

Biodiversity Loss in the News, 2019-2026: Attention, Geography and Tone of Global Biodiversity Coverage, and How It Compares with Research and Invention

Fliar BI · Prism Research Layer · Working paper, October 2026 · Dataset and code: github.com/fliarbi/prism-news-api · Licence CC BY-NC 4.0

Abstract

We measure how biodiversity and its loss were covered in a global news index from January 2019 to July 2026, using 80,378 de-duplicated articles, and set that coverage beside 35,332 research papers (2015–2025) and 5,209 patent families (2015–2024) on the topic. Six results stand out:

1. **A small, slowly rising share.** Biodiversity took 5.81 of every 10,000 news articles in 2025, 1.17 times its 2019 share of 4.98. The low point was 2020, at 3.98 per 10,000.
2. **Peaks fall in conference months.** The largest monthly share was December 2022 (11.52 per 10,000), the month the Kunming-Montreal Global Biodiversity Framework was adopted. The second was October 2024 (10.22), the month COP16 opened in Cali.
3. **Geography.** The United States holds 19.36% of located articles but is under-represented (lift 0.4). Ecuador (10.36), Colombia (9.4) and Indonesia (4.4) are the most over-represented of the leading countries, and South America (3.99) the most over-represented continent. Within India, Assam (9.42), Goa (5.95) and Odisha (2.72) lead.
4. **Shifting attention.** Colombia's share of its own news rose from 5.39 per 10,000 in 2023 to 76.95 in 2024. Canada's fell from 9.19 in 2023 to 3.6 in 2025 (0.39 times), after a peak of 28.31 in 2022.
5. **Tone.** Coverage is more positive than news in general: 74.1% of articles are positive in tone (all news: 56.8%) and 23.1% negative (all news: 33.6%). 67.9% are rated critical priority (all news: 42.6%).
6. **Research and invention.** Biodiversity papers grew from 4.19 to 6.94 per 10,000 papers between 2015 and 2025 (1.66 times). Patent families grew from 62 in 2015 to 1,280 in 2024, and 97.7% were filed in China.

Findings stated for citation

- **F1.** Biodiversity took 5.81 of every 10,000 news articles in 2025, 1.17 times the 2019 share; the 2020 share (3.98) was 20.1% below 2019.
- **F2.** December 2022, the month the Global Biodiversity Framework was adopted, was the peak month, at 11.52 articles per 10,000 (1.97 times the 2022 average).
- **F3.** October 2024, the month COP16 opened in Cali, was the second-highest month (10.22 per 10,000). Colombia's share of its own news rose from 5.39 to 76.95 per 10,000 between 2023 and 2024.
- **F4.** The United States held 19.36% of located biodiversity news at a lift of 0.4; India held 16.12% at 1.22.
- **F5.** Ecuador (10.36), Colombia (9.4) and Indonesia (4.4) were the most over-represented of the 25 leading countries.

- **F6.** South America (3.99), Africa (2.25) and Oceania (2.24) were over-represented; North America (0.5) was under-represented.
- **F7.** Within India, Assam (9.42), Goa (5.95) and Odisha (2.72) had the most over-represented coverage.
- **F8.** Canada's share fell from 9.19 to 3.6 per 10,000 of its news between 2023 and 2025, after 28.31 in 2022.
- **F9.** 74.1% of biodiversity articles were positive in tone (all news: 56.8%).
- **F10.** 67.9% were rated critical priority, 1.59 times the all-news share.
- **F11.** Endangered-species protection appeared in 25.32% of themed articles, 201.46 times its rate in all news.
- **F12.** Biodiversity papers rose 1.66-fold as a share of all papers between 2015 and 2025.
- **F13.** Patent families grew 20.65-fold from 2015 to 2024; 97.7% were filed in China.

1. Introduction

Biodiversity loss is the decline in the variety of life, from genes to species to ecosystems. Scientists link it to land-use change, overexploitation, pollution, invasive species and climate change. Governments agreed new global targets in December 2022, and met again in Cali in October 2024 to review them.

News is one of the main ways the public learns about these trends, yet attention to biodiversity is rarely measured. Assessments record the state of species. Bibliometric studies record research. Few sources record how much of the news biodiversity takes, when, where and in what tone.

This paper and its dataset measure that attention. They combine three records for one topic: a global news index, research papers and patents. Every comparison uses a denominator, so that growth in the index or in publishing is not mistaken for growth in interest. The companion dataset publishes an article-level sample (20,163 rows) and full coverage tables, so every figure here can be re-derived. The [Prism News API](#) serves the full history.

2. Data and methods

News. The Prism news index holds articles from outlets worldwide; non-English articles are indexed in English translation. Each article carries its opening text (the first few sentences), a primary location, a graded tone label, an editorial priority rating (1-9), themes, keywords and named organisations. The index also carries journal abstracts, which match when their opening names biodiversity. We count unique article identifiers; repeated rows for the same article are removed. When this release was built, 92.88% of the index was readable, so all counts are lower bounds.

Matching. An article is about the topic when its opening text contains one of nine terms as whole words: *biodiversity*, *biodiversity loss*, *loss of biodiversity*, *biodiverse*, *biological diversity*, *species extinction*, *extinction crisis*, *habitat loss* or *threatened species*. Biodiversity alone matched 70,035 articles; *biological diversity* 3,460, *threatened species* 3,389 and *habitat loss* 2,719. Three families of matches are excluded:

- exam-preparation quizzes and digests ("correct option is", "facts for prelims");
- molecular senses ("biodiversity of proteoglycans");
- quiz question templates.

