

# Global assessment of dragonflies

**VINCENT KALKMAN**  
National Museum of Natural  
History Naturalis, The  
Netherlands

European Invertebrate Survey  
The Netherlands

Chair IUCN Dragonfly Specialist  
Group

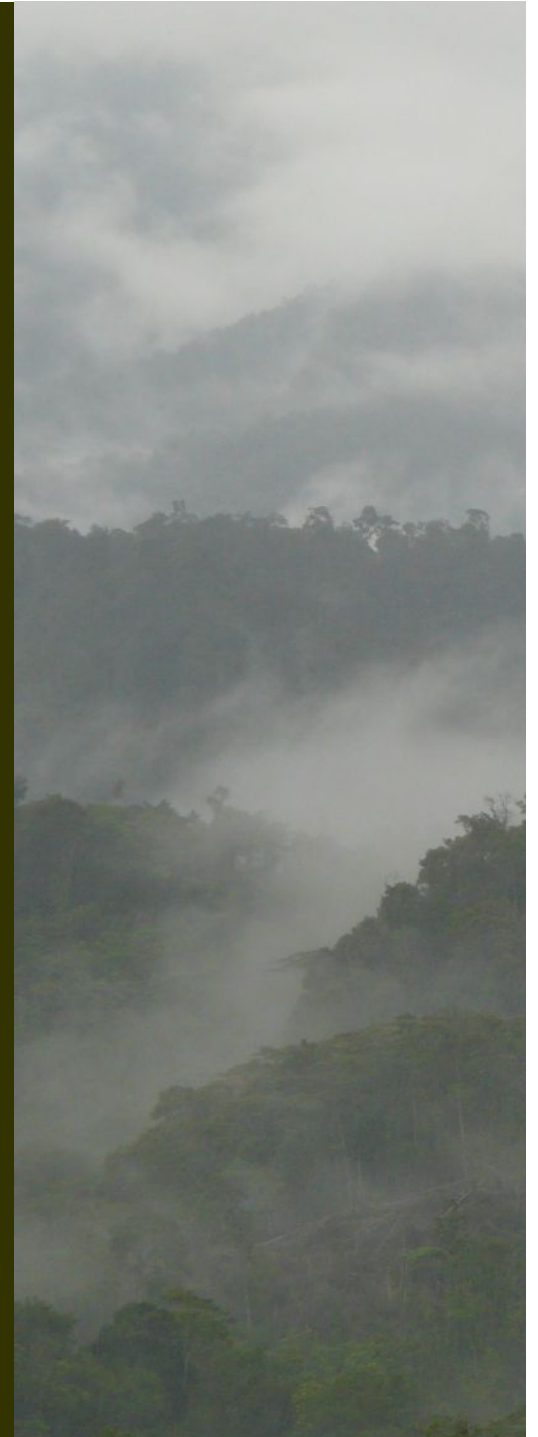


## Why dragonflies?

- . insects form the bulk of animal diversity
- . increasing interest in 'other groups'
  
- . freshwater is an important resource
- . increasing interest in aquatic biodiversity

## Odonata are convenient and attractive

- . beautiful and popular
- . relatively well studied



. IUCN and Conservation International  
prioritised freshwater conservation

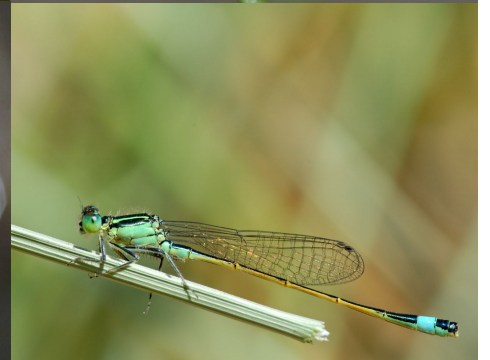
. Both work together on the Global  
Freshwater Assessment:

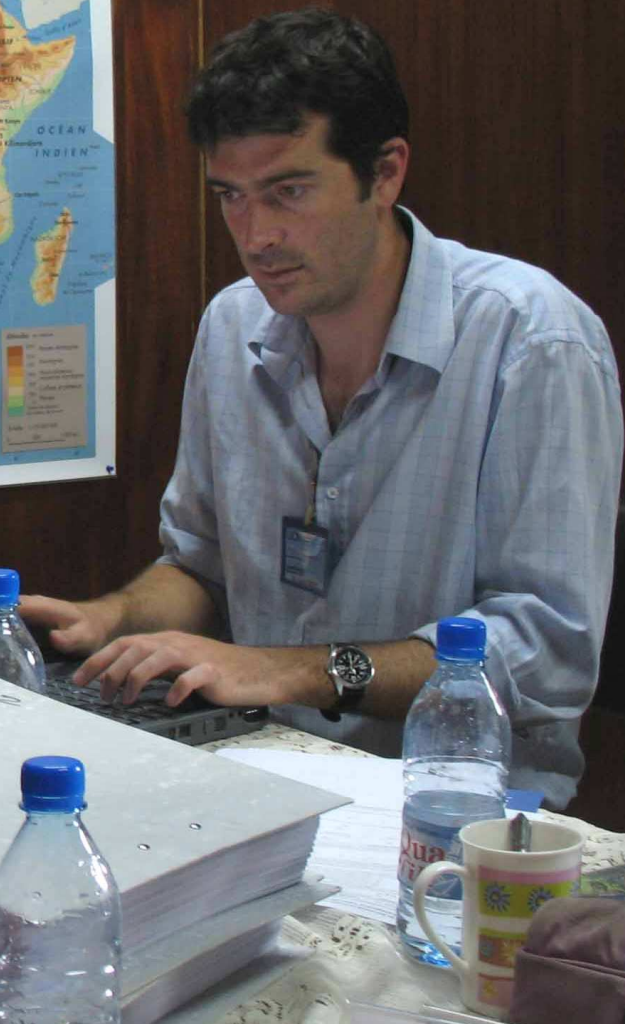
- Mollusc
- Fish
- Dragonflies





- . African Freshwater Assessment
- . Mediterranean Freshwater Assessment
- . Red List Species Index
- . Global Dragonfly Assessment





