

Thematic accounts “Biodiversity” in Bulgaria



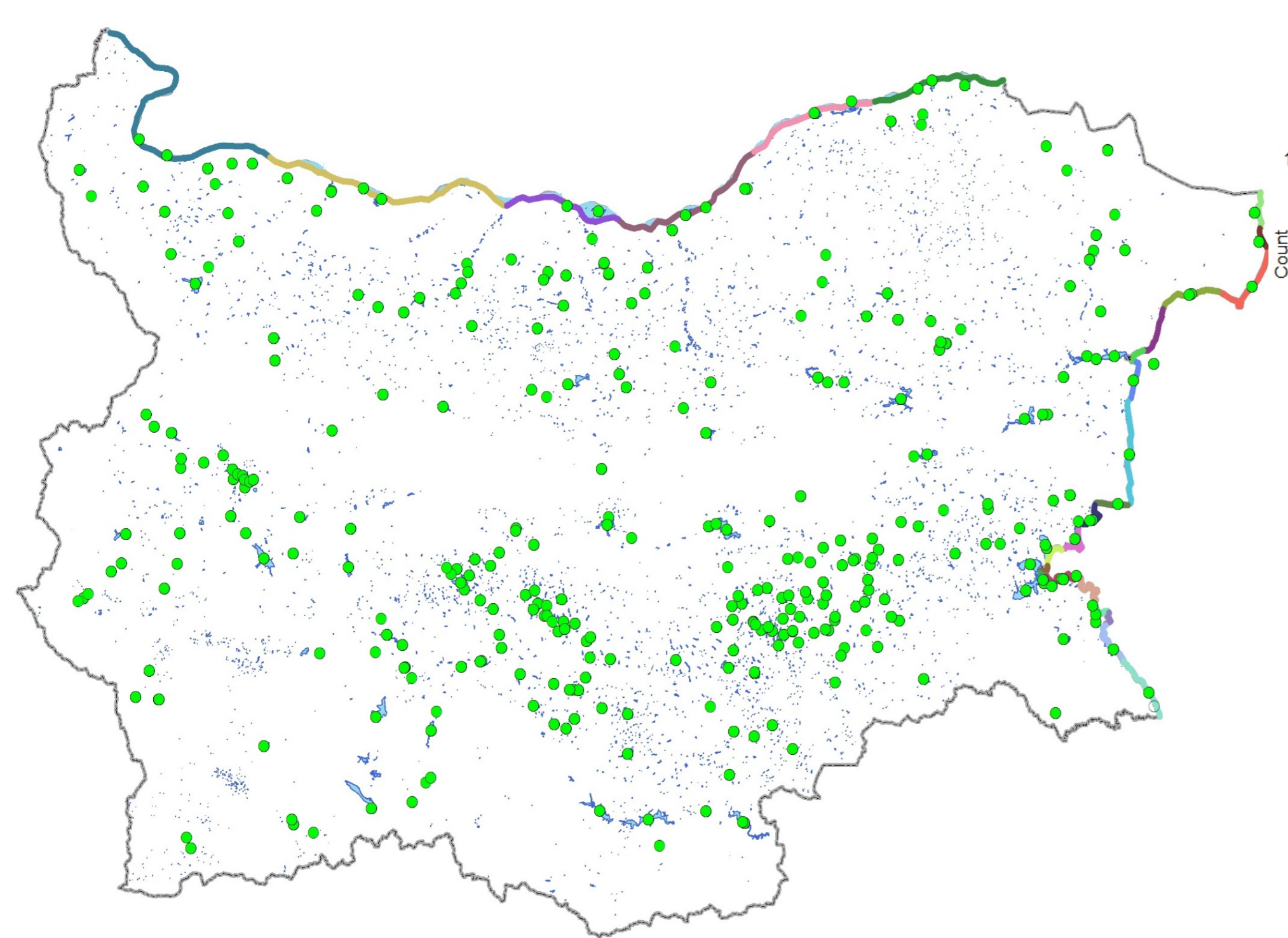
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Introduction