These removed 86 of 80,464 raw matches (0.11%); the vocabulary is specific. One reviewer read 40 randomly drawn matched openings. 36 concerned biodiversity, threats to species or habitats, or their conservation (precision 90%). In 17 (42.5%) biodiversity loss or conservation was the main subject. The four false positives were passing mentions: a ministry appointment, a travel listing, a planetary-science feature and an animal explainer.

Measures. Coverage over time is expressed per 10,000 articles in the index that month or year, because the index grew from 11,807,177 articles in 2019 to 26,990,006 in 2025. Geography, tone, priority and themes use January 2023 – July 2026. Geography is expressed as lift: a place's share of biodiversity articles divided by its share of all located articles. States are measured against all located news from their own country. 30.36% of articles in the geography window carry a primary country. Place tags derived from ordinary words ("Congress", "Earth", "Winter", "Cloud") were treated as unlocated in every location field, which removed 15.3% of city-tagged articles.

Research and patents. Research papers are de-duplicated articles and reviews (2000–2025) with *biodiversity*, *biodiversity loss*, *species extinction*, *extinction risk*, *habitat loss* or *biological diversity* in the title. Repository deposits and molecular senses (antibody, peptide and immune-repertoire diversity) are excluded. Patent families (2006–2024) match *biodiversity*, *biological diversity*, *species diversity*, *habitat restoration* or *ecological restoration* in the title, are counted once per filing office, and exclude molecular libraries.

3. Results

3.1 How much and when

The index holds 80,378 biodiversity articles from January 2019 to July 2026. Raw counts rose from 5,884 in 2019 to 15,694 in 2025, a 2.67-fold rise. The share of all news rose far less: from 4.98 per 10,000 in 2019 to 5.81 in 2025, or 1.17 times (Table 1). The low point was 2020, at 3.98 per 10,000, 20.1% below 2019. The highest annual share was 2024, at 6.08.

Year	Biodiversity articles	All articles in index	Per 10,000
2019	5,884	11,807,177	4.98
2020	6,458	16,230,014	3.98
2021	8,684	17,281,220	5.03
2022	11,190	19,115,515	5.85
2023	11,502	20,484,506	5.61
2024	14,178	23,311,896	6.08
2025	15,694	26,990,006	5.81

Table 1. Biodiversity articles per year and as a share of the index. 2026 (January–July) is partial and omitted.

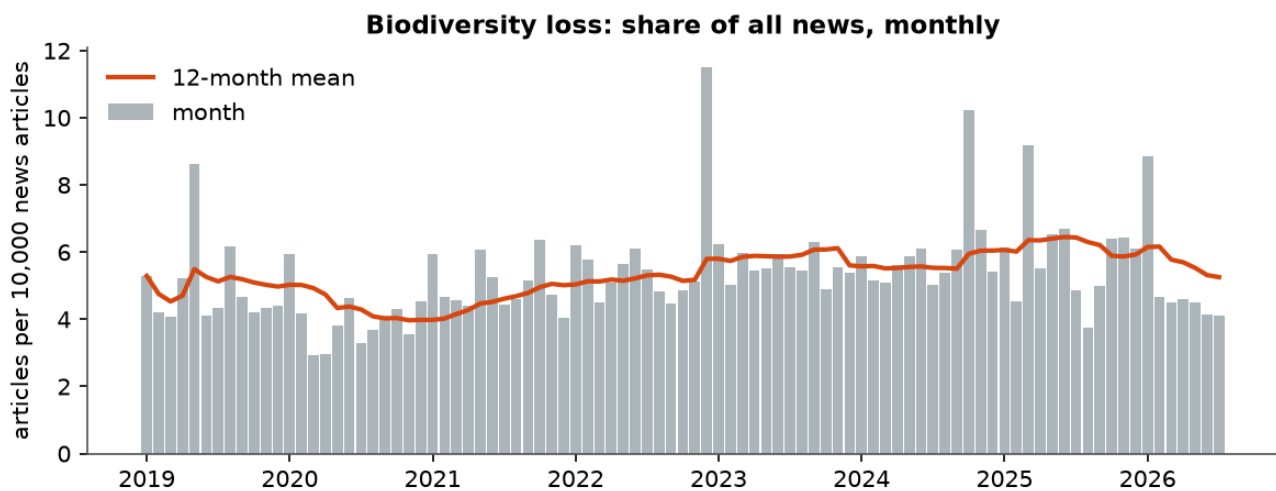


Figure 1. Biodiversity coverage as articles per 10,000 news articles, monthly, January 2019 – July 2026. Bars are months; the line is the 12-month mean.

Monthly attention is spiky (Figure 1). The largest share was December 2022, at 11.52 per 10,000, 1.97 times the average for 2022. That was the month COP15 in Montreal adopted the Kunming-Montreal Global Biodiversity Framework. The second was October 2024, at 10.22, the month COP16 opened in Cali. March 2025 had the most articles in raw terms (2,283). The coincidence of the peaks with the conferences is a matter of timing; we do not test which stories drove them.

The seasonal pattern is weak (Figure 2). January (10.31%), May (9.67%) and October (9.17%) hold the largest shares of a typical year, together 29.15%, against 25% for an even spread across three months. May contains the International Day for Biological Diversity (22 May). Journal abstracts dated to the first day of a month may add to January.