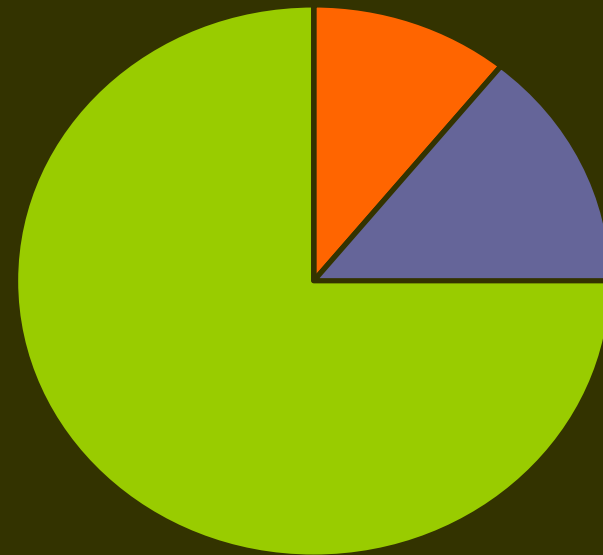
## examples of Red List Assessments

Western Africa

n

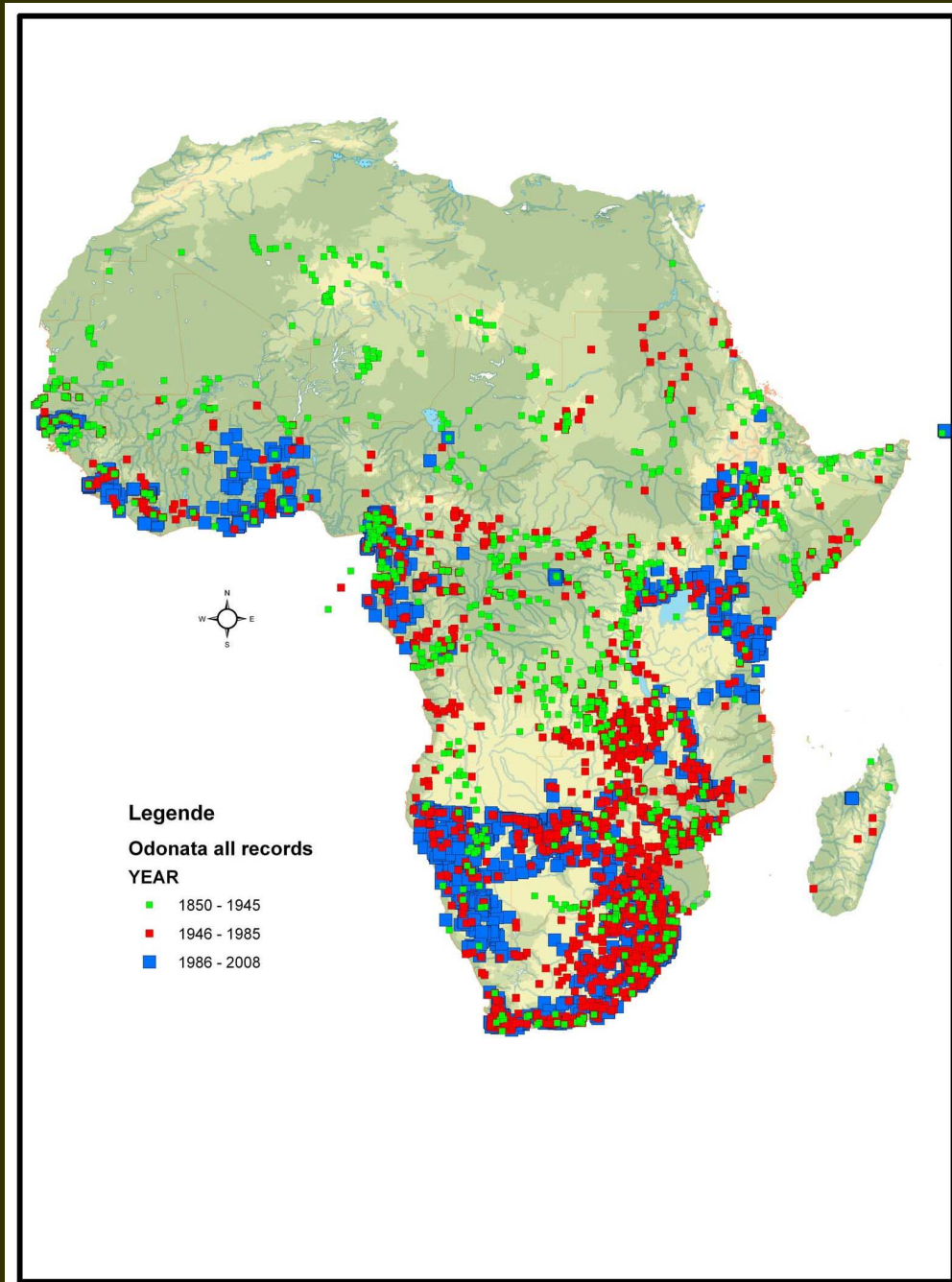
CRITICALLY ENDANGERED	8
ENDANGERED	6
VULNERABLE	14
NEAR THREATENED	3
DATA DEFICIENT	41
LEAST CONCERN	215

