Towards a global biodiversity watch?

Integrating satellite data and biodiversity modelling

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30.03.2021 | Copernicus Land, Marine, & Coastal Workshop

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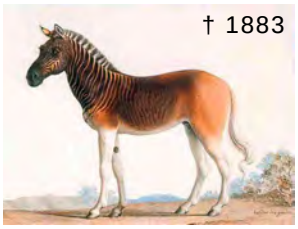
Biodiversity loss



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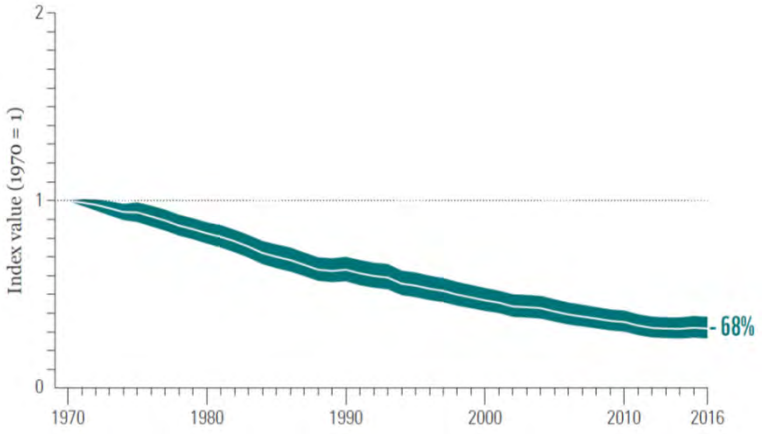
Biodiversity loss



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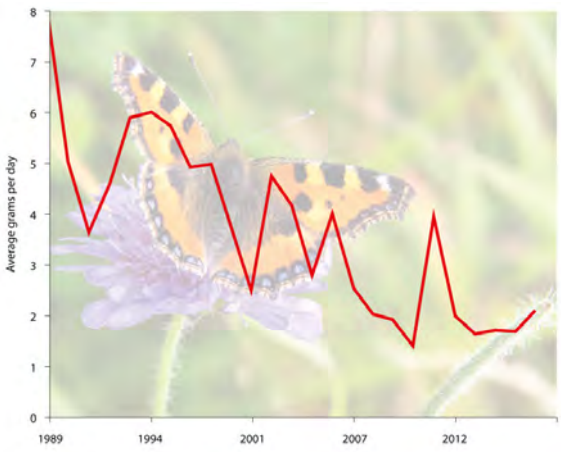
Biodiversity loss



Hallmann *et al.* 2017 | PLOS ONE

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Policy questions

- How will drivers of biodiversity change evolve?
- What are the consequences for biodiversity and ecosystem services?
- What are the implications of different policy choices?

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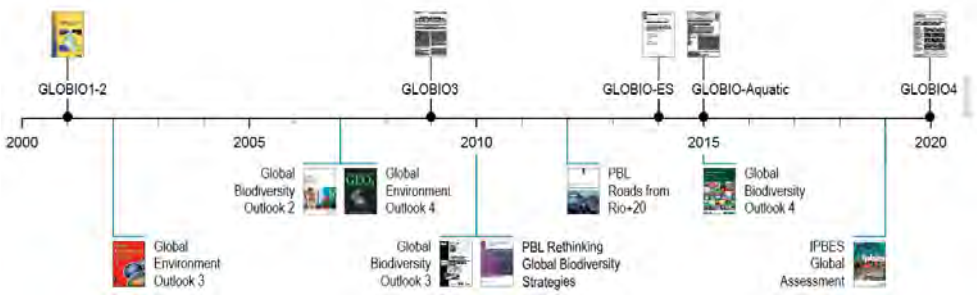
The GLOBIO model

- *Global* model of *local* biodiversity intactness
- Biodiversity metric: mean species abundance (MSA)
- Correlative approach (pressure → impact)



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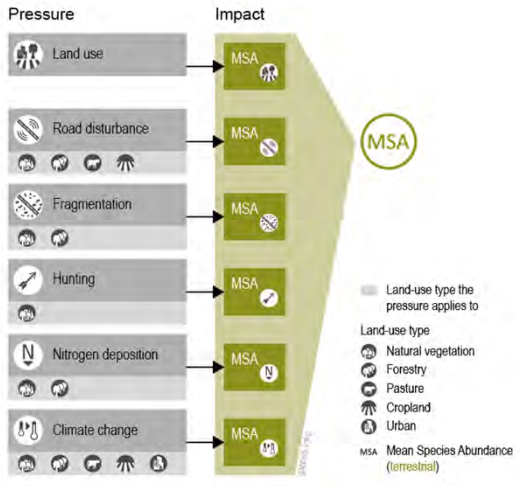
The GLOBIO model