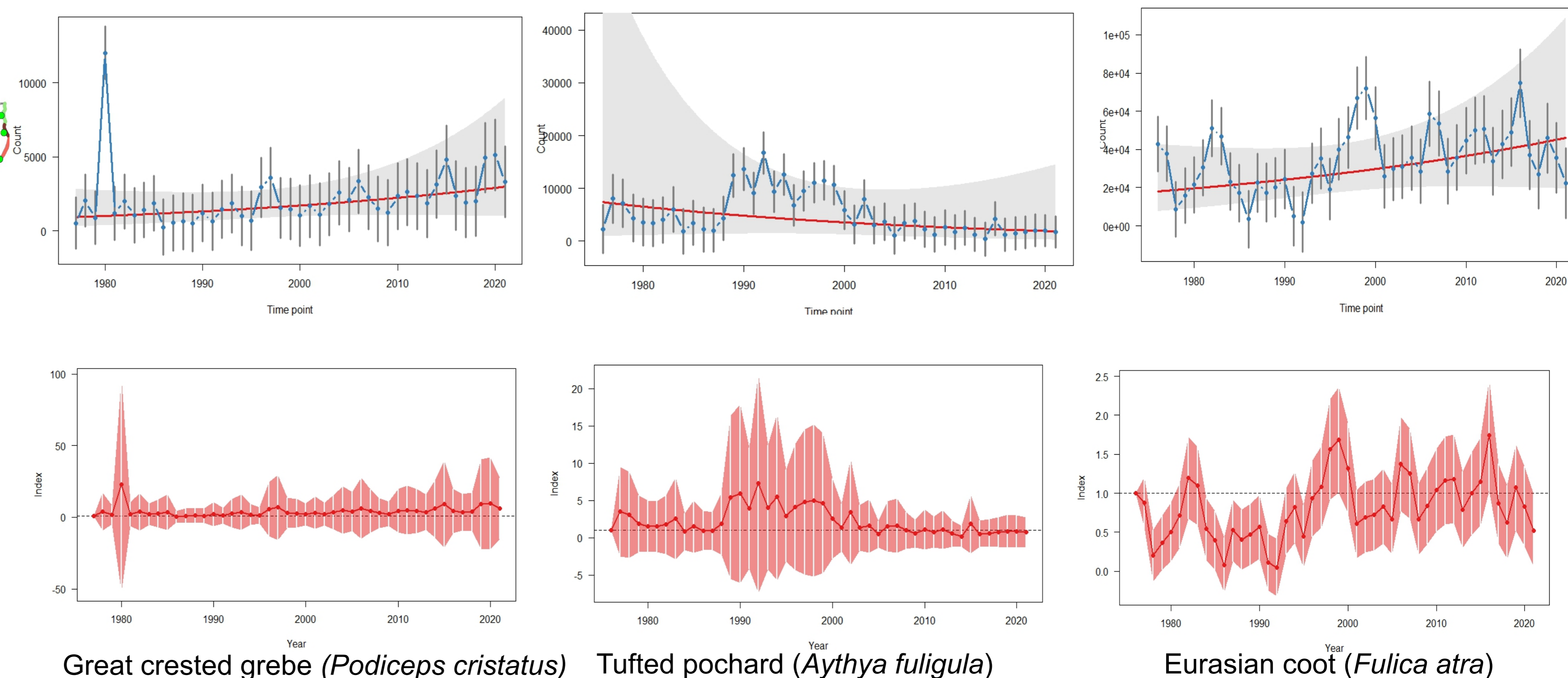
Within the framework of the "Biodiversity" thematic account, the data from two monitoring schemes, part of the National Biodiversity Monitoring System – “Mid-winter census of wintering waterbirds” and Breeding birds in 2020 were evaluated.

Distribution maps have been prepared for all established wintering species of waterfowl, the long-term trend and direction of the wintering populations for the period 1976-2021 have been estimated.

In 2020, a survey of nesting birds was conducted in sampling areas of the 10x10 sq. km ETRS grids. For all 164 squares, species diversity was estimated by summarizing available primary data. This data can be used to assess the species diversity through the years, on national and ecosystem level.