total 312 species

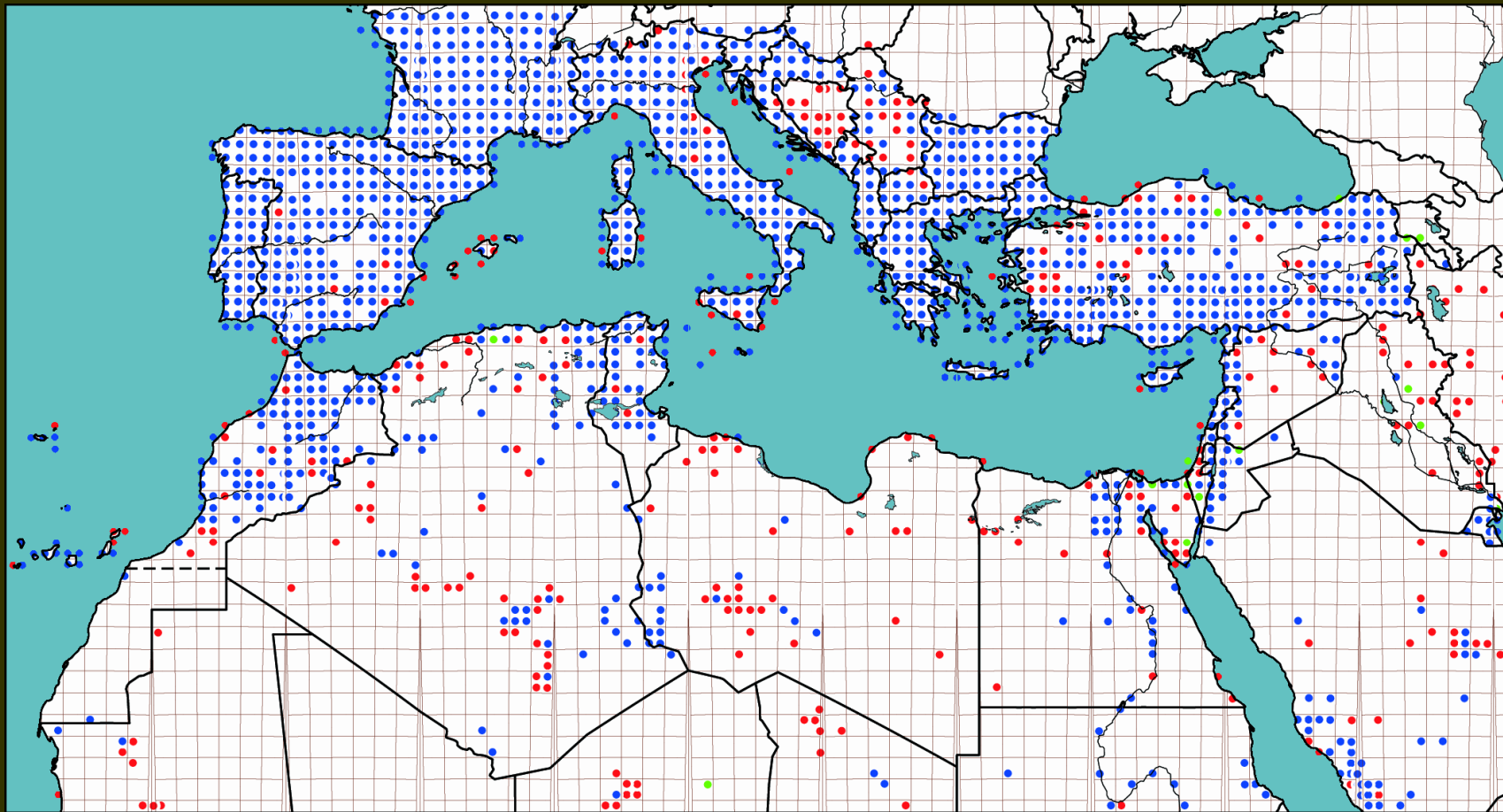




# African Freshwater Assessment

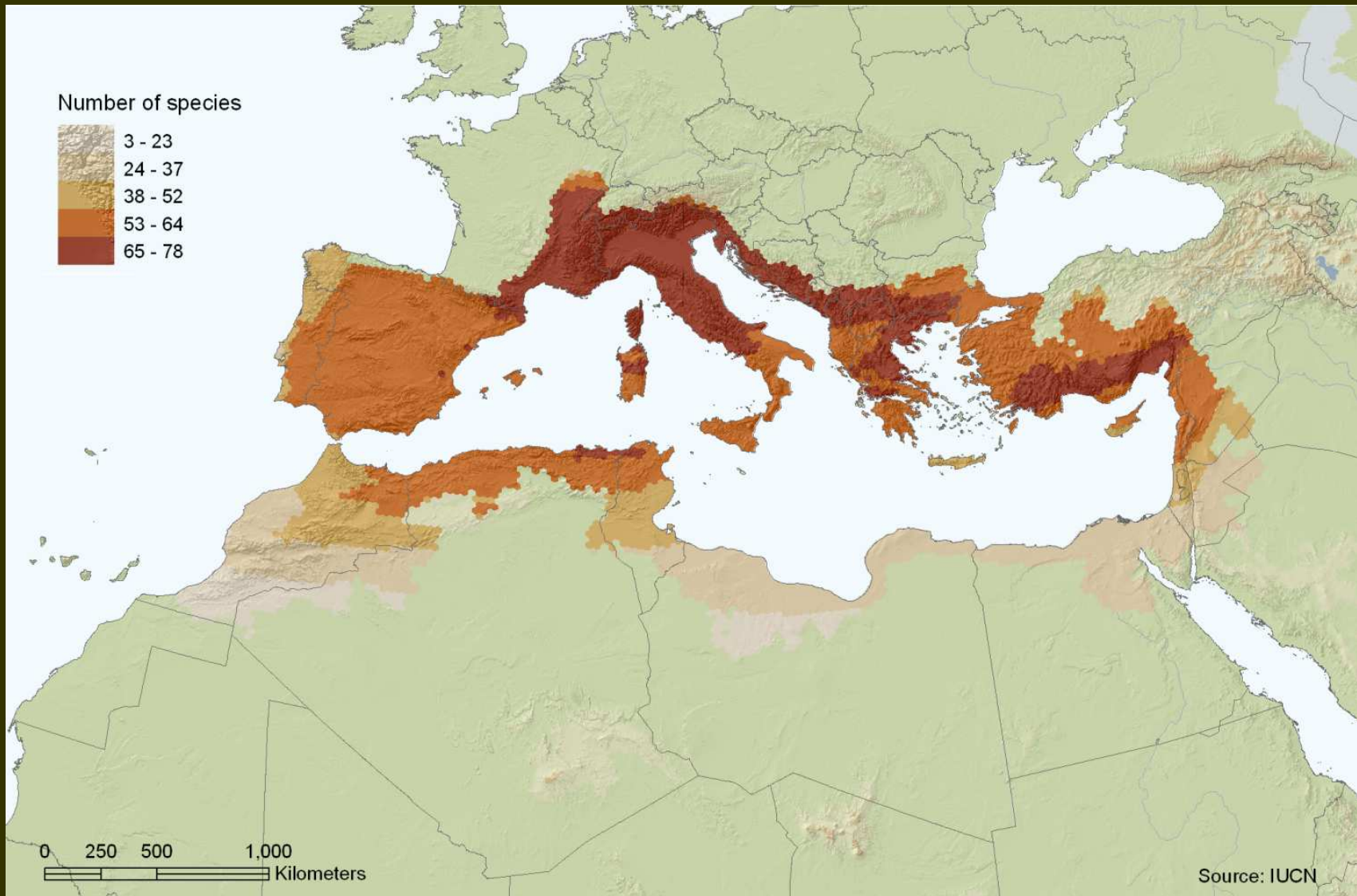


# Mediterranean Freshwater Assessment

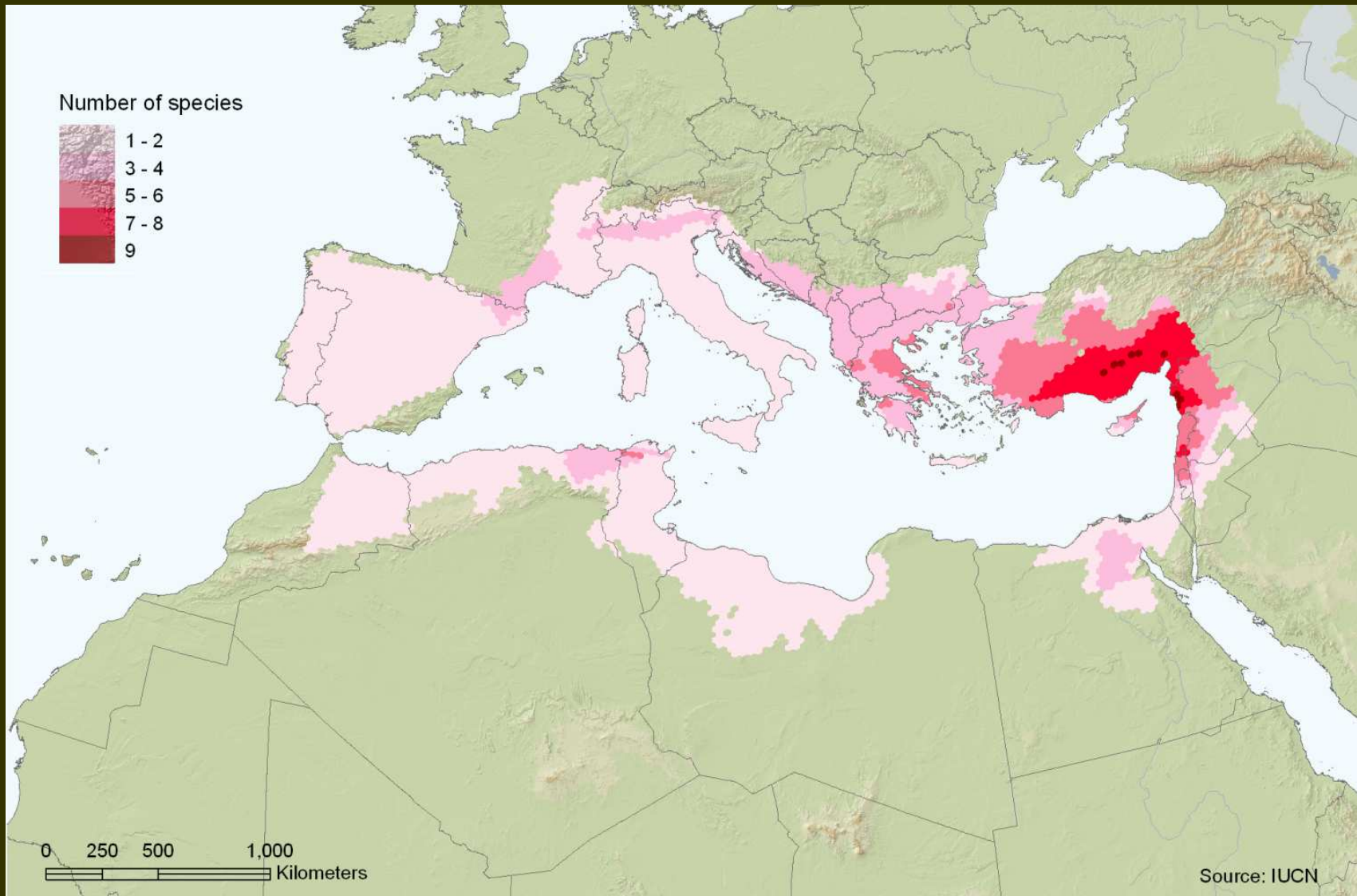




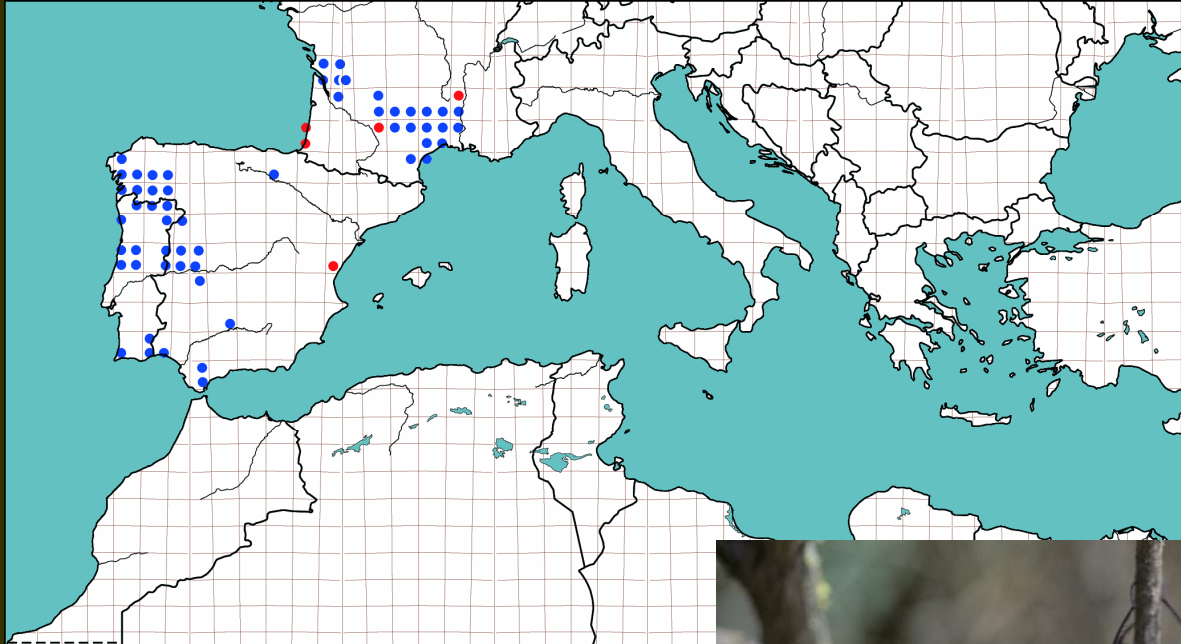
# Mediterranean Freshwater Assessment



# Mediterranean Freshwater