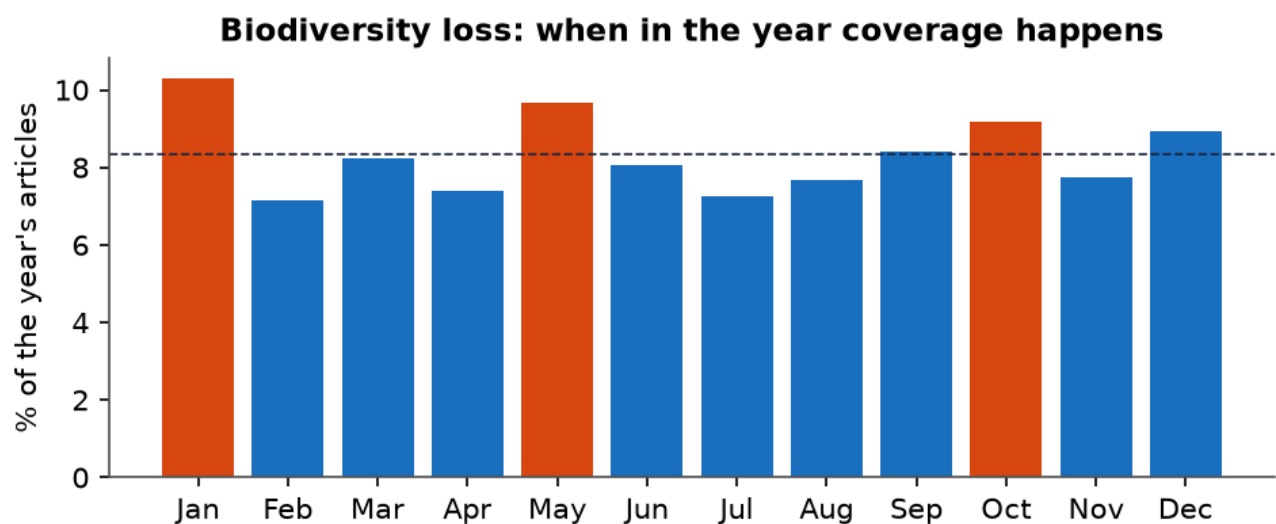


Figure 2. Share of each year's biodiversity articles published in each month, averaged over 2019–2025. Dashed line = an even spread (8.3% per month).

3.2 Where

Between January 2023 and July 2026, 14,624 biodiversity articles carried a primary country. The United States holds the largest raw share (19.36%), but its lift is 0.4: biodiversity takes well under half as large a share of American news as of news overall. India's share (16.12%) comes with a lift of 1.22, and the United Kingdom's (8.53%) with 1.46. The most over-represented of the leading countries are megadiverse tropical countries: Ecuador (10.36), Colombia (9.4) and Indonesia (4.4) (Table 2, Figure 3).

Country	Located articles	Share %	Lift vs all news
United States	2,831	19.36	0.4
India	2,357	16.12	1.22
United Kingdom	1,248	8.53	1.46
Australia	606	4.14	1.93
Canada	568	3.88	1.81
France	561	3.84	1.94
Brazil	432	2.95	3.42
Colombia	357	2.44	9.4
Singapore	316	2.16	2.43
China	315	2.15	0.82
Indonesia	179	1.22	4.4
Kenya	132	0.9	4.11
Ecuador	103	0.7	10.36

Table 2. Leading countries in located biodiversity news, January 2023 – July 2026, with lift against all located news. Indonesia, Kenya and Ecuador are added for their lift. Singapore's count includes a recurring item tagged to Singapore that is not about the country, which inflates its lift.

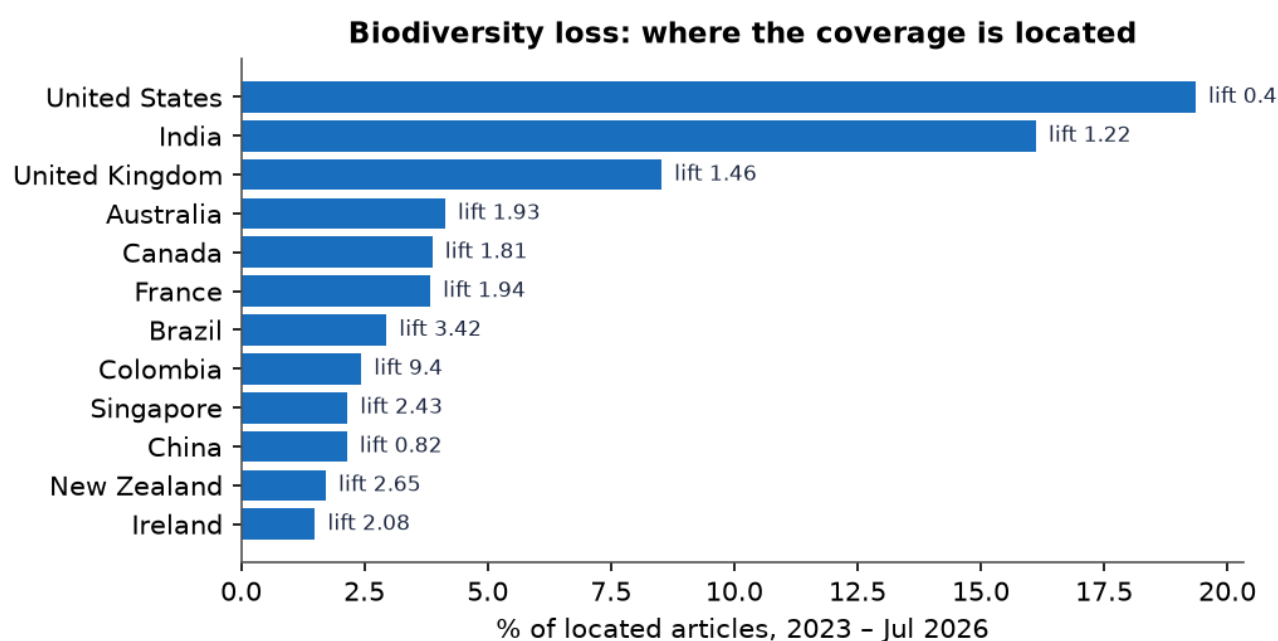


Figure 3. Leading countries by share of located biodiversity articles, 2023 – Jul 2026, labelled with lift against all located news.

