
STATUTORY INSTRUMENTS

2023 No. 91

**The Environmental Targets (Biodiversity)
(England) Regulations 2023**

PART 4

Targets relating to the abundance of species

CHAPTER 1

2030 Species abundance target

Measurement of 2030 species abundance target

12.—(1) The 2030 species abundance target is to be measured by calculating the difference between the overall relative species abundance index for the years 2029 and 2030 in order to establish whether the overall relative species abundance index for the year 2030 is the same as, or higher than, the overall relative species abundance index for the year 2029.

(2) The overall relative species abundance index for a year is derived from the calculation of the geometric mean of the relative species abundance indices for every species listed in Schedule 2 for that year, which is smoothed to reduce the impact of between-year fluctuations in data collected over time.

(3) The same methodology must be used to determine the overall relative species abundance index for each year.

(4) In this regulation—

“baseline index” means the index value of 100 for any species in the first year that it is included in that relative species abundance index;

“geometric mean” means a mathematical process where a series of numbers are multiplied together and then the “n”th root of the product is calculated, where “n” is equal to the length of the series;

“relative species abundance index” for a species means an index which—

- (a) is an annual measure;
- (b) provides a standardised measure of abundance of that species across England; and
- (c) is expressed as a value relative to 100, where—
 - (i) 100 is the baseline index for each species in the first year that it is measured in that relative species abundance index; and
 - (ii) 0 means no sightings of that species were recorded in a year⁽¹⁾.

⁽¹⁾ If the value of the relative species abundance index is 50, this means that the abundance of that species has decreased by 50% compared to the first year of measurement. If the value of the relative species abundance index is 200, this means that the abundance of that species has doubled compared to the first year of measurement.

(5) Where a species listed in Schedule 2 appears in more than one dataset that meets the criteria referred to in sub-paragraphs (a) and (b) of the definition of “relative species abundance index” in paragraph (4), the relative species abundance index for that species is calculated—

- (a) in the case of a species listed in Schedule 2 that is a plant, from the average value of species abundance for that species derived from all the species abundance datasets in which it appears;
- (b) in the case of a species listed in Schedule 2 that is an animal, from the species abundance dataset that the Secretary of State considers best provides—
 - (i) an annual measure; and
 - (ii) a standardised measure of abundance of that species with the widest coverage across England.

(6) For the purposes of paragraph (4), an index is only to be used if it is calculated using the same methodology each year.