Assessment



# Mediterranean Freshwater Assessment



Splendid Cruiser  
*Macromia splendens*





# Mediterranean Freshwater Assessment



Greek Red Damselfly  
*Pyrrhosoma elisabethae*

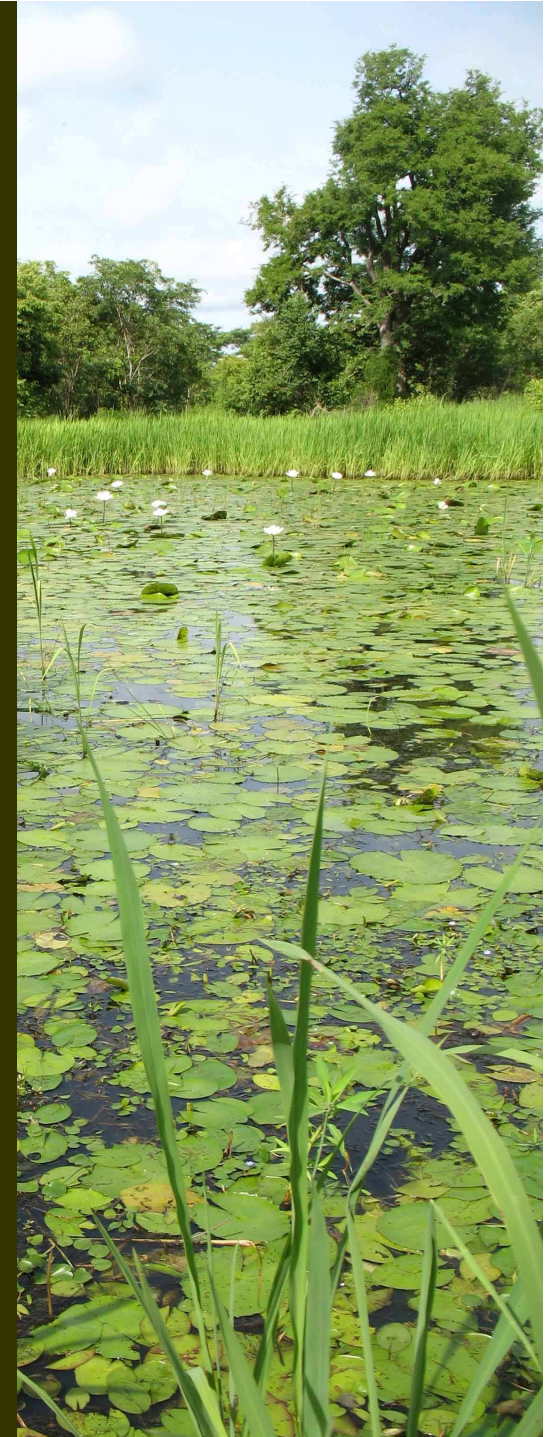


# Sampled Red List Index



global diversity Odonata

about 5700 species  
... at most 7000?