3.3 Geo intelligence: continents, states and shifting attention

The world map (Figure 4) shows the pattern at a glance. Biodiversity is over-represented in the news of South America, much of Africa, Southeast Asia and Oceania, and under-represented in the United States, China and Japan. By continent, South America (3.99), Africa (2.25), Oceania (2.24), Europe (1.38) and Asia (1.17) are over-represented, while North America (0.5) is not (Figure 7, left).

Biodiversity loss: which countries over- and under-cover the topic

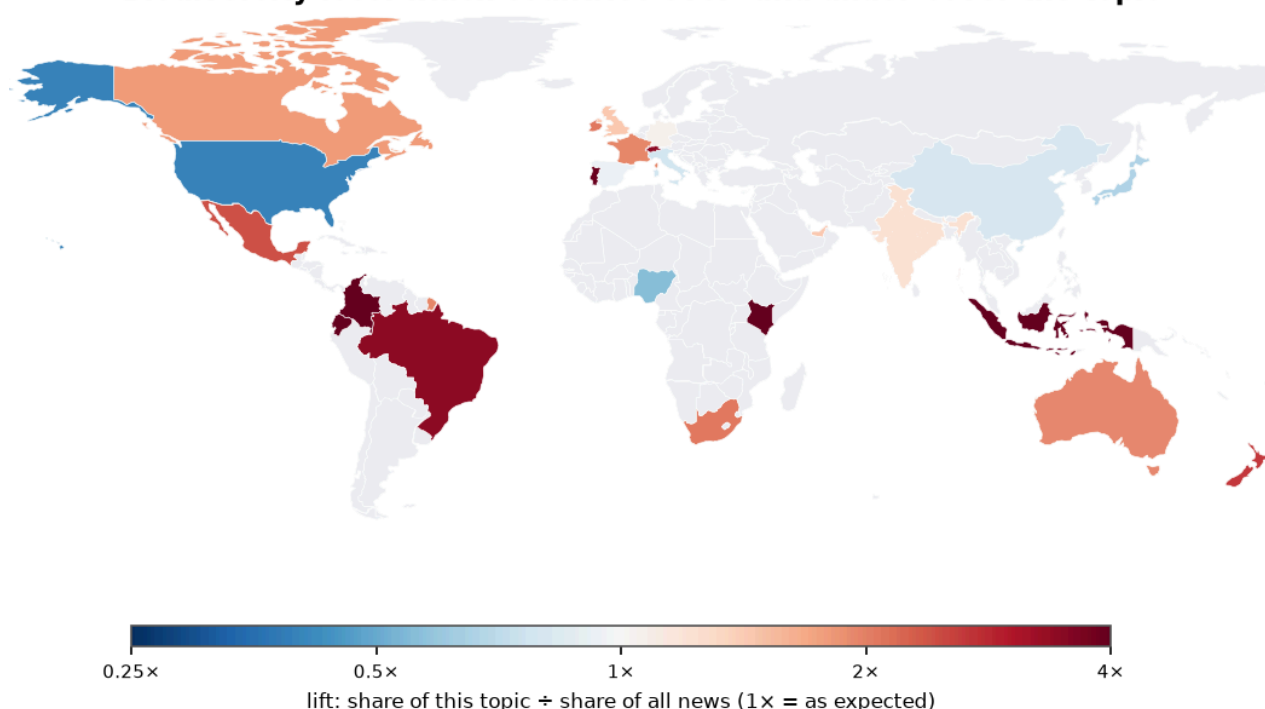


Figure 4. Lift of each country's share of located biodiversity articles, January 2023 – July 2026 (red = over-represented, blue = under-represented, grey = fewer than 100 articles). India is drawn with its official outline.

Within countries, coverage concentrates in a few states (Table 3). In India, 1,954 articles carried a state. Among states with at least 50 articles, and measured against each state's share of Indian news, Assam (9.42), Goa (5.95), Odisha (2.72), Kerala (2.14) and Uttarakhand (1.99) are the most over-represented. Assam lies in the north-east, Goa and Kerala on the Western Ghats coast, and Uttarakhand in the Himalaya. Uttar Pradesh (0.35), Maharashtra (0.47) and Delhi (0.55) are under-represented despite sizeable article counts (Figure 5). Assam alone holds 15.46% of located Indian biodiversity articles.

In the United States, 2,065 articles carried a state. Among states with at least 50 articles, Oregon (2.62), California (1.76), Colorado (1.55) and Florida (1.47) lead by lift, while Illinois (0.99) and Texas (0.9) sit at or below their weight in American news (Figure 6). The US ranking should be read with caution. An earlier ranking led by New Mexico, Texas and Mississippi disappeared once place tags derived from ordinary words were removed. Sample rows tagged Texas still include cities that are also personal or brand names and stories with no Texas subject, so for some rows the state tag follows a name or the publisher rather than the place.

