

Insect Conservation – from conservation planning to action

Axel Hochkirch



Toxorhynchites brevipalpis

The gradient of biodiversity valuation



Our next
relatives



Fluffy
Cuties



Charismatic
Flagships

The gradient of biodiversity valuation



Our next
relatives



Fluffy
Cuties



Charismatic
Flagships



Ecosystem
Servants



Without
value

The gradient of biodiversity valuation



Our next
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Fluffy
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Without
value



Competitors



Pests



Disease vectors
& pathogens

Protection

The gradient of biodiversity valuation



Our next
relatives



Fluffy
Cuties



Charismatic
Flagships



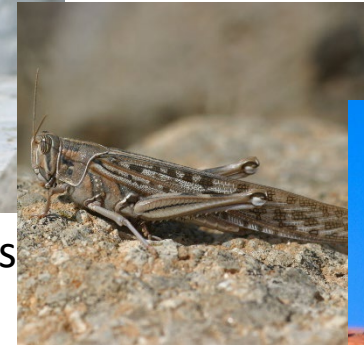
Ecosystem
Servants



Without
value



Competitors



Pests

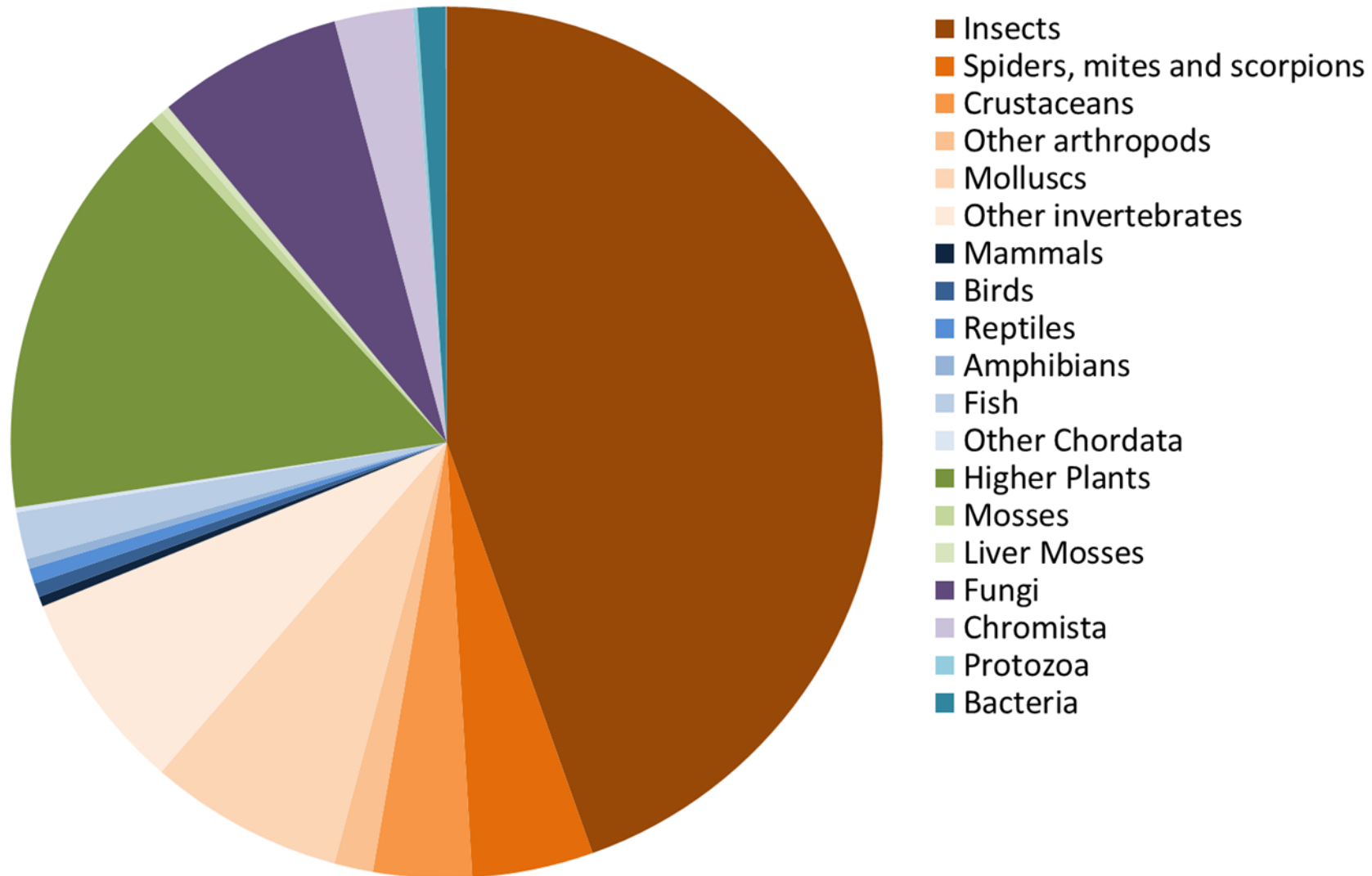


Disease vectors
& pathogens

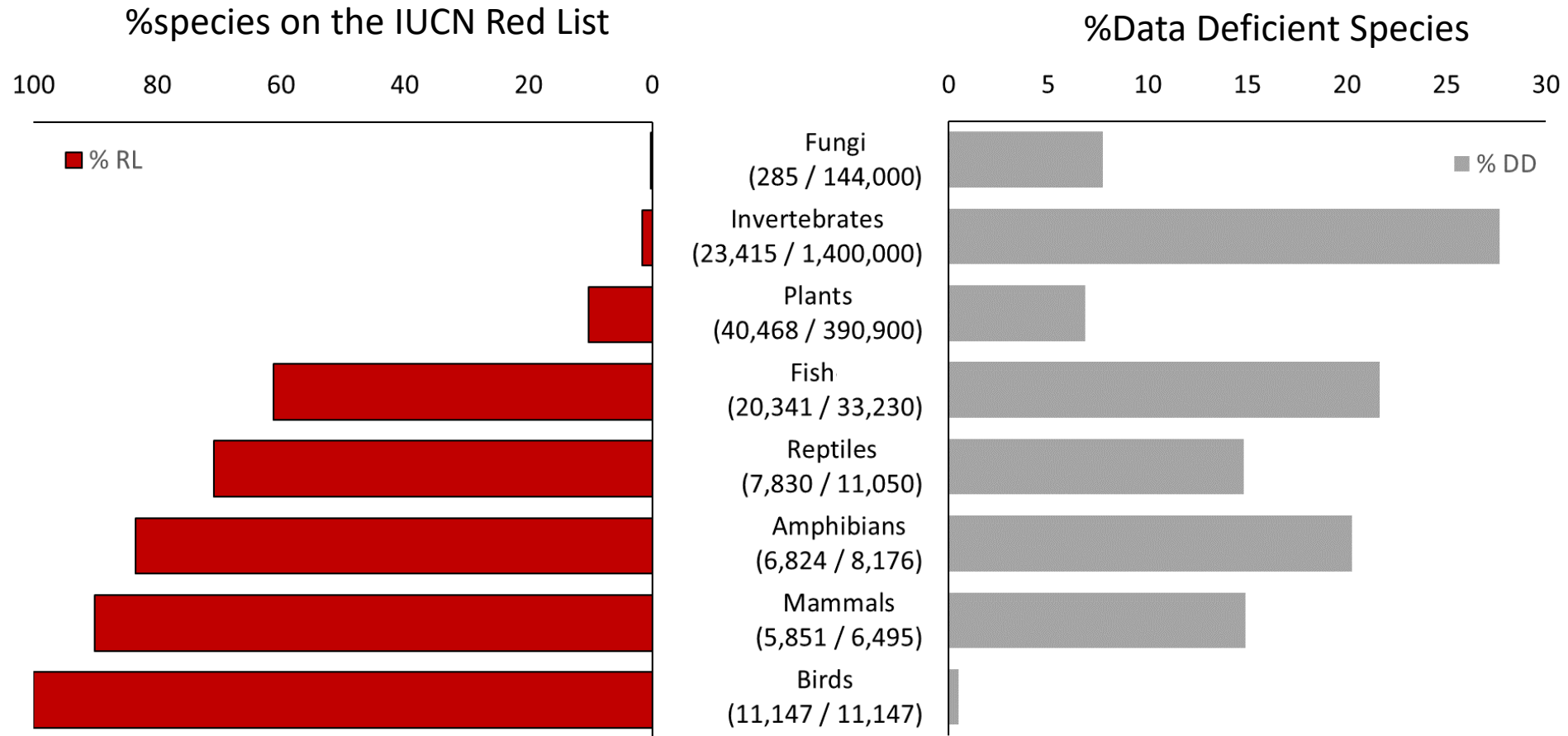
Eradication

Insects are the most species-rich group

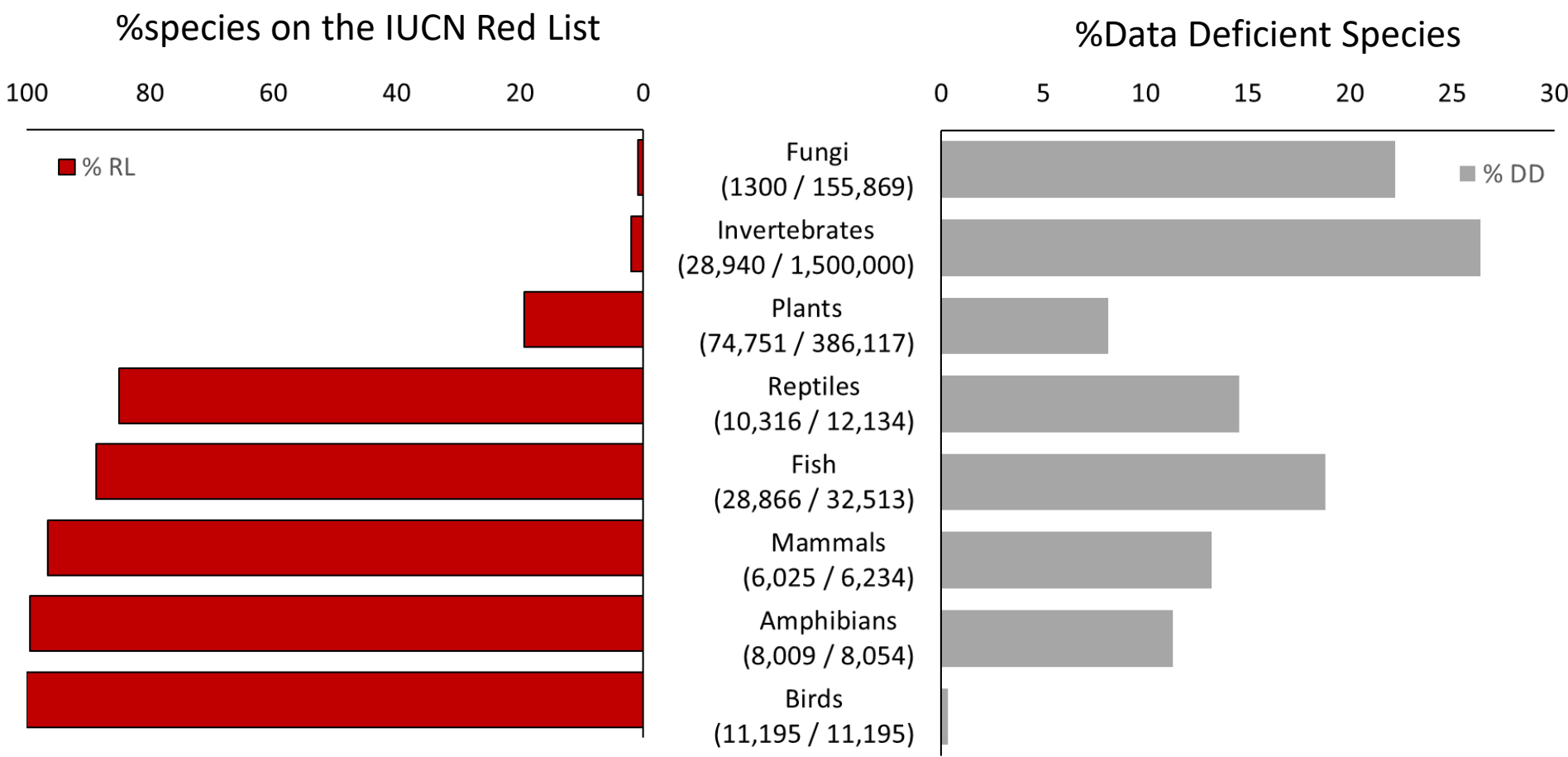
2.5 million described species:



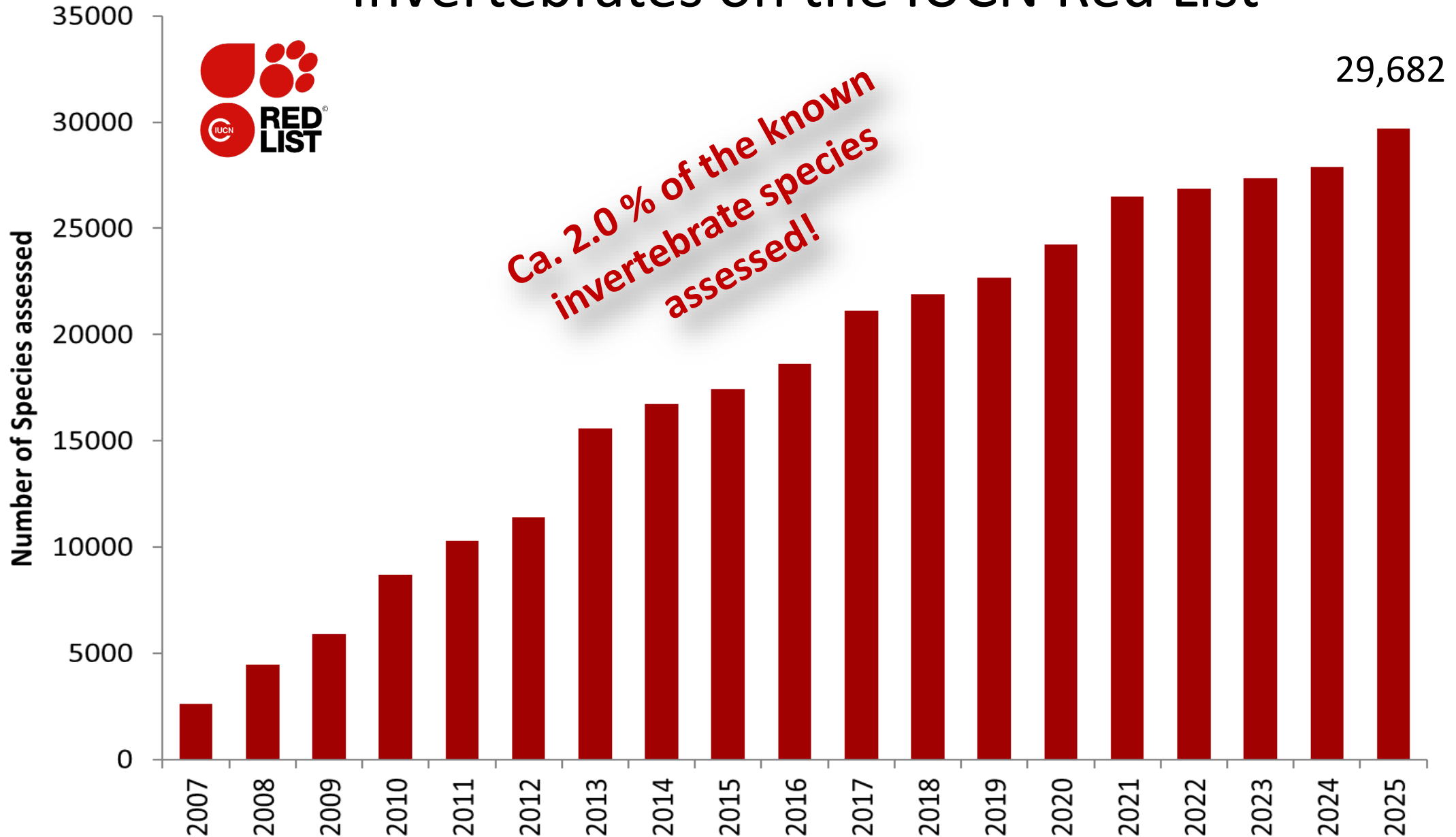
Neglected Taxa in the IUCN Red List



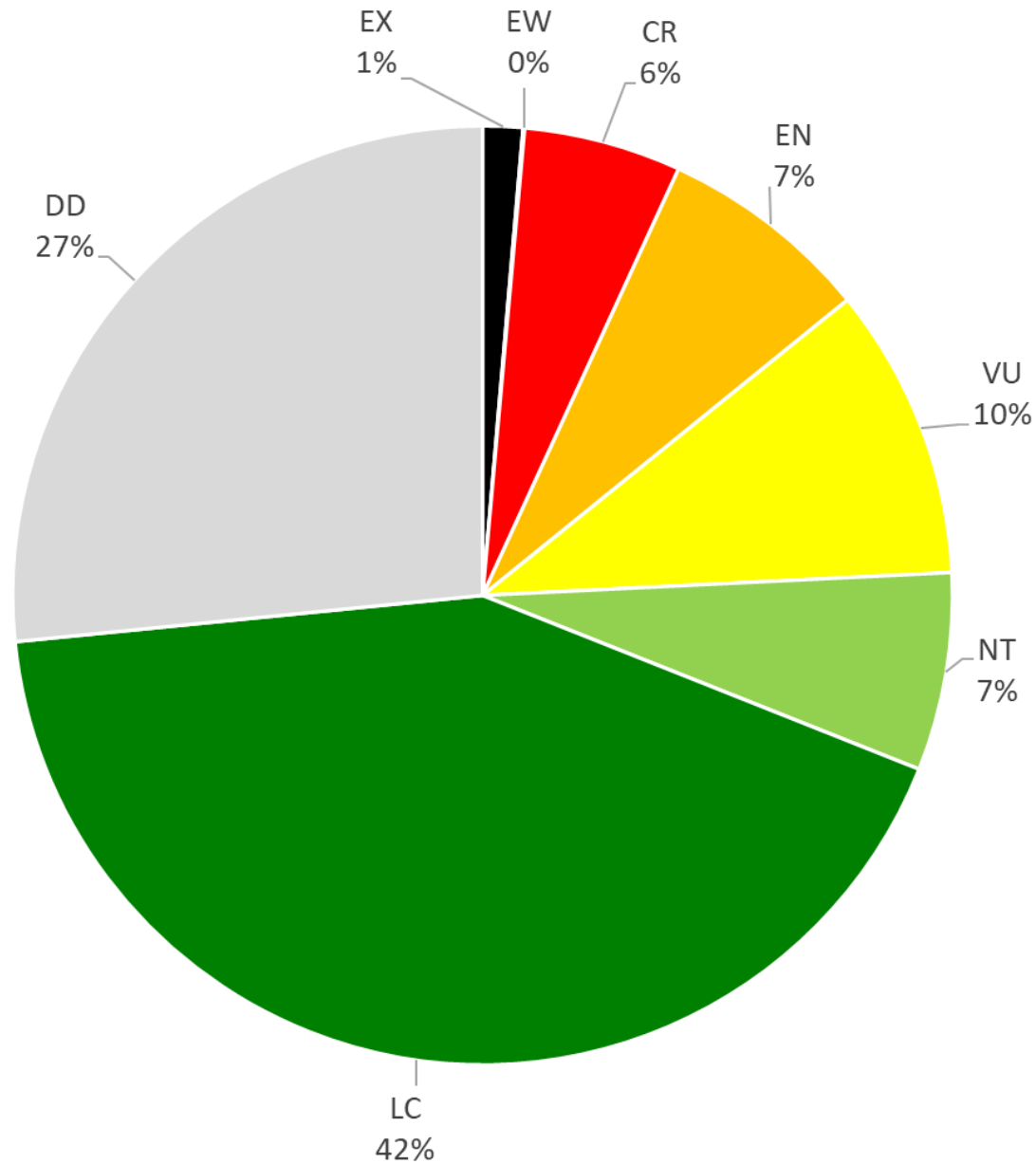
Neglected Taxa in the IUCN Red List



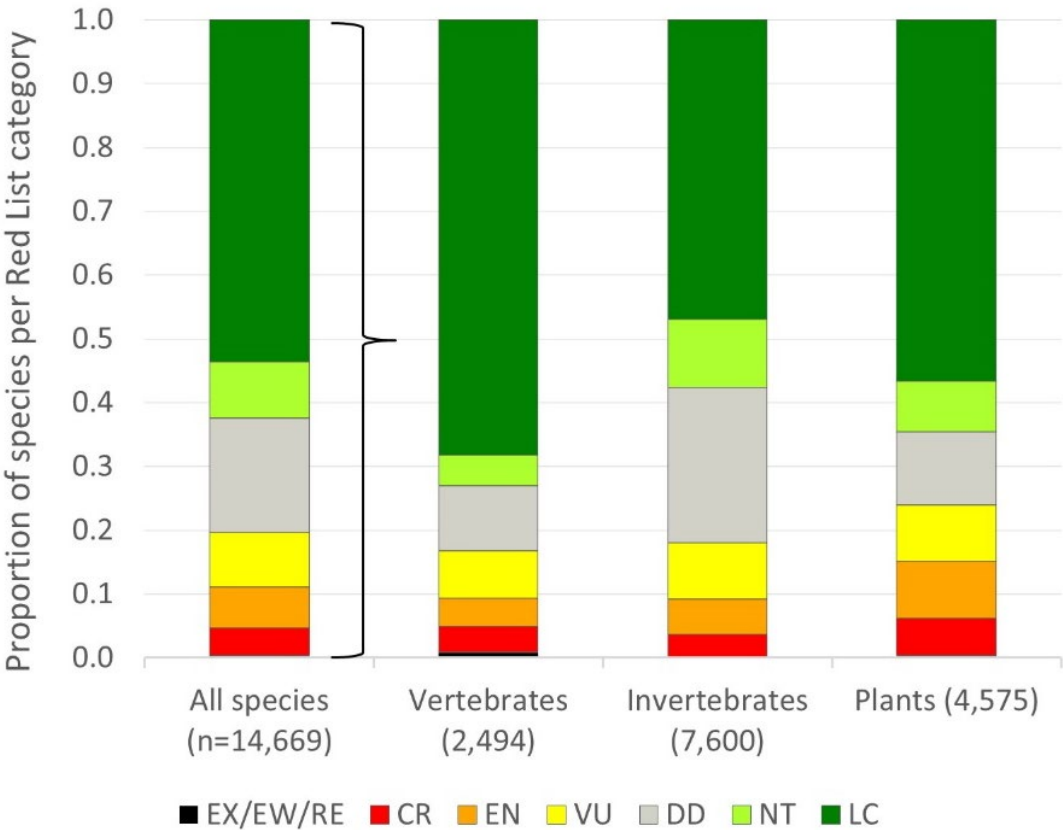
Invertebrates on the IUCN Red List