Mid-winter waterbirds counting - monitoring sites 1976 - 2021



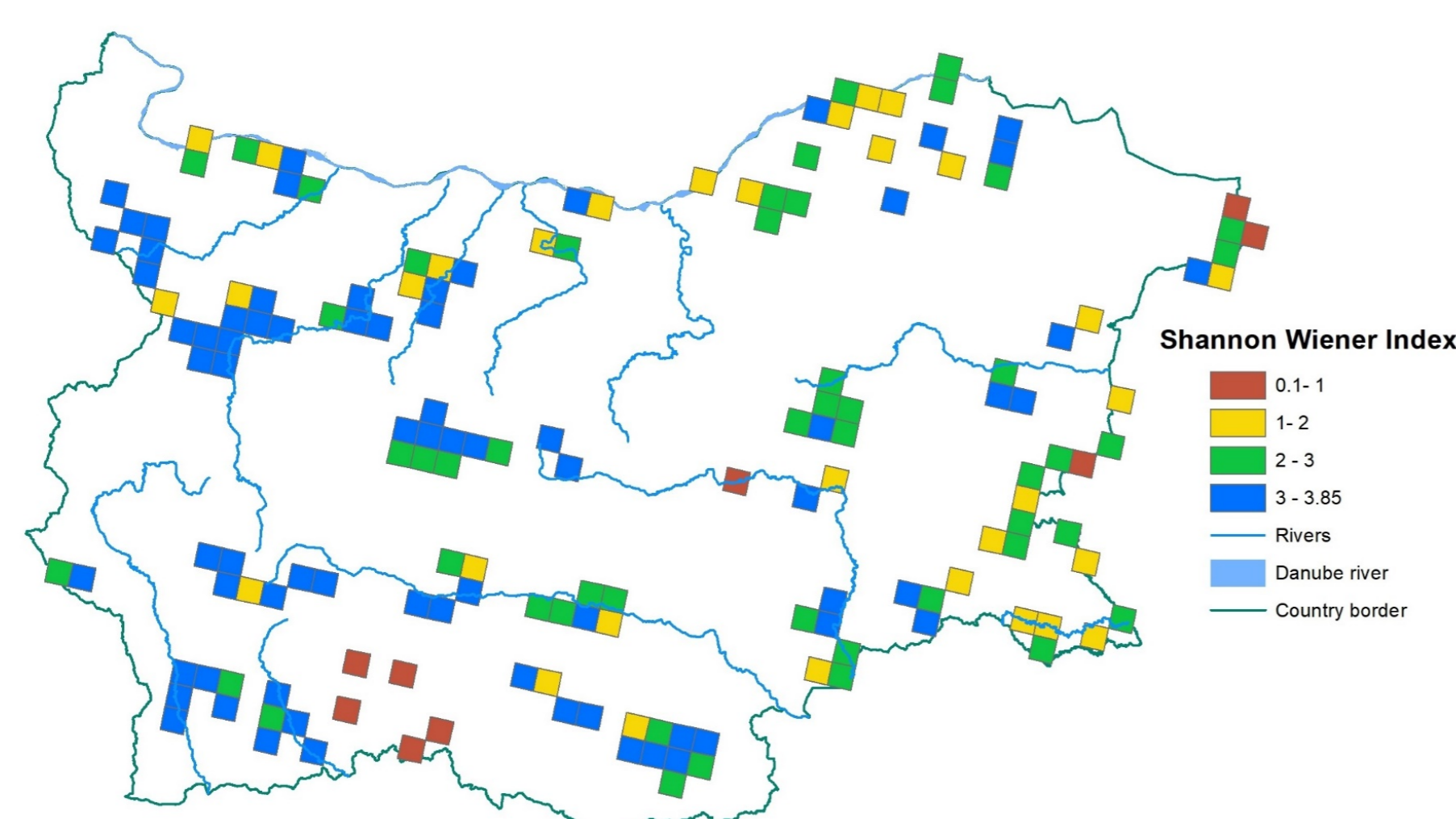
Methods

- Data from Mid-winter waterbirds census, covering period from 1976 – 2021.
- Field observation and mapping through mobile applications and GIS software.
- Trend analyses – rTRIM package and calculations of TRIM Index.

Results and Analysis

- At least 82 wintering waterbirds in the period 1976- 2021.
- More than 50 % of the wintering waterbirds species have stable or increasing trends - as Great crested grebe and Eurasian coot.
- On the other hand - most of the threatened species have declining winter populations in Bulgaria as: Tufted pochard.

Breeding birds: Shannon - Wiener Diversity Index was estimated for 2020 breeding season.



Results and Analysis

- Most of the sampling plots ETRS 10x10 sq.km are with high diversity of breeding birds species.
- The highest diversity of breeding birds can be seen in water ecosystems and forestry area in most of the mountains.

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