India: state	Articles	Lift	United States: state	Articles	Lift
Assam	302	9.42	Oregon	54	2.62
Goa	64	5.95	California	362	1.76
Odisha	110	2.72	Colorado	62	1.55
Kerala	102	2.14	Florida	163	1.47
Uttarakhand	87	1.99	New York	283	1.18
Andhra Pradesh	56	1.26	Massachusetts	57	1.16
Lowest: Delhi	139	0.55	Lowest: Washington	61	1.13
Lowest: Maharashtra	146	0.47	Lowest: Illinois	54	0.99
Lowest: Uttar Pradesh	88	0.35	Lowest: Texas	110	0.9

Table 3. States with the highest and lowest lift in biodiversity coverage, January 2023 – July 2026, among states with at least 50 articles. Lift = the state's share of the country's located biodiversity articles ÷ its share of all located news from that country.

Biodiversity loss: states of India by lift

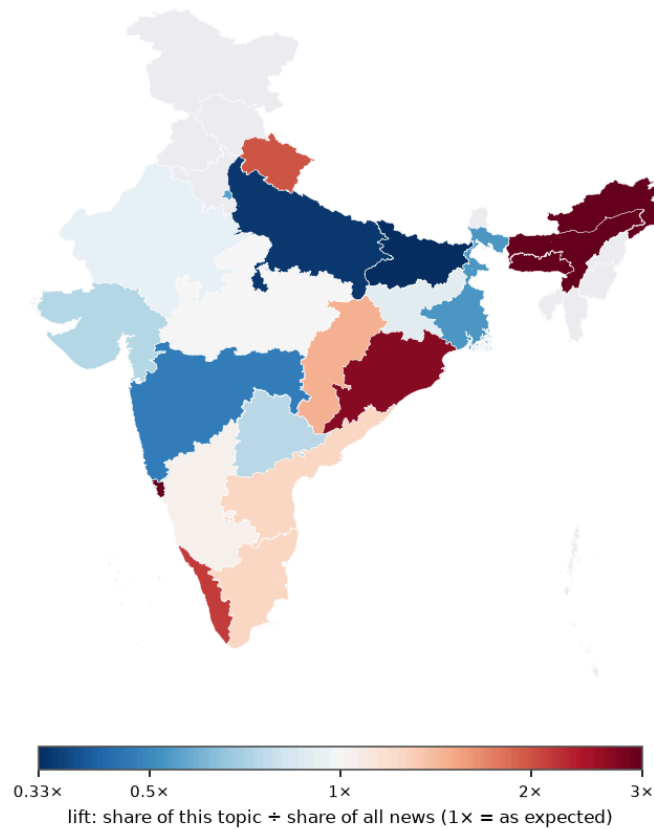


Figure 5. Lift of each Indian state's share of located biodiversity articles against its share of all located Indian news, January 2023 – July 2026. Official outline; Ladakh is drawn within Jammu and Kashmir in the boundary file used.