Invertebrates on the IUCN Red List

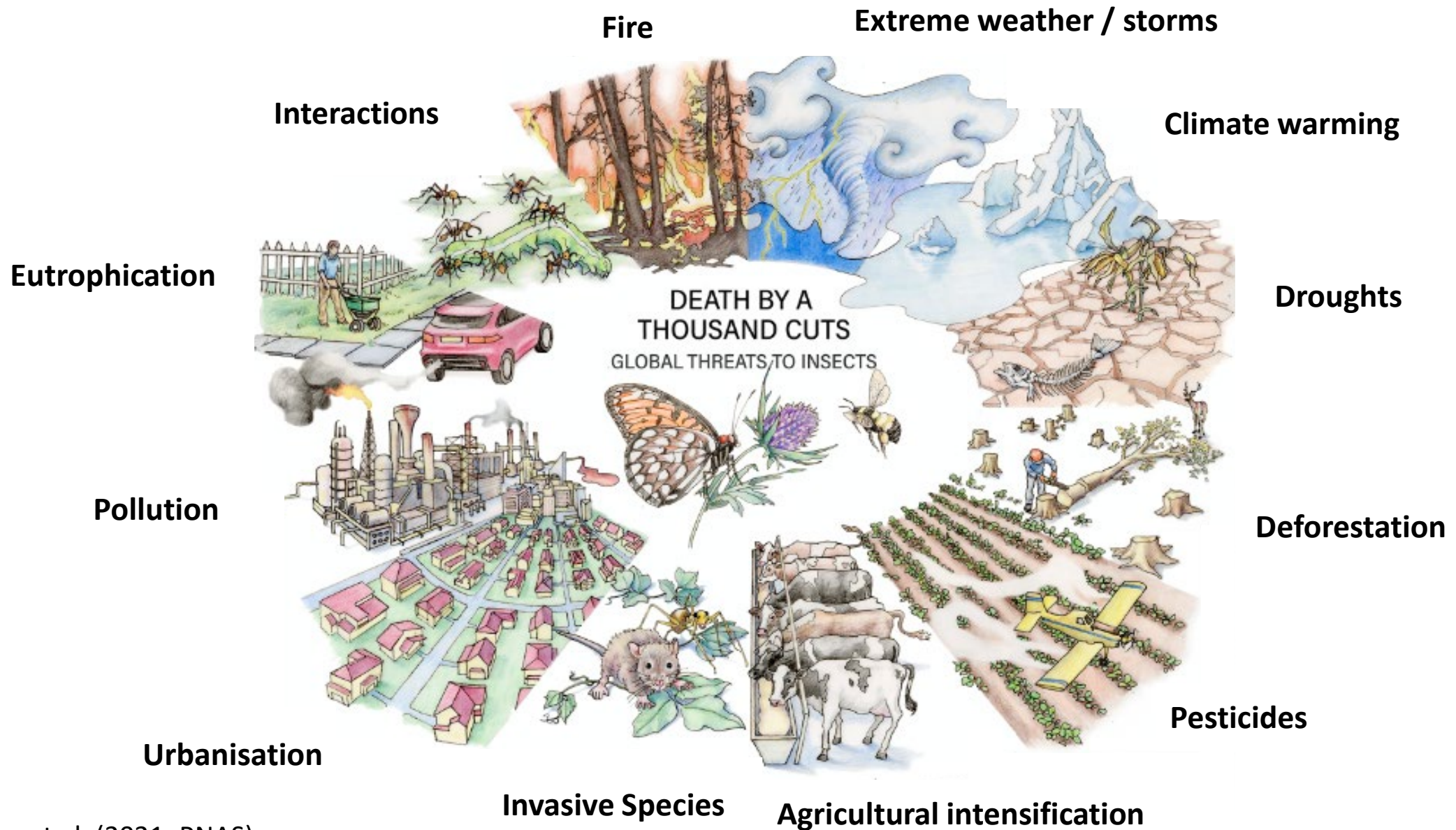


European Red List

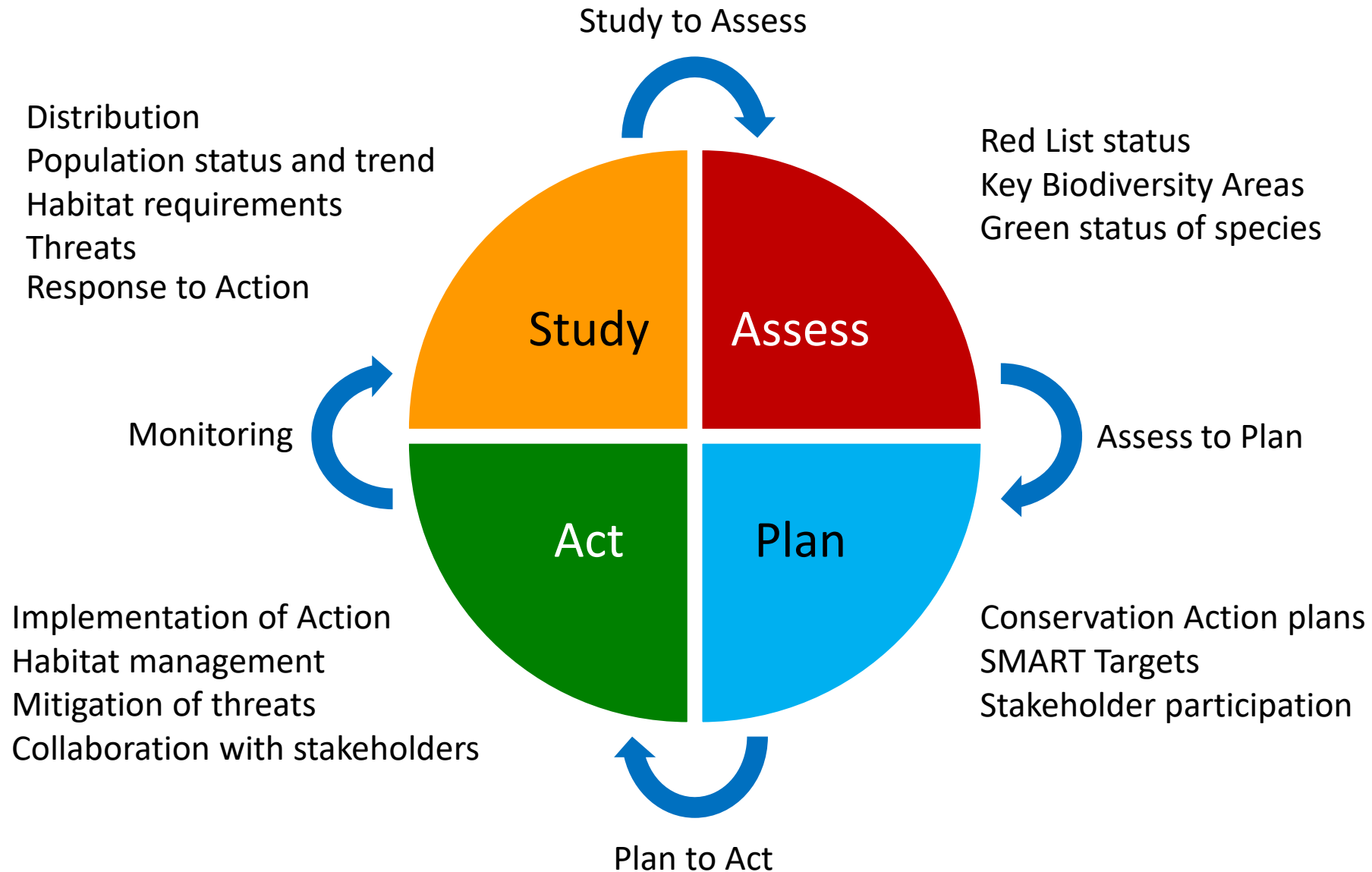


Species Group	% threatened	Species	Number threatened
all (except insects)	25%	~2.6 M	0.65 Million