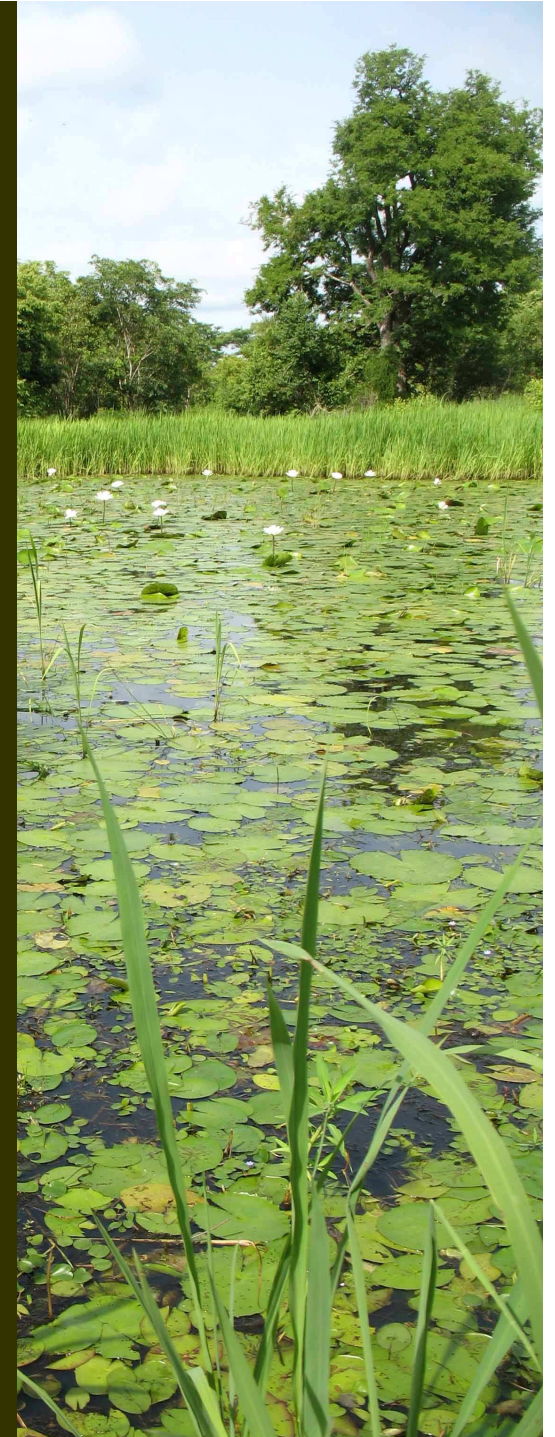


# Sampled Red List Index



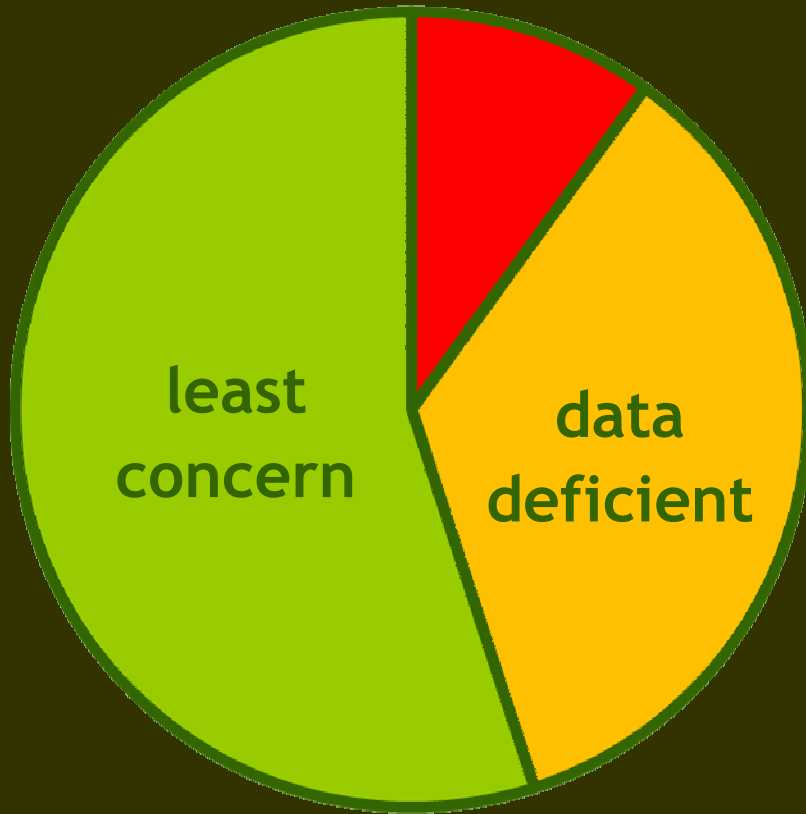
Red List Index: Odonata

1500 species assessed  
... 4200 species remaining





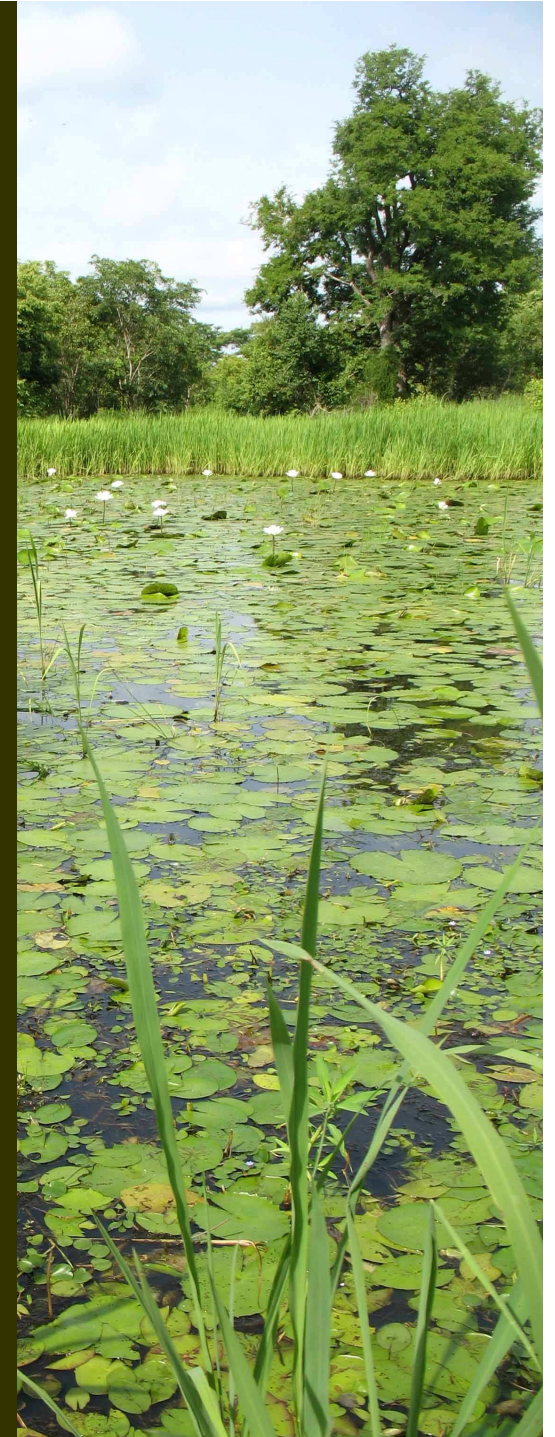
# Sampled Red List Index



Red List Index: Odonata

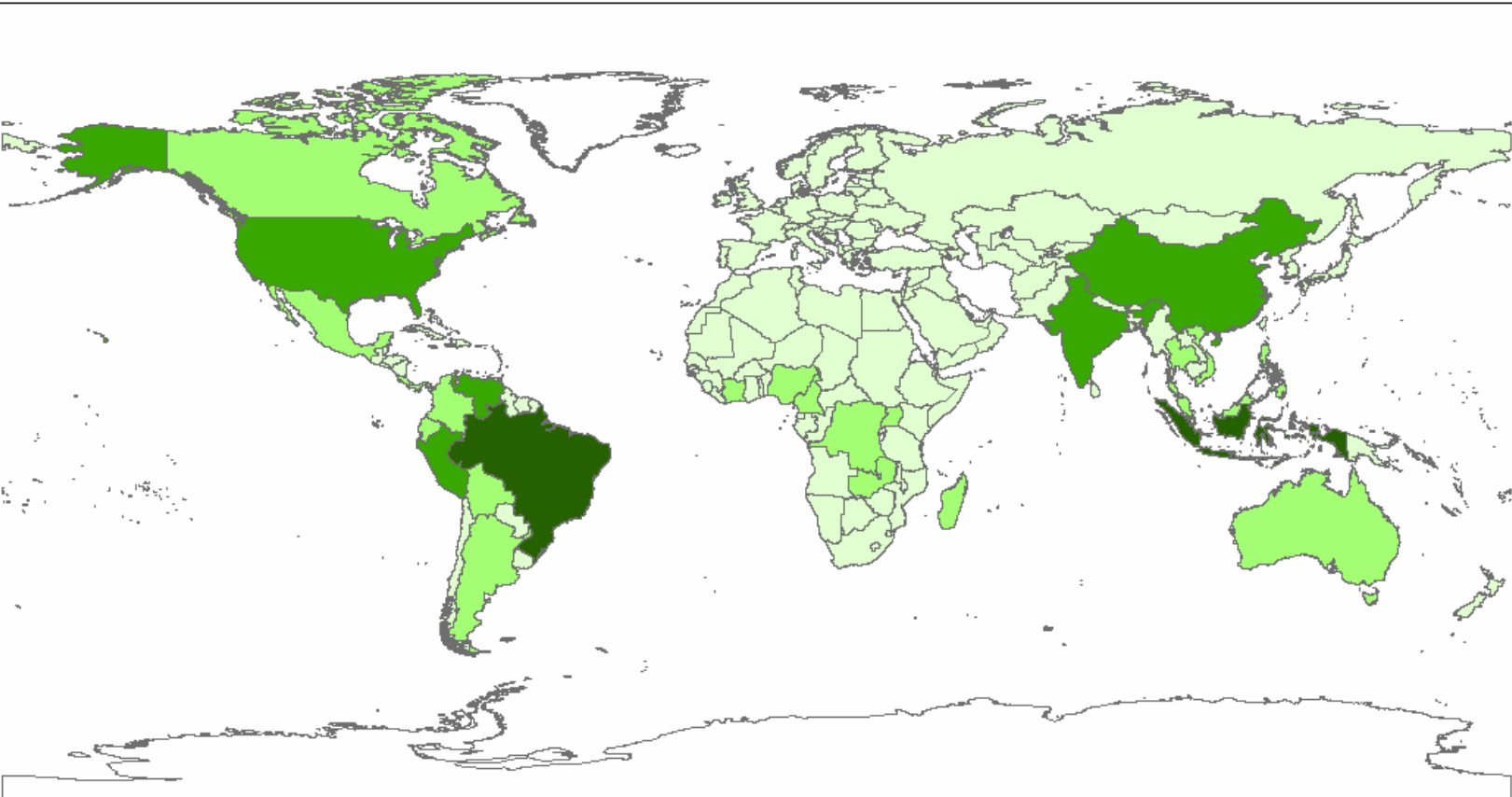
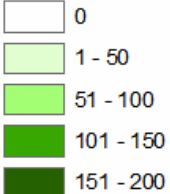
10% threatened