Biodiversity loss: states of United States by lift

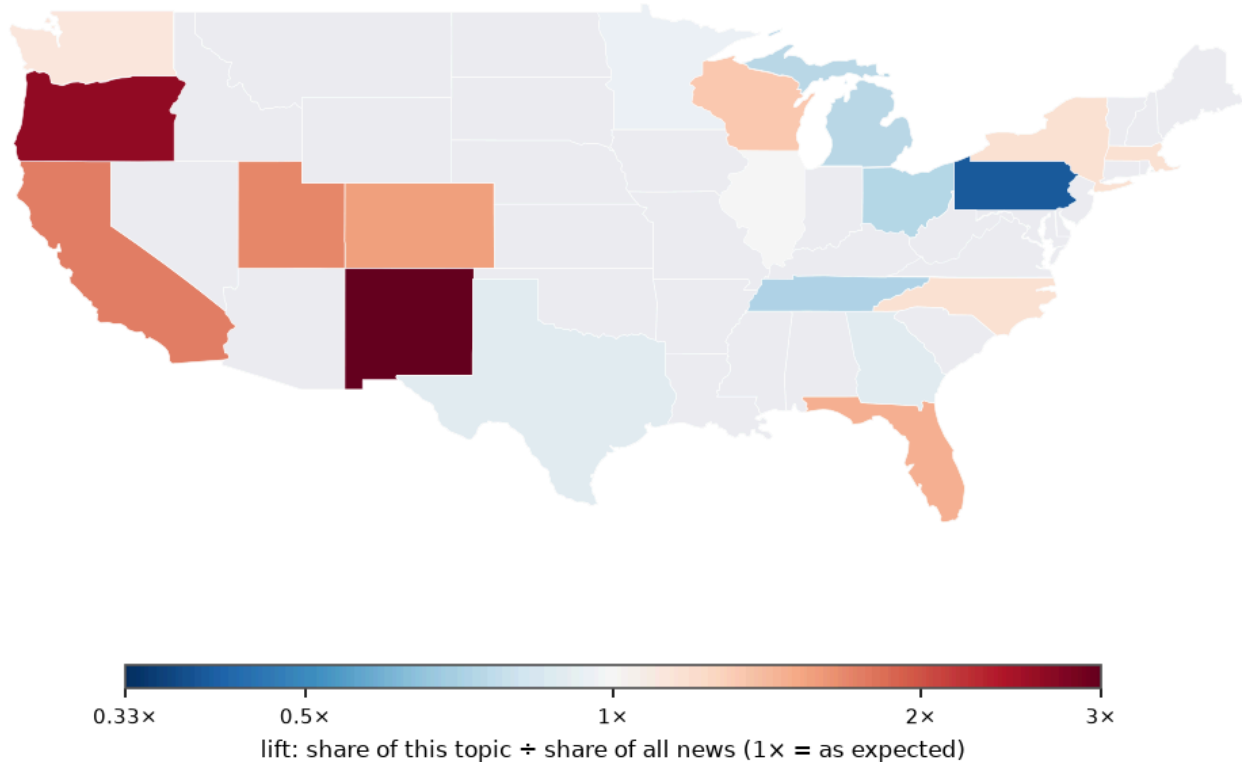


Figure 6. Lift of each US state's share of located biodiversity articles against its share of all located US news, January 2023 – July 2026.

Attention also moves between countries from year to year (Figure 7, right). Measured as biodiversity articles per 10,000 of each country's located news, the clearest shifts fall in the conference host countries. Colombia rose from 5.39 in 2023 to 76.95 in 2024, the year it hosted COP16, and stood at 24.08 in 2025. Canada reached 28.31 in 2022, the year Montreal hosted COP15, then fell from 9.19 in 2023 to 3.6 in 2025 (0.39 times). Among the other leading countries, Australia (6.18 to 8.42, 1.36 times) and Brazil (11.35 to 12.63, 1.11 times) rose between 2023 and 2025, while the United Kingdom (5.75 to 5.25, 0.91 times) fell. India, the United States and France were nearly flat (0.96 to 0.99 times). Outside the seven leading countries, China fell from 4.65 in 2023 to 2.46 in 2025, and Ecuador stays high but volatile on a small base (63.19 in 2023, 34.22 in 2025).

Tone varies by country against each country's own baseline. Biodiversity coverage is less negative than the country's news overall in India (17.3% negative against 41.2%), New Zealand (23.9% against 45.7%), France (30.8% against 47.6%) and the United Kingdom (21.4% against 36.9%). It is somewhat more negative in Switzerland (39.4% against 35.5%) and the United States (36.5% against 33.1%), and close to baseline in Australia (38.1% against 38.4%). Singapore is not compared: a large part of its sample rows are one recurring item tagged to Singapore with no Singapore subject, all negative in tone.

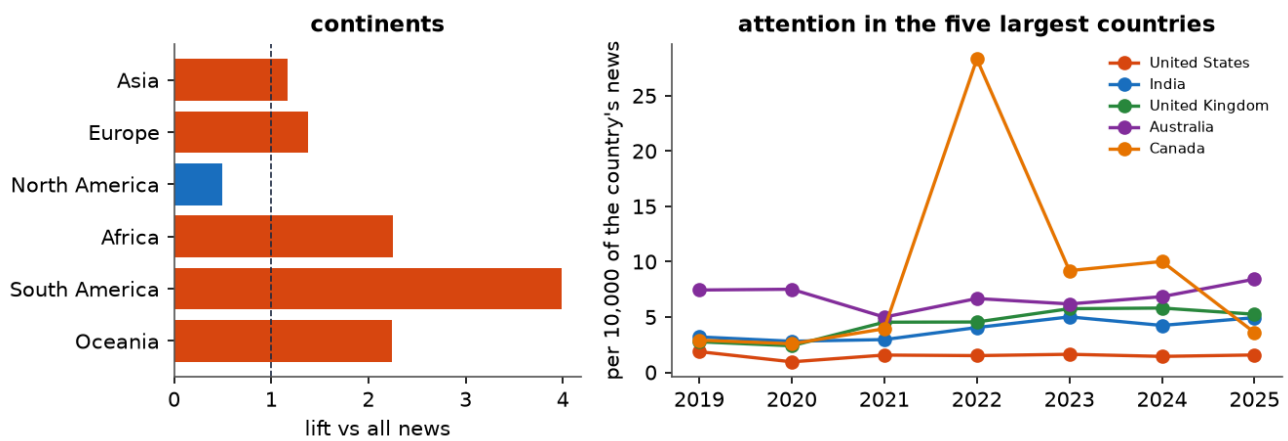


Figure 7. Left: lift by continent, January 2023 – July 2026. Right: biodiversity articles per 10,000 of each country's located news, 2019–2025, for the five countries with the most articles.

3.4 Tone, urgency and themes

Biodiversity coverage is more positive than news in general, and more often rated urgent (Figure 8). Among articles with a tone label, 74.1% are positive against 56.8% across the index (1.3 times), and 23.1% are negative against 33.6% (0.69 times). Much of the coverage reports conservation projects, new protected areas, species surveys and funding, which read as positive even when the underlying trend is decline. A machine rating of editorial priority puts 67.9% of biodiversity articles at critical level (7 or higher), against 42.6% of all news (1.59 times).