Insects	24%	~5.5 M	1.32 Million
			1.97 Million ± 0.23 Million

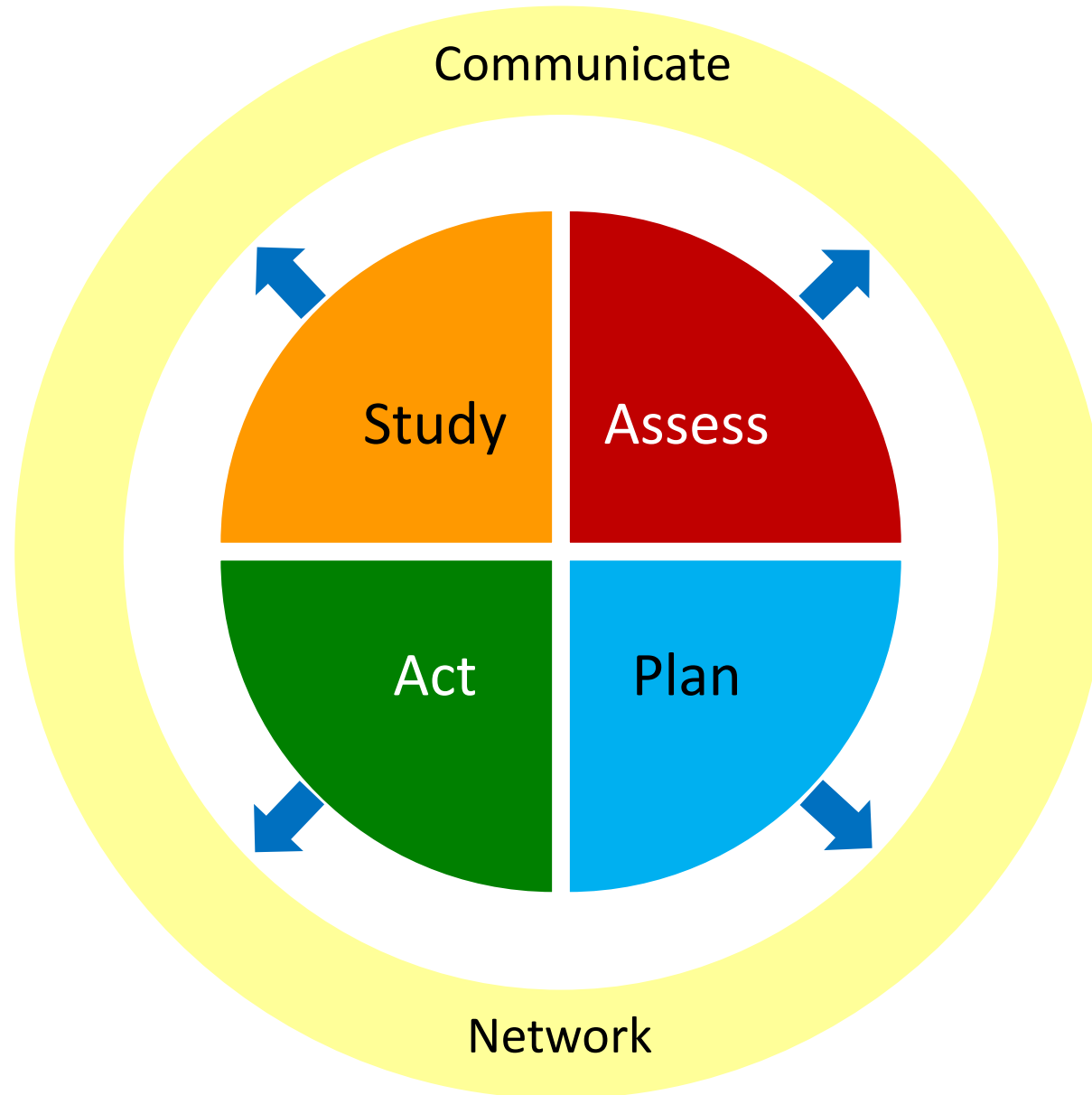
Death by a Thousand cuts



From Knowledge to Action



From Knowledge to Action



Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)



