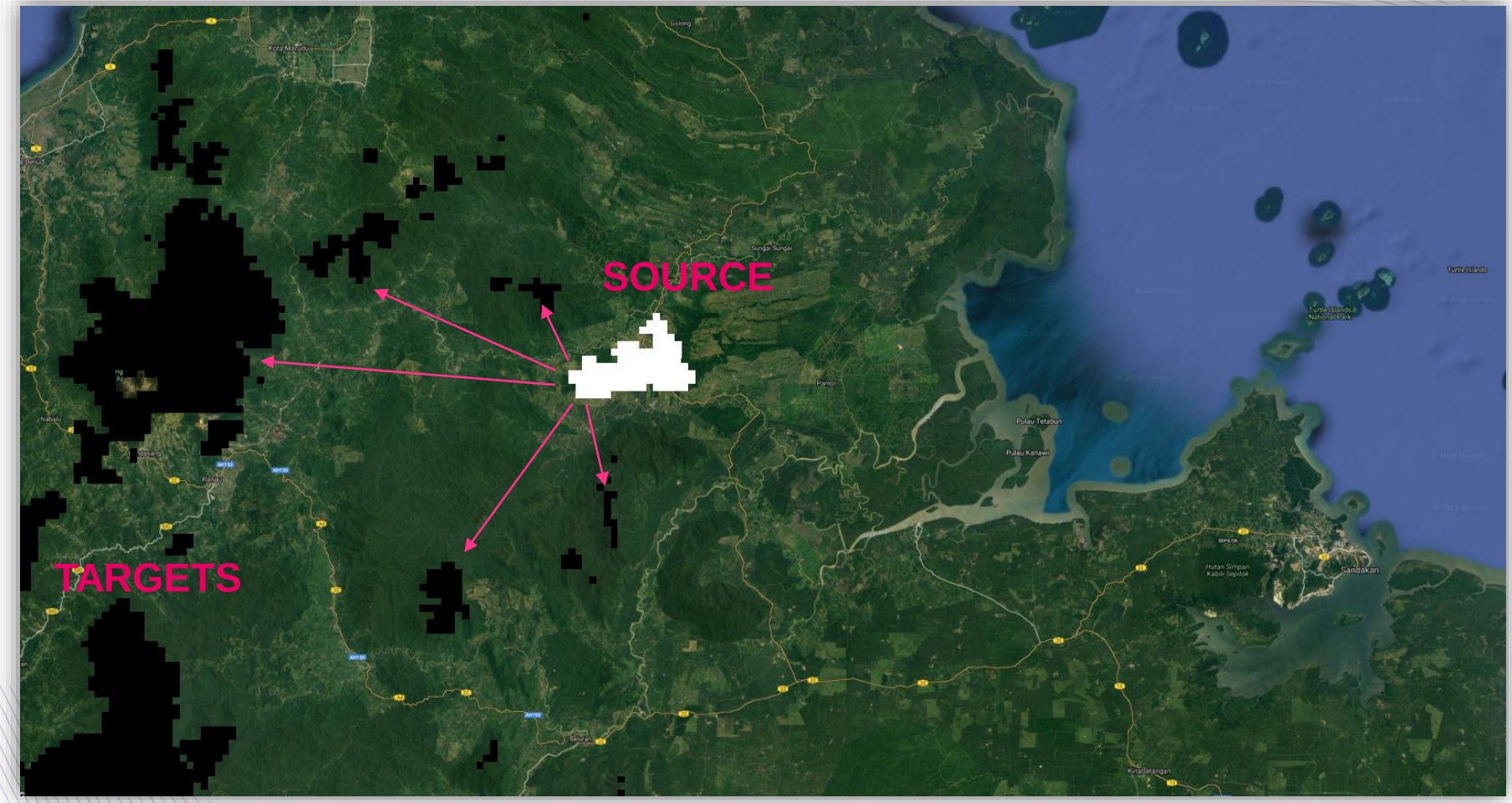
*Where is the species of interest moving from, i.e. the **source**?*