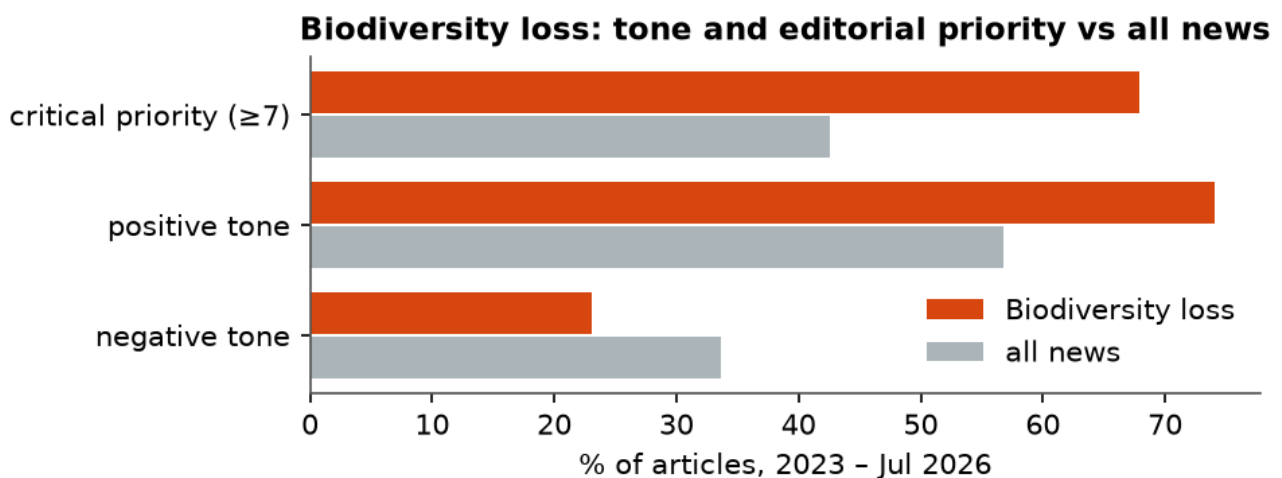


Figure 8. Tone and the share rated critical priority, biodiversity articles vs all news, 2023 – Jul 2026.

Themes show what the stories are about (Table 4). Biodiversity conservation efforts are the most common theme (35.46% of themed articles), followed by endangered-species protection (25.32%) and wildlife habitat preservation (18.69%). Deforestation prevention appears in 15.75% and ocean conservation in 12.25%. The most specific themes, by lift, are environmental policy frameworks and conservation strategies.

Theme	Articles	Share %	Lift
biodiversity conservation efforts	11,719	35.46	171.21
endangered species protection	8,367	25.32	201.46
wildlife habitat preservation	6,178	18.69	169.59
deforestation prevention campaigns	5,206	15.75	121.62
ocean conservation and marine protection	4,048	12.25	76.05
conservation genetics and biodiversity preservation	2,668	8.07	108.72
biodiversity conservation strategies	1,131	3.42	278.62
environmental policy and governance frameworks	373	1.13	413.42

Table 4. Most common and most specific themes in biodiversity coverage, January 2023 – July 2026, with lift against all themed news.

The organisations named most often include the International Union for Conservation of Nature (541 articles), UNESCO (486), the United Nations Environment Programme (337), the IUCN Red List (333) and the United States Fish and Wildlife Service (305). Generic labels ("esg", "supply chain") and a tag carried by journal abstracts also rank high, so the list reflects labelling as much as actors.

3.5 Research attention and invention

Research on biodiversity grew faster than the scientific literature. Papers with biodiversity terms in the title rose from 4.19 per 10,000 papers in 2015 to 6.94 in 2025, a 1.66-fold increase in share, while the total literature in the corpus grew by a factor of 1.0 over the same years. Between 2015 and 2025, 35,332 such papers were published (60,579 since 2000). The most-cited include work on the impact of biodiversity loss on humanity, indicators of global decline, land-use effects and extinction risk from climate change [1–6].

News attention does not track research attention (Figure 9). Research share rose steeply after 2020, with the largest annual gains in 2021 and 2025. News share fell in 2020, recovered by 2022 and has moved with the conference calendar since.

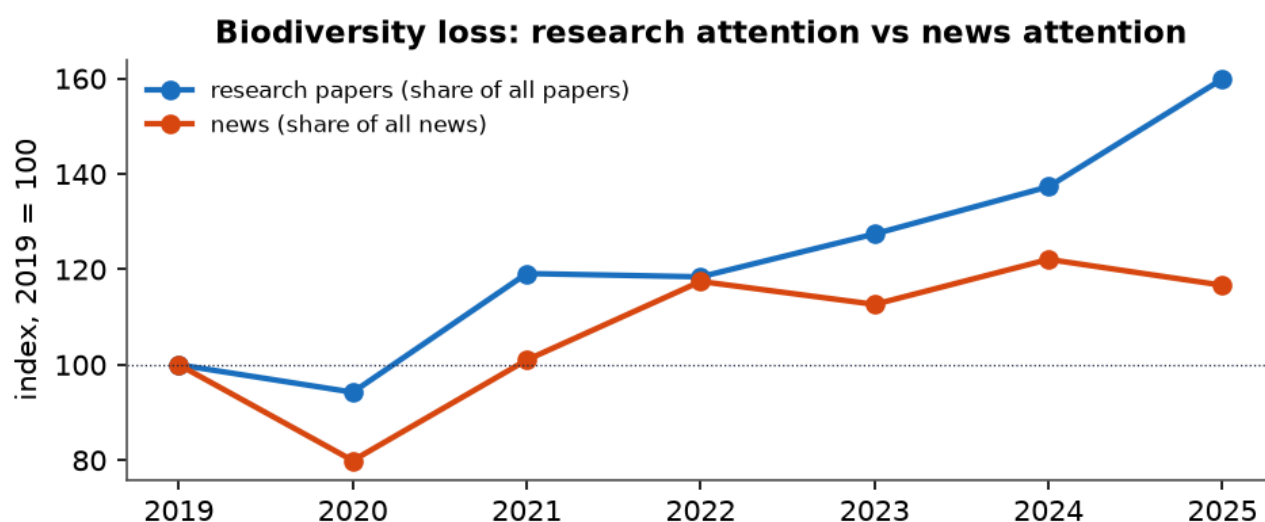


Figure 9. Research papers with biodiversity terms in the title (share of all papers) and biodiversity news (share of all news), each indexed to 2019 = 100.