35% data deficient



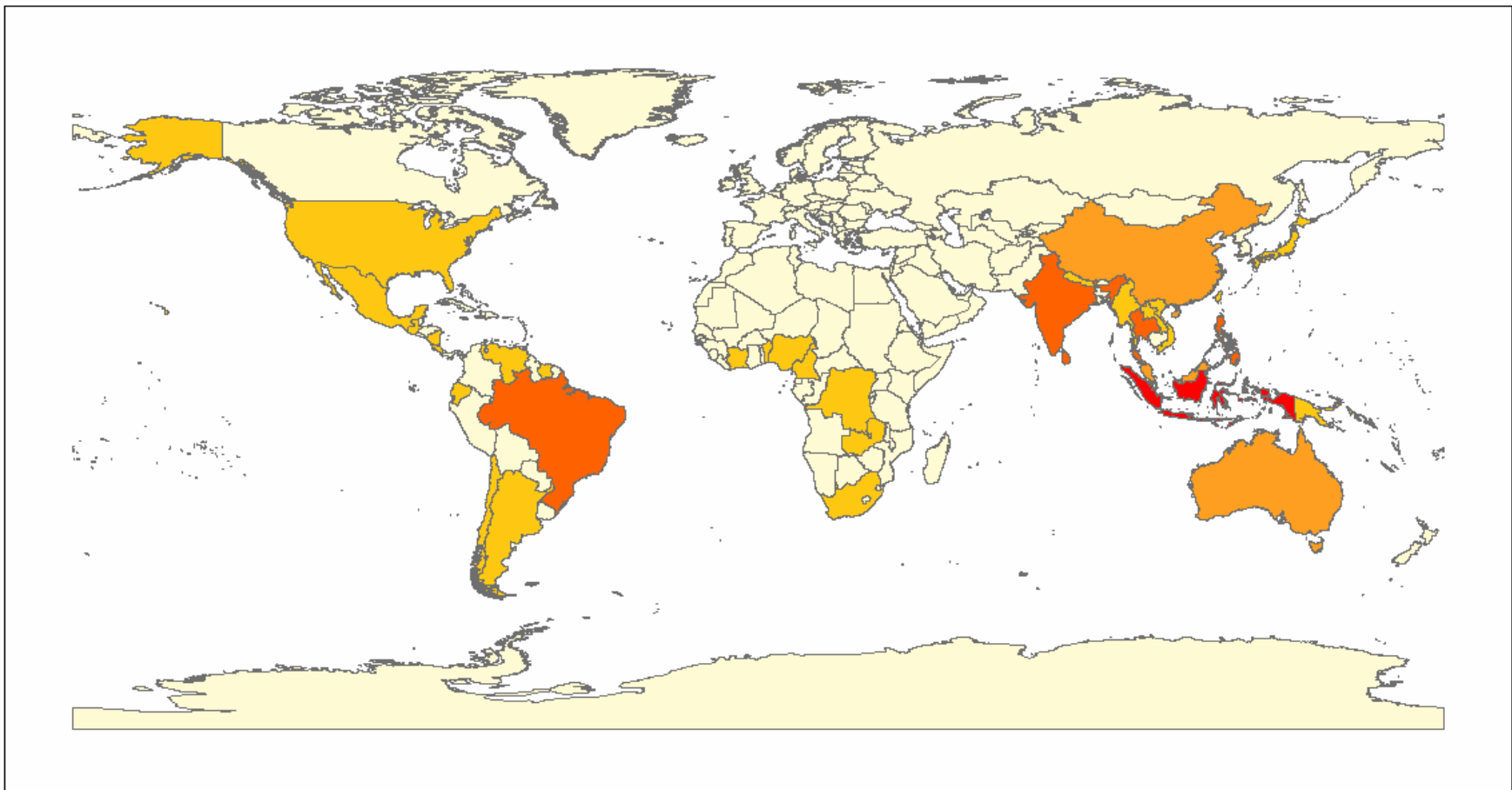
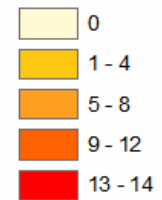
# Species Richness

