UN environment WCMC 40 years

Biodiversity Indicators Partnership

INDICATOR FACTSHEET

INDICATOR NAME: **Species Status Information Index**

Key facts

Indicator type	State
Is the indicator **applicable for national use?**	Yes
Current development status	Developed
What is the **coverage**?	Global
Is the indicator **freely available?** If so, where? Please provide a link.	Yes Link: https://mol.org/indicators
Is the indicator **peer-reviewed?**	Yes
Who is involved in the production of this indicator/**who are the partners?** Please provide partner logos.	GBIF MOL MAP OF LIFE GEO BON

Target information

TARGETS	
Please indicate the primary **Aichi target** and any secondary targets that this indicator aligns to?	Primary: 19 Post-2020: Target 19
Is the indicator an **official SDG indicator**, if so, for which target?	
Is the indicator **relevant for other SDG targets**? If so please state which.	Goal 14, 15
Is the indicator an **official indicator for other MEA (e.g.** CITES/CMS/RAMSAR**),** if so, for which targets?	IPBES Global Assessment
Is the indicator included in the **IPBES core or highlighted** indicators?	Core

Is the indicator **relevant for other MEA targets**? If so please state which.	

Themes:

THEME	
Agriculture	
Marine and freshwater habitats	X
Pollution	
Finance, research and knowledge	X
Human well-being	
Policy and conservation actions	
Species	X
Terrestrial habitats	X
Sustainable use of natural resources and land	

Who is the main contact point for the indicator?

Walter Jetz, walter.jetz@yale.edu

Description of the indicator: (what the indicator is/measures, what policy questions it addresses, brief background/history of development).

Primary species occurrence records are essential for monitoring the status and trends of biodiversity, but remain limited and biased in their availability.

The Species Status Information Index, SSII, measures trends in the coverage of mobilized biodiversity data. The index quantifies the growth in the shared evidence base available to measure, account for and use biodiversity in decision-making.

The indicator is calculated annually at near global scale and comprehensively for a growing array of species groups.

Graphs and diagrams: (insert graphic/figure, how to interpret the trend and what do +ve/-ve trends mean etc.)

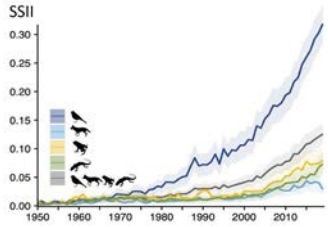

Fig 1: Global annual trends in SSII. In all four example species groups SSII has been increasing. But biodiversity information coverage as indicated by SSI remains limited, and particularly so for groups other than birds.

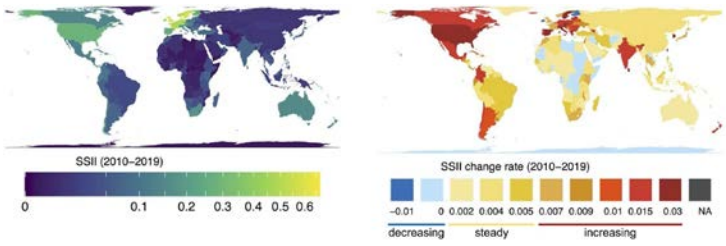

Fig 2: Status (left) and recent trends (right) of SSII vary strongly among nations. While some regions saw strong increases in the past ten years, many parts of the world have steady and in some cases decreasing SSII.

Current storyline (a succinct overview of the current trend and explain how this impacts biodiversity)

Despite a rapid rise in biodiversity data coverage, particularly in the last two decades, persistent geographic and taxonomic biases in biodiversity knowledge remain. A large number of countries show steady or even decreasing biodiversity information gathered and lack the evidence to account for biodiversity in decision-making.

Data and methodology:

Coverage	Global
Scale	Global
Time series available	1950-2019
Next planned update	2021
Possible disaggregations	By species group and region, down to 110km grid cells
Metadata used	
Methodology	SSII quantifies spatiotemporal biodiversity data coverage for a particular grid resolution and geographic range expectation and can be flexibly aggregated at the levels of species, nations and the globe. Global SSII tracks the proportion of range cells with records, either for a single species or averaged across multiple species. National SSII restricts this calculation to the range cells inside a particular country. Steward's SSII follows the National SSII calculation but additionally applies a species-level weight to account for different national stewardships of species, i.e. their varying responsibilities as determined by the portion of a species' global range expectation they hold. The current (2020) national SSII values provided use as a 110km equal area grid and represent Steward's SSII. Geographic range expectations come from a variety of expert sources (https://mol.org/datasets), and currently (2020) for mammals and amphibians include range maps assembled by experts supporting IUCN Red List assessments (https://www.iucnredlist.org/resources/spatial-data-download).

Producing this indicator nationally: Please provide a brief description on how easy it is to produce this indicator at the national level

The indicator can readily be disaggregated or calculated at the national and sub-national level. The indicator is summarized at the resolution of relatively coarse grain grid cells (e.g. 100km), but overlay with species data and national borders is conducted at a finer spatial resolution (1-5km).

Use of the global method and data at the national level: Please provide explanatory text in the box below which answers the following questions:

Are there national subsets of global data available for use to calculate this indicator? Yes. Can the indicator methodology be applied with in-country data to develop a national indicator? Yes, in-country and other data can be combined. Is there guidance on how to produce the indicator at the national level? Please provide a link to available guidance. See further information and national subset becoming available at https://mol.org/indicators

Examples of national use: Please provide examples on where and how the indicator has been used at the national level, and links to case studies if available

Availability of global data for national use:

Freely available for non-commercial use	Available with agreements in place with providers	Contact provider

X		

Contact person(s) for supporting national use: Please provide an alternative contact name and email address if this is different than the main indicator contact

Further resources:

https://mol.org/indicators

Meyer, C., H. Kreft, R. Guralnick, and W. Jetz. 2015. Global priorities for an effective information basis of biodiversity distributions. Nature communications **6**:8221.

Oliver, R.Y., Meyer, C., Ranipeta, A., Winner, K. & W. Jetz: Global and national trends in documenting and monitoring species distributions. Submitted.