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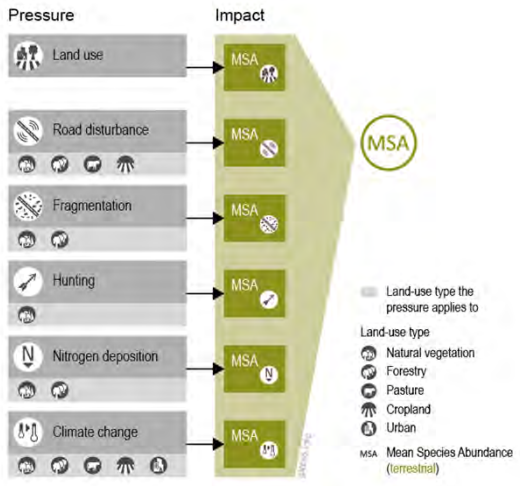
The GLOBIO model



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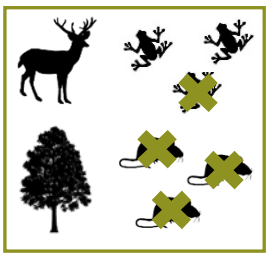

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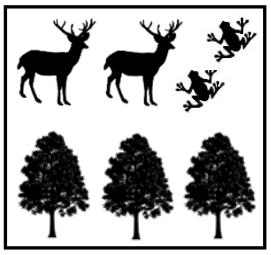


= 0.5


= 1.0


= 0.33

MSA = 0.61

8

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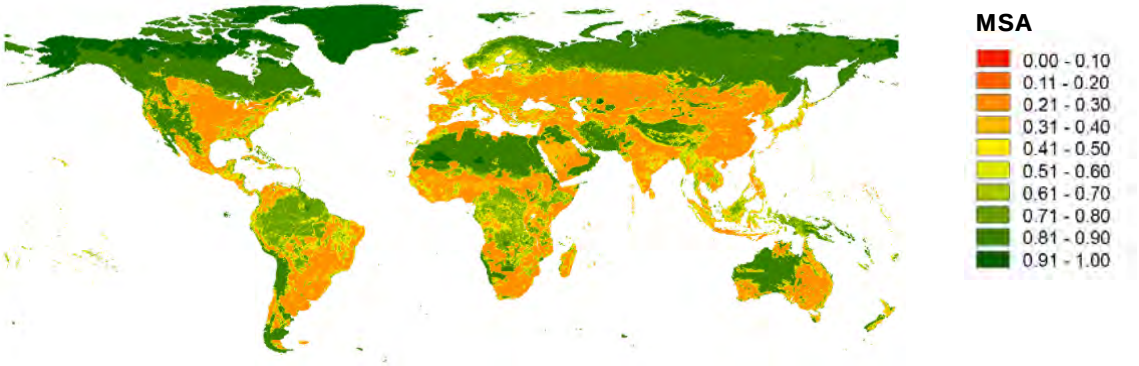
The GLOBIO model



Schipper *et al.* 2020 | Global Change Biology

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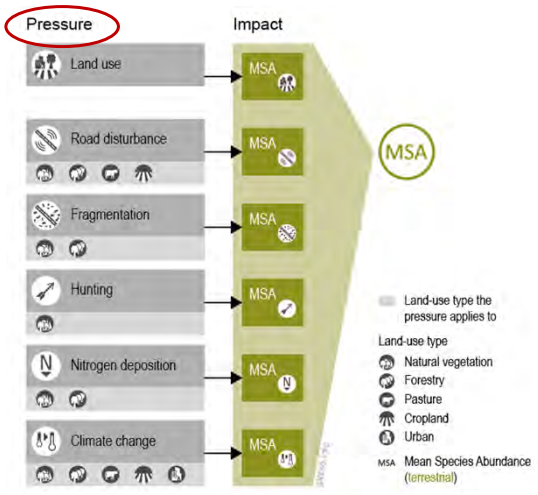
Towards a global biodiversity watch?



- ‘Feed’ GLOBIO with satellite data on pressures

Pilot

- ESA-CCI 1992-2018
- Pasture and forestry/plantations from national statistics
- Other pressures from global models or datasets

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www.globio.info