*Where is it moving to, i.e. the **target**?*

Source – label 1
Target – label 2



Movement direction



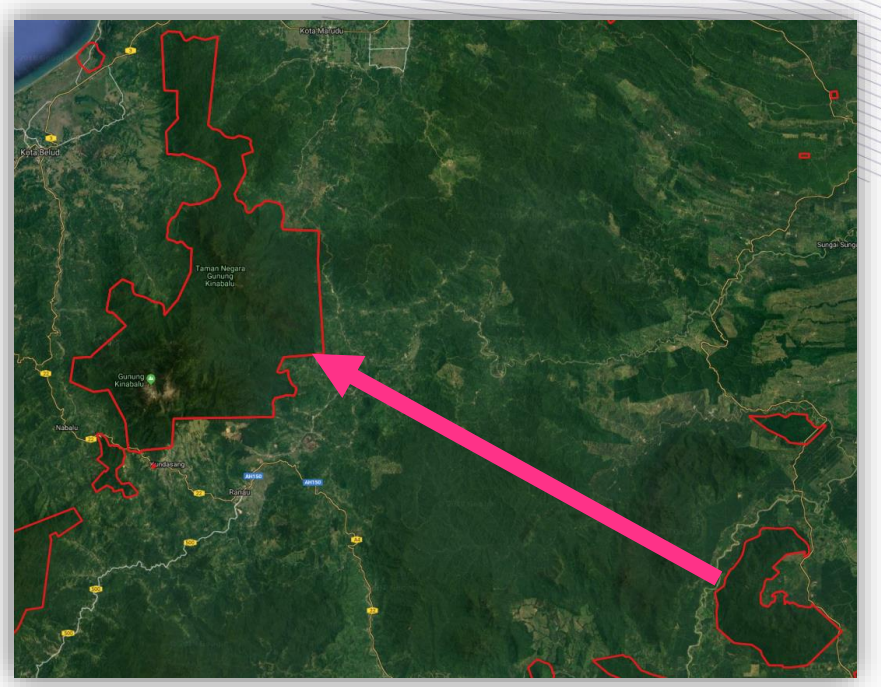
Example *SourceTarget.tif* raster file in QGIS

Habitat Data

*What is the **habitat** of the species of interest**?***

*What **proportion** of each grid cell does that habitat cover?*

= 0.76 =



****Ensure *all* raster layers have the same pixel/cell size & geospatial extent****

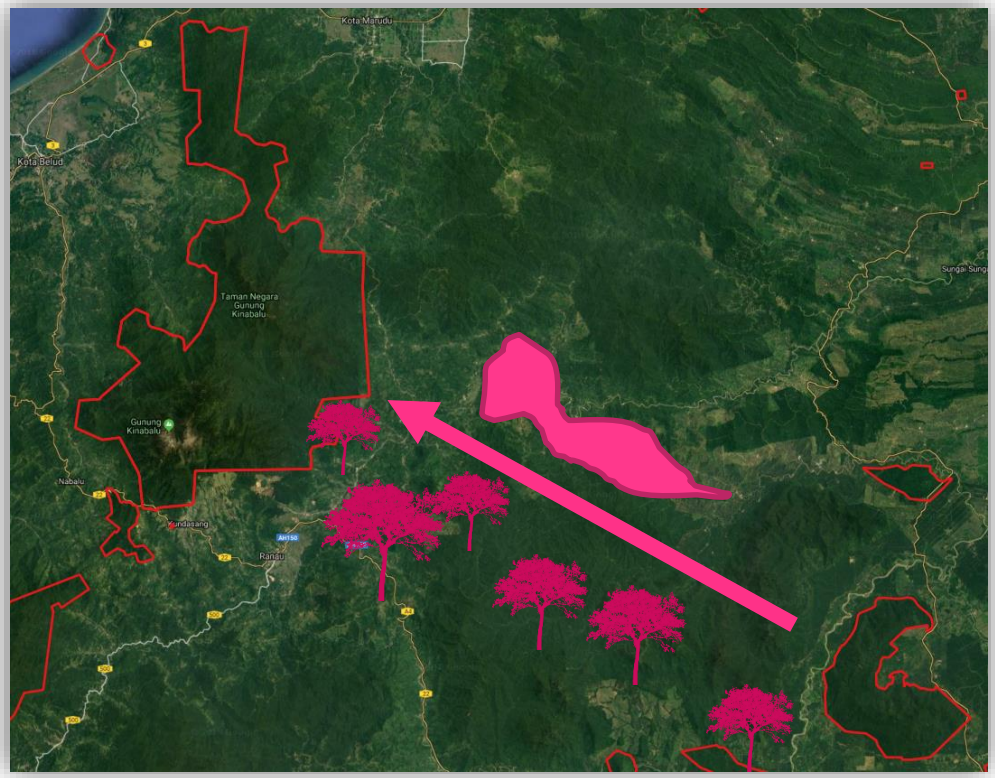
*What is the **quality** of the habitat in that cell**?***