Adriatic Marbled Bush-Cricket (*Zeuneriana marmorata*)

A National Action Plan for Italy 2016-2022

Edited by Axel Hochkirch, Francesca Tami, Yannick Fanin, Carlo Guzzon, Pierpaolo Merluzzi & Paul Tout



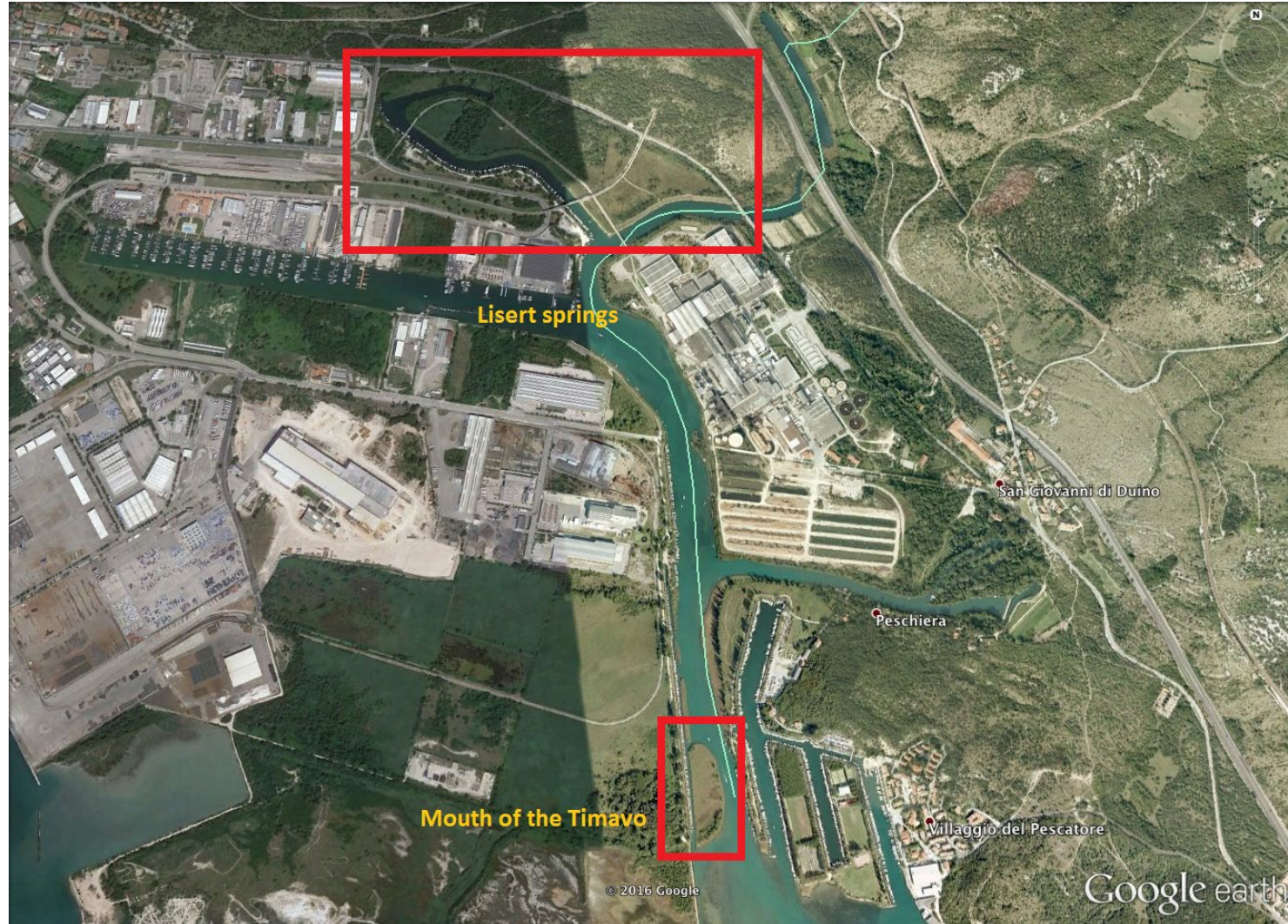
Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)

Threatened in Slovenia because of conversion of sedge meadows into corn fields, new mowing techniques, *Solidago* invasion.