Patenting rose fastest, from a low base. 62 patent families were published in 2015, 116 in 2019 and 564 in 2020 (4.86 times the 2019 count), and 1,280 in 2024, a 20.65-fold rise over 2015. China's office holds 97.7% of families from 2015 to 2024 (Figure 10). The leading technology classes are climate-change adaptation technologies (Y02A, 566 families), water

treatment (C02F, 537) and horticulture and forestry (A01G, 342). These are mostly site-level ecological-restoration methods rather than inventions about species.

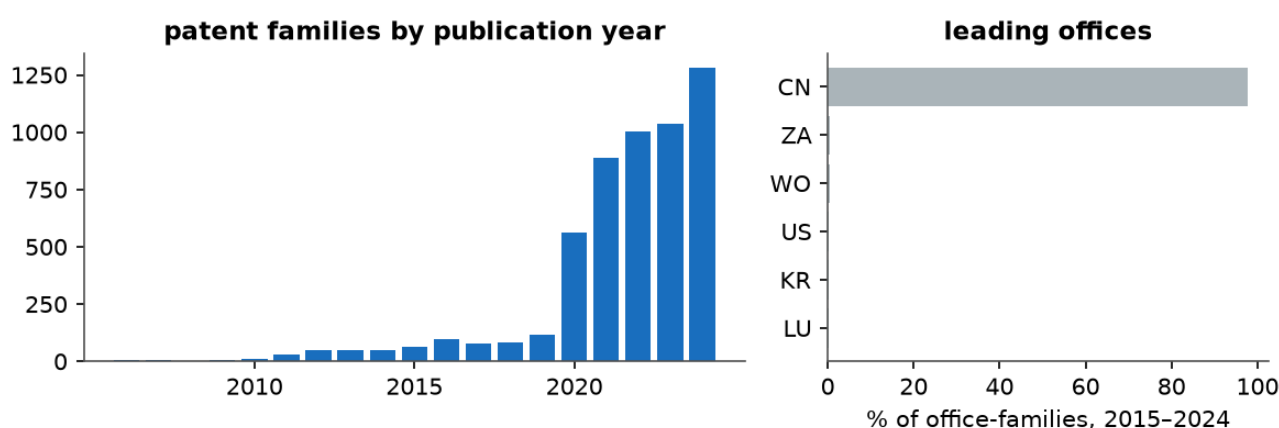


Figure 10. Biodiversity and ecological-restoration patent families by publication year (left) and the leading filing offices, 2015–2024 (right).

4. Discussion

Three points matter for anyone who uses news as a record of biodiversity loss. First, coverage measures attention, not the state of nature. The two largest monthly peaks fall in the months of the two biodiversity conferences, and the host countries' own coverage was highest in their host years. This is a match of timing; the data do not show which stories drove the peaks. Second, raw shares mislead. The United States leads in raw terms but is under-represented. The places most over-represented relative to their share of all news (highest lift) are megadiverse countries such as Ecuador, Colombia and Indonesia, and, within India, Assam and the coastal states of Goa and Odisha. Third, the tone of coverage is mostly positive. Stories report projects, surveys and pledges more than losses, so the news may under-state the decline that the research literature describes.

Research, invention and news run on different clocks. Research share grows steadily and sped up after 2020. Patent filings grew fastest but are concentrated in one office and in restoration engineering. News follows the conferences. The dataset lets researchers link the three, for example to test whether conference months are followed by research or policy activity in the host country.

5. Limitations

- **Index availability.** 92.88% of the index was readable at build time, so counts are lower bounds. Shares and lifts are less affected, because the missing part is spread across topics.
- **Coverage after May 2026.** The index thins after May 2026, so 2026 (January–July) is partial and is excluded from year comparisons.
- **Matching.** Matching uses the article opening. Articles that mention biodiversity only later are missed, and 10% of matches only mention it in passing. Fewer than half of matches (42.5%) have biodiversity loss or conservation as the main subject.
- **Journal abstracts.** The index carries journal abstracts as well as journalism. They are on topic and are kept, but they are dated to the first day of a month and carry few locations.
- **Machine labels.** Location, tone, priority and themes are machine-labelled. The city field is noisy and is not analysed. The US state field appears to follow outlets or

personal names for some rows.

- **Ordinary-word place tags.** Place tags derived from ordinary words ("Congress", "Earth", "Winter") were treated as unlocated in every location field, which removed 15.3% of city-tagged articles and shrank the located base for countries and states.
- **Outlet mix.** The index over-represents English-language outlets. This shapes geography.
- **Research and patent counts.** These match titles only. Patent office shares reflect filing practice; narrow utility filings are numerous in China.

Data availability

The dataset (article sample, monthly and country tables, research and patent tables, all metrics) is released under CC BY-NC 4.0 with this paper. The sample holds 20,163 of 80,373 matched articles to 31 July 2026. Full article text, headlines, publishers, later articles and other topics are served by the Prism News API: <https://github.com/fliarbi/prism-news-api> (base URL <https://radar-api.fliarbi.com/news>). A worked query: `prism-news trends "biodiversity" --since 2019-01-01 --until 2026-07-31 --granularity monthly`.

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