Number of Species



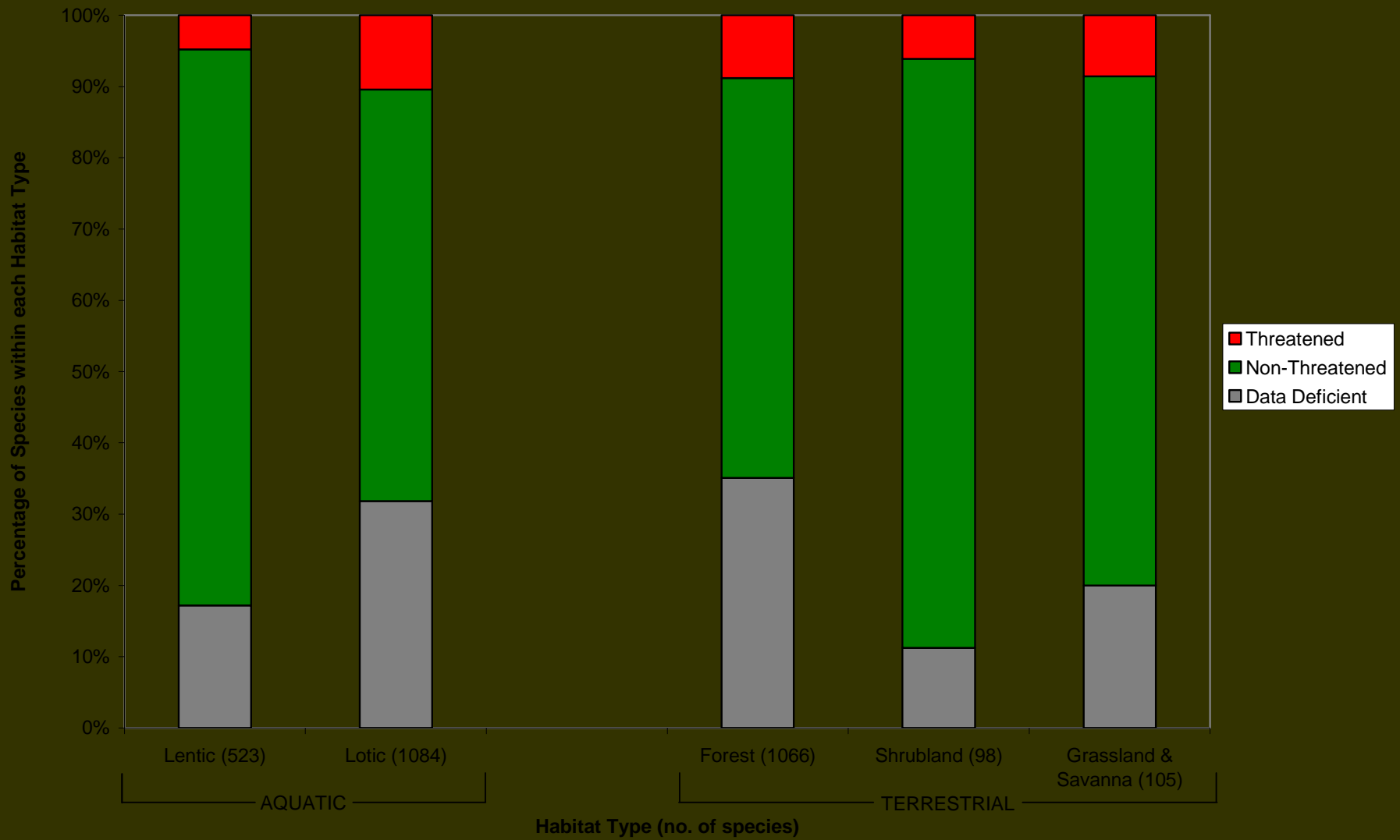
# Threatened Species

## Number of Species







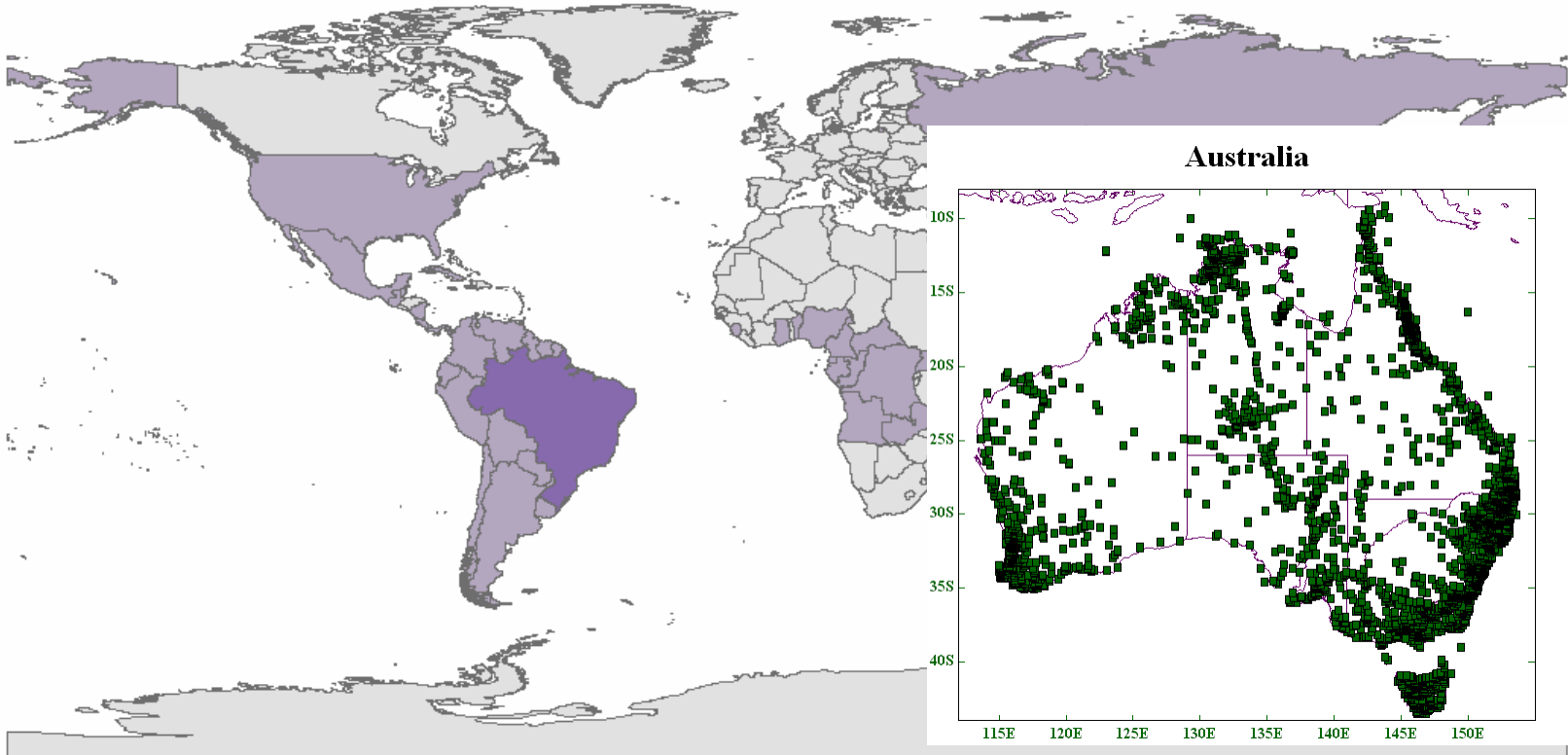
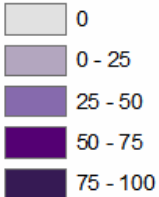