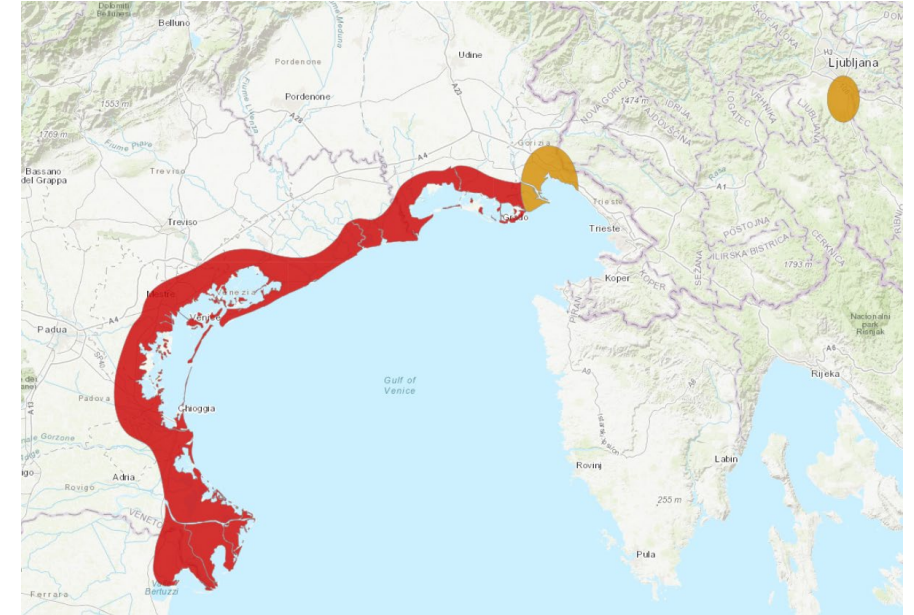
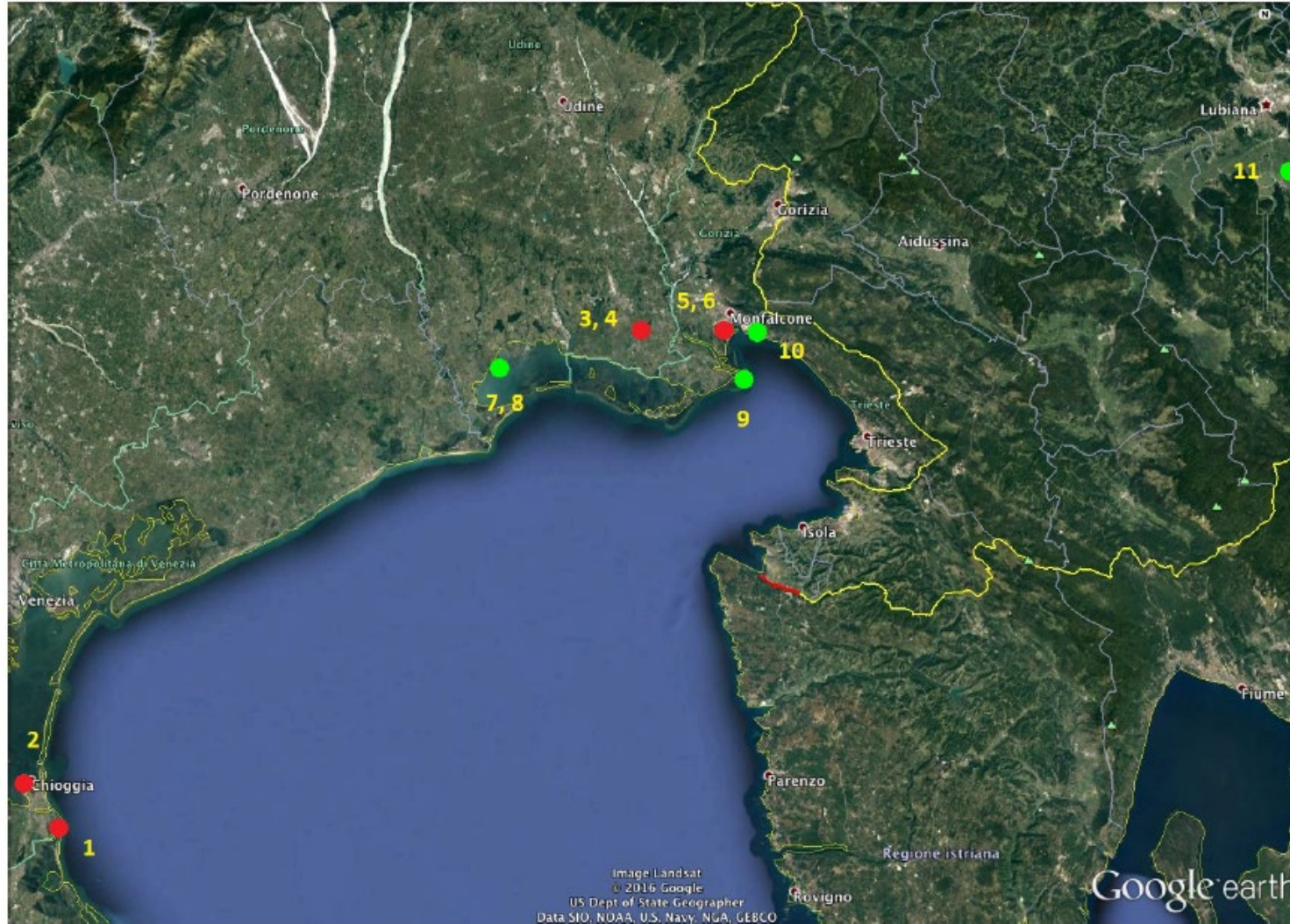


Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)

Threatened in Italy because of industrial and agricultural development



Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)



Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)

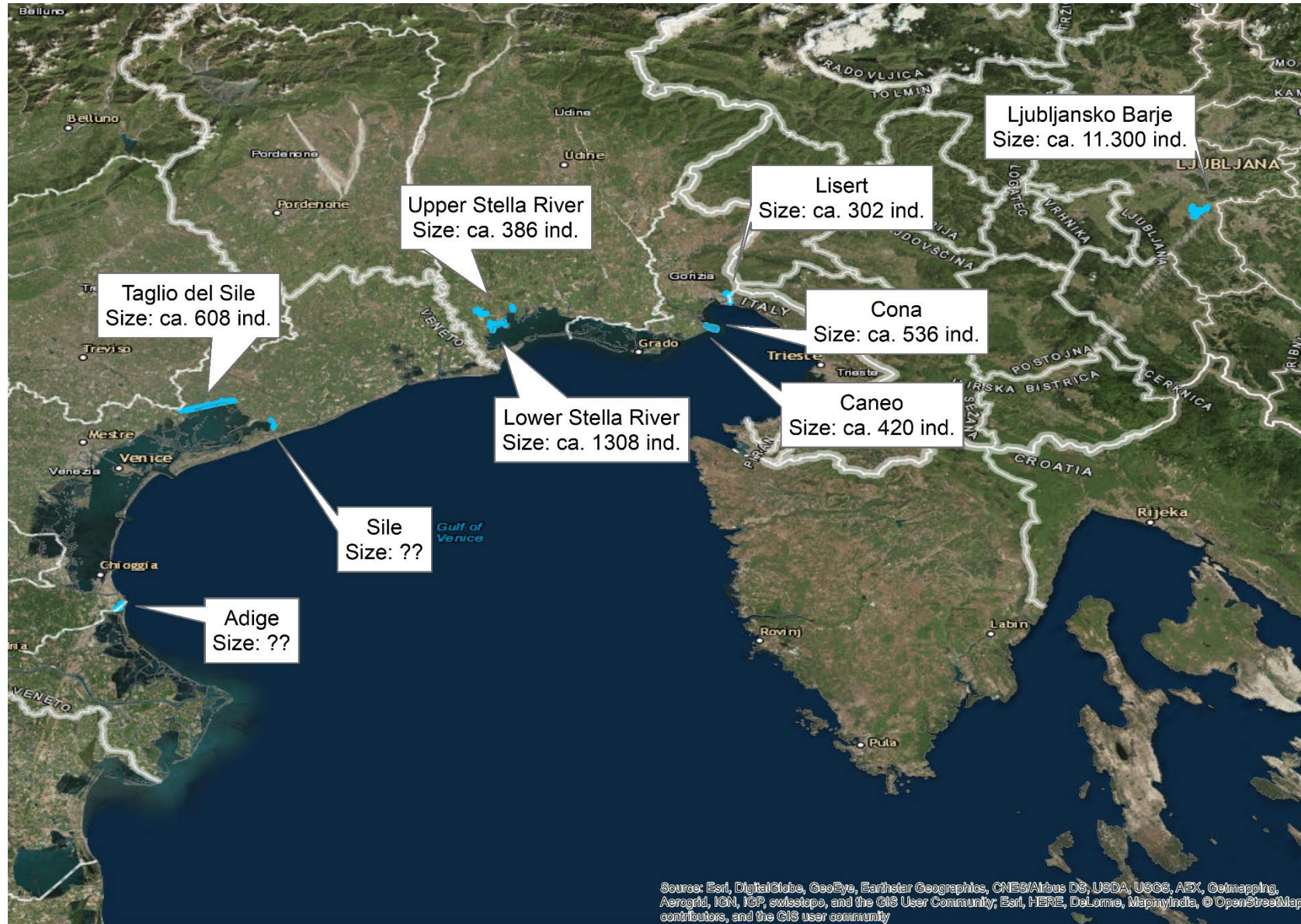
Conservation action plans were published in 2017

Vision of the Italian Action Plan:

The Italian North Adriatic coastal area will maintain a well-connected network of open wetland habitats, including reeds, marshes and wet meadows, that will be under sustainable conservation management, sustaining large viable populations of *Zeuneriana marmorata* and other associated threatened wetland species.



Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)



Adriatic Marbled Bush-cricket (*Zeuneriana marmorata*)





Biotopo Schiavetti - NE Italy



2021 Release site

Verified presence:

2022



Biotopo Schiavetti - NE Italy



2021 Release site

Verified presence:

2022

2023



Biotopo Schiavetti - NE Italy



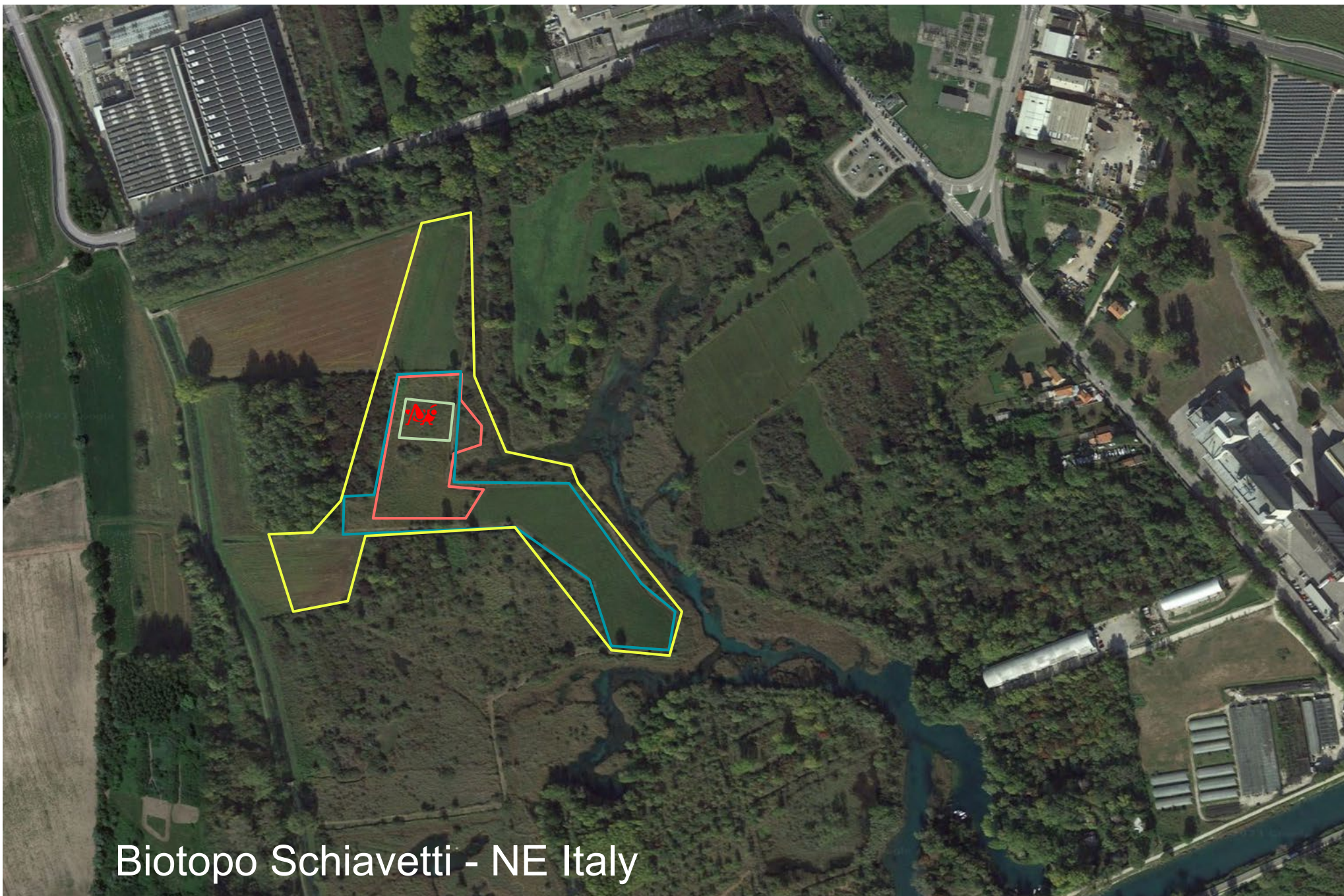
2021 Release site

Verified presence:

2022

2023

2024



Biotopo Schiavetti - NE Italy



2021 Release site

Verified presence:

2022

2023

2024

2025

European Action Plans for threatened Pollinators

Canarian Islands endemic pollinators of the Laurel Forest zone

Conservation plan 2023–2028



Yeray Monasterio León, Carlos Ruiz Carreira, Ruth Escobés Jiménez, Javier Almunia, Martin Wiemers, Ante Vujic, Craig Macadam, Julia Raser, Axel Hochkirch



Hoverflies specialised to veteran trees in Europe

Conservation action plan 2023–2030

Orange-horned Wasp Fly (*Sphiximorpha petronillae*), Red-legged Leafwalker (*Chalcosyrphus pannonicus*), Royal Wasp Fly (*Primocerioides regale*), Golden Forest Fly (*Brachypalpus chrysites*), Jacobson's Leafwalker (*Chalcosyrphus jacobsoni*), Black-legged Leafwalker (*Chalcosyrphus nigripes*)



Ante Vujic, Marija Miličić, Marina Janković Milosavljević, Jeroen van Steenis, Craig Macadam, Julia Raser, Axel Hochkirch



Teasel-plant specialised bees in Europe

Conservation action plan 2023–2030

Dark Pantaloon Bee (*Dasypoda braccata*), Spiny Pantaloon Bee (*Dasypoda spinigera*), Swollen Pantaloon Bee (*Dasypoda suripes*), Silvery Pantaloon Bee (*Dasypoda argentata*), Large Scabious Mining Bee (*Andrena hattorfiana*), Scabious Resin Bee (*Trachusa interrupta*)



Denis Michez, Vladimir Radchenko, Craig Macadam, Vicky Wilkins, Julia Raser, Axel Hochkirch



The Key to Success: Engagement & Collaboration



Thank you for your attention