Prioritisation Layer *(for Dropping analysis)*

*CONSERVATION: Where is **additional habitat** that your species could move through, e.g. unprotected forest? Which of these potential habitat patches are a **conservation priority** to ensure future connectivity as species shift their ranges?*

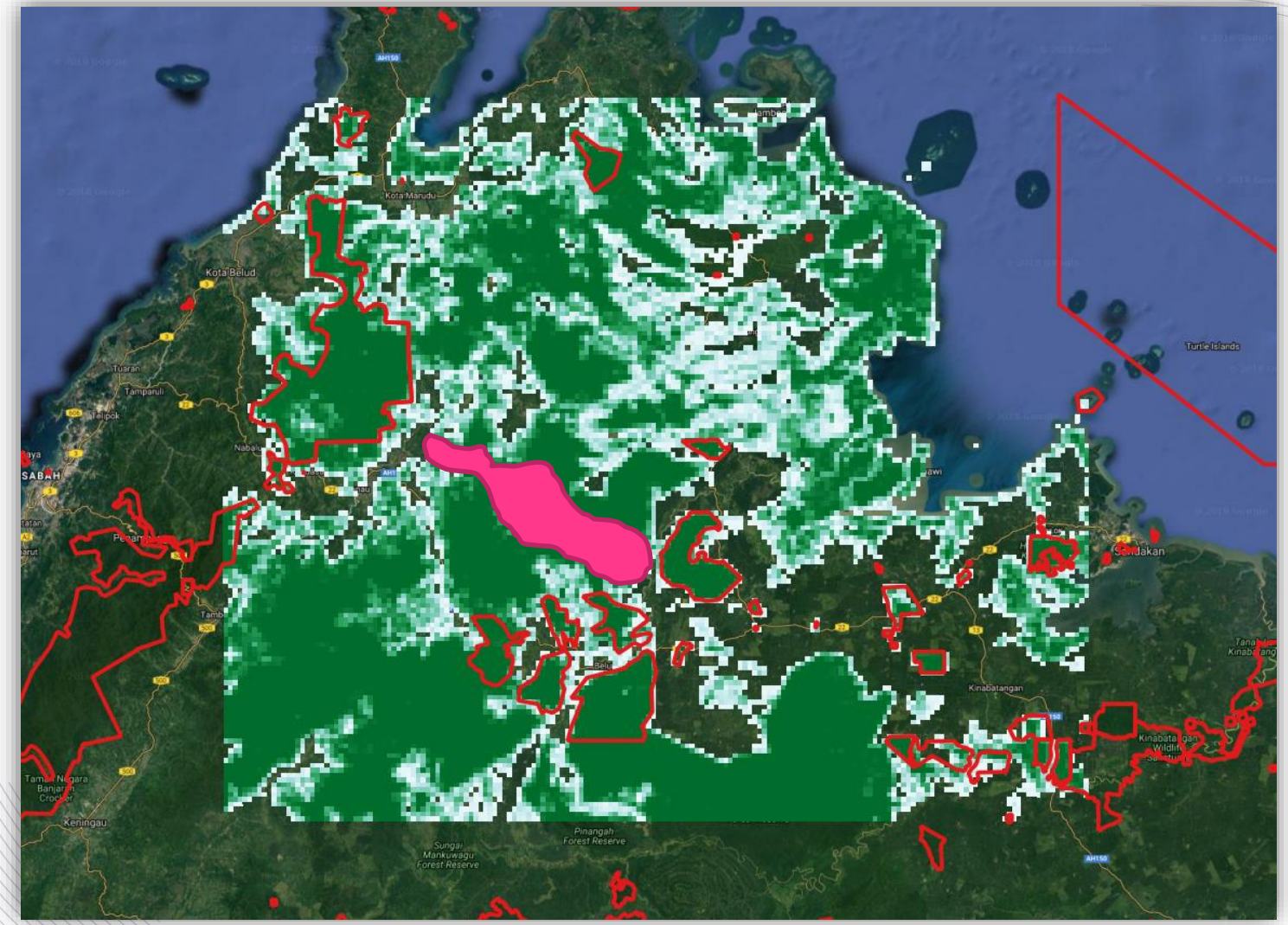
…OR…

*RESTORATION: Does habitat need to be **restored** in order to enhance movement pathways along key routes?*



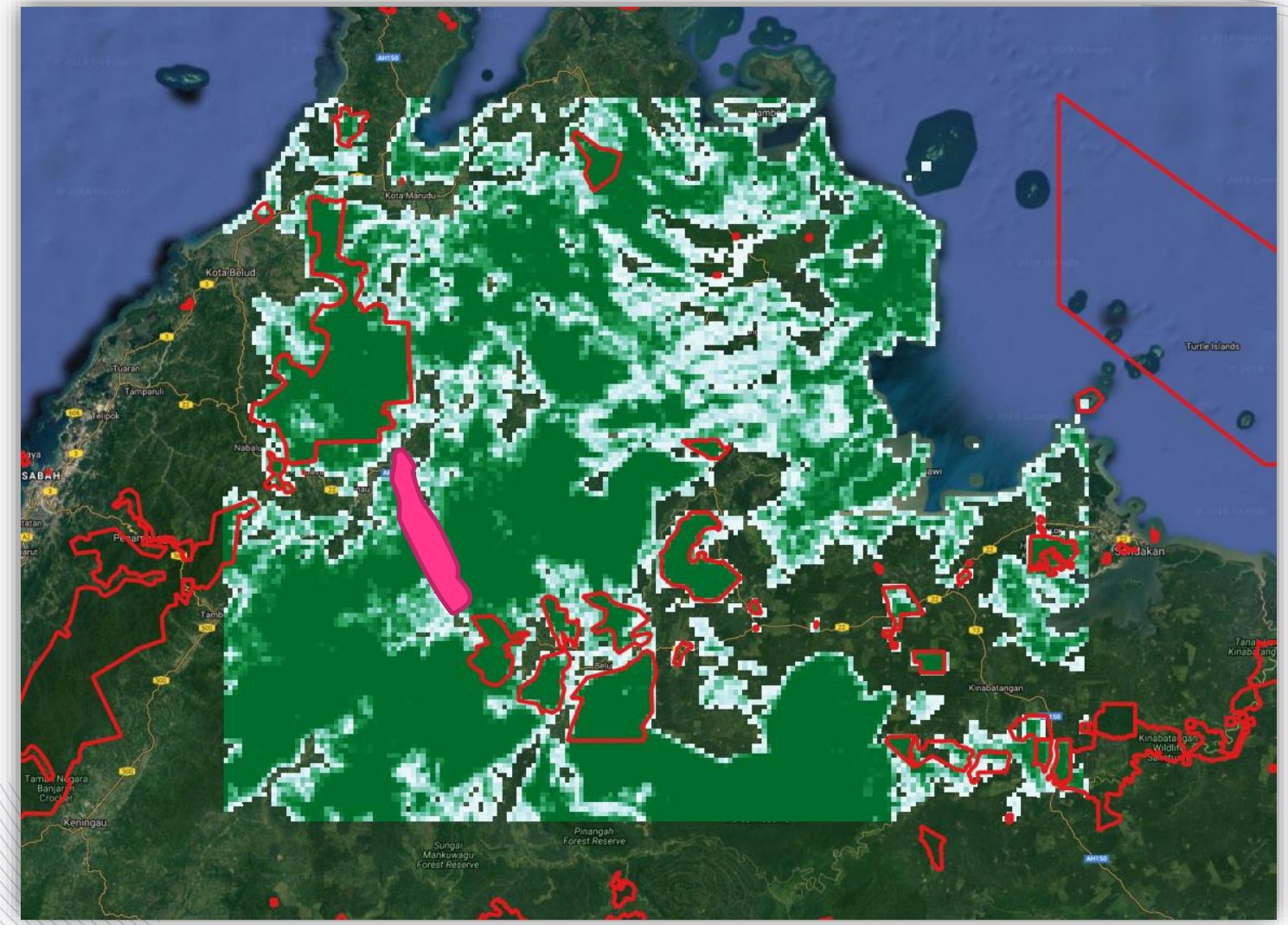
Prioritise conservation or restoration of additional habitat to enhance connectivity