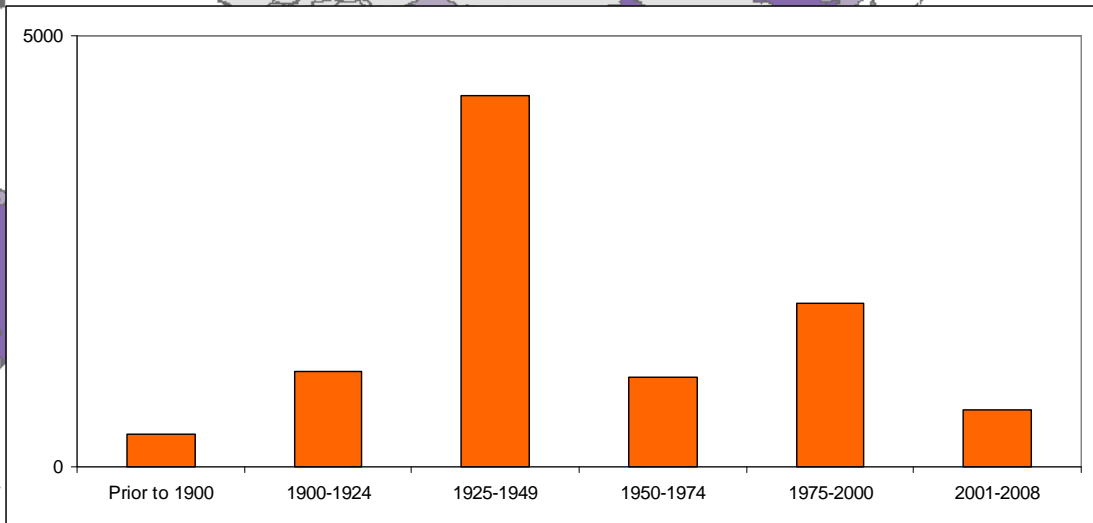
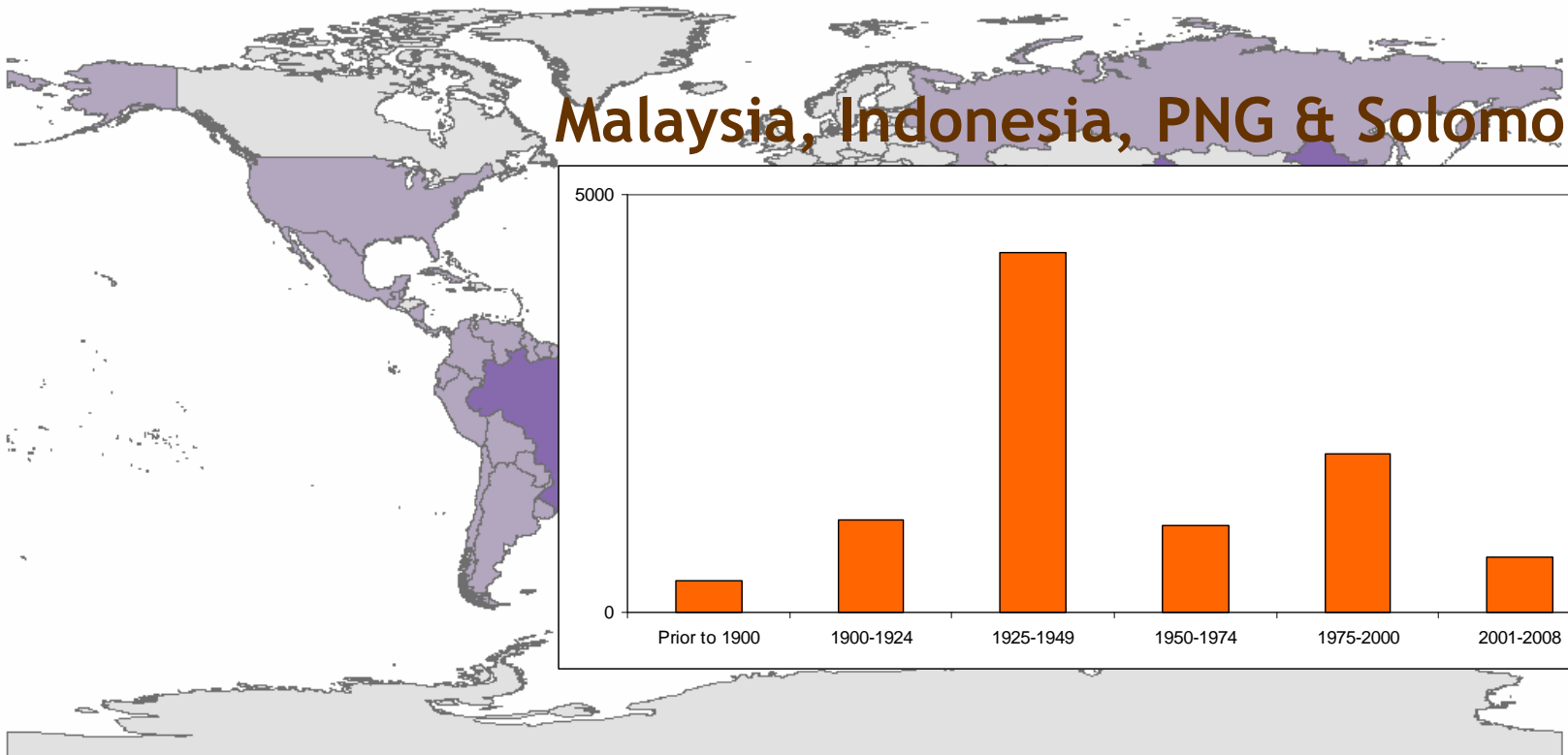
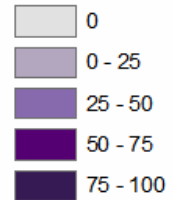
# Proportion of Data Deficient Species

Percentage Data Deficient



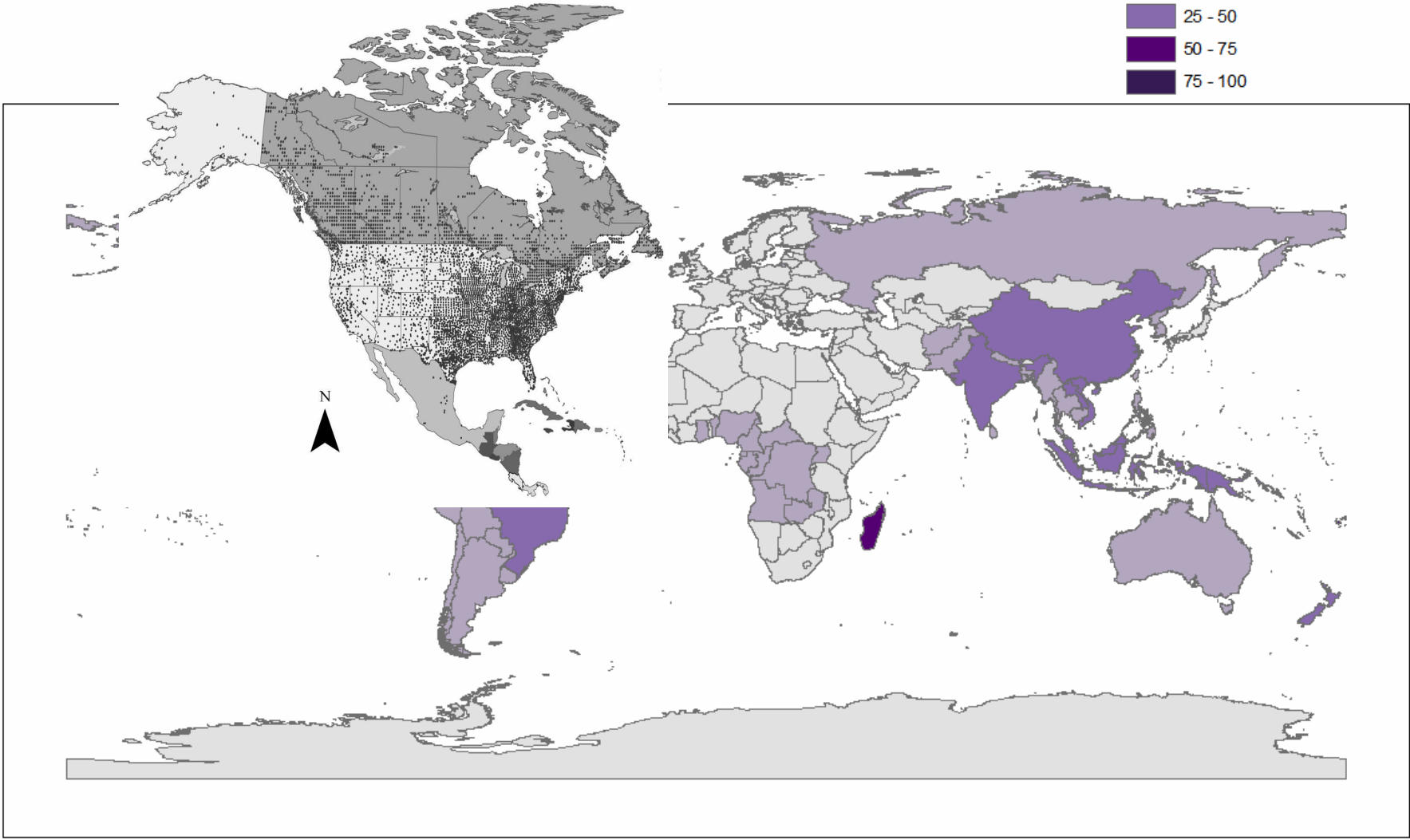
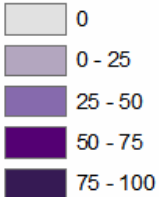
# Proportion of Data Deficient Species

Percentage Data Deficient



# Proportion of Data Deficient Species

Percentage Data Deficient





# Global Dragonfly Assessment

Ready in 2015?

Remarks & questions?

Vincent Kalkman  
Kalkman@naturalis.nl