Conservation prioritisation



Choosing unprotected habitat to **conserve** for connectivity

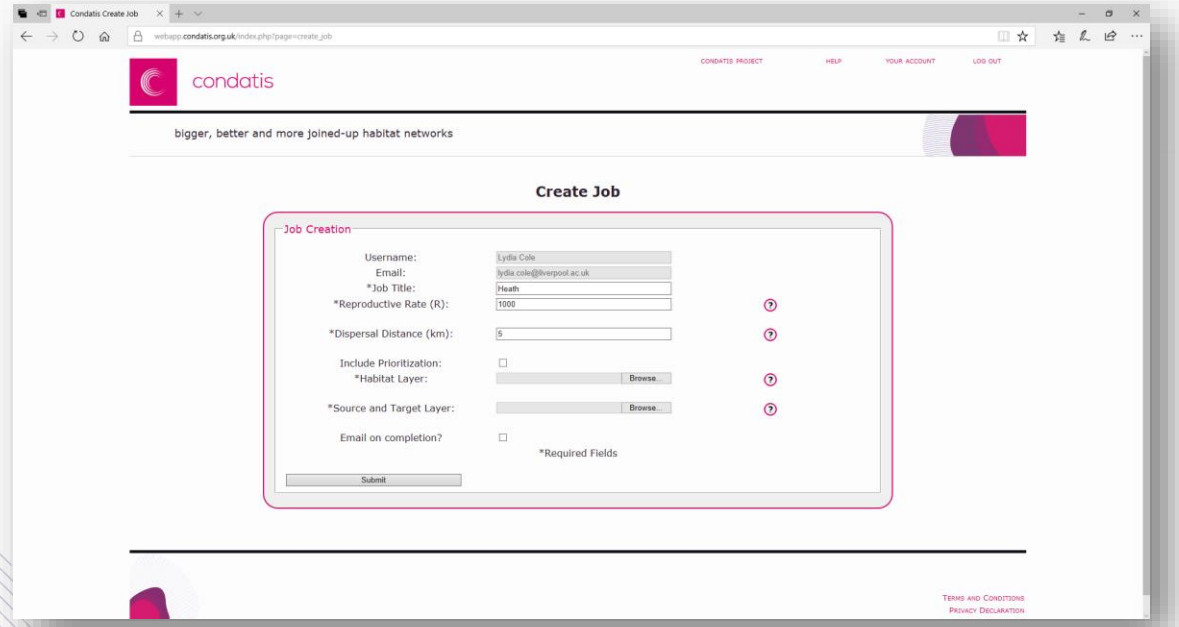
Restoration prioritisation



Choosing where to **restore** habitat to enhance connectivity

Data inputs for Condatis

Data/files	Name
Reproductive rate	Number of individuals per km^2 per generation
Dispersal distance	km travelled per individual per generation
Source/target raster	Source cells labelled 1; target cells labelled 2
Habitat raster	Proportion of habitat per grid cell (0-1)
Prioritisation raster	Proportion of habitat per grid cell (0-1)



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Now ready to go…..

Condatis – www.webapp.condatis.org.uk