

## Description of the visualisation of some parameters of the habitat environment

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### Source data

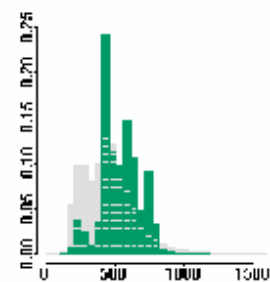
Layers of **altitude**[m], **average annual temperature** [°C], **average total annual rainfall** [mm], **map of the potential natural vegetation** according to associated units [19 categories, see Neuhäuselová 1998] and map of **phytogeographic division** [6 regions, if need districts] were transferred to the raster with square size of 100m, which is adequate to the maximum detail of the available layers respectively except of altitude is the detail of the layers much smaller [of an order of 1km].

To the same raster of square size 100m the vector **layer of habitat survey** was transferred, whereby arose 161 raster squares (according to of the number of habitats) of 5m and values 0 or 1. These single rasters were aggregated to 161 rasters with squares of 100m, when the value in the raster cell is integral from 0 to 400 - this means the quotient of the cell coated with vector of the habitat with the accuracy of +12,5 m<sup>2</sup>.

The ratios of the areas of habitats given for single histogram intervals respectively the percentage displayed by the doughnut charts go always from these aggregated rasters.

### Histograms of the altitude, average annual temperature and average total annual rainfall

(Pic. 1) includes always two histograms, grey one and colored one (according to formation group of the habitat). The **grey – background** histogram shows the distribution of variables of the environment on the whole territory of CR, the **colored – habitat** – histogram shows the variables of the environment in raster cells with the occurrence in the habitat (quotient of the habitat in the raster cell is taken into account). On x-axis is the variable of the environment in appropriate units, on y-axis is the relative scale. Thanks to this we can compare the shape of the histograms, however not the values of the frequencies! The overlap of the histograms is represented by the dashed area, to show the course of a histogram.



Pic. 1. Example of an altitude histogram of habitat K1

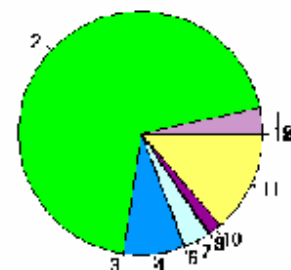
### Doughnut and sector charts of categorial data

Diagrams for categories of the **map of the potential natural vegetation CR** (Pic. 2) may contain 19 different categories of vegetation of associated vegetative units, how it is shown in Neuhäuselová 1998 in the text part. Numbers are running according to the make-up of the original publication and the colours were chosen to roughly represent the vegetation types

As we are used to them from the map of potential natural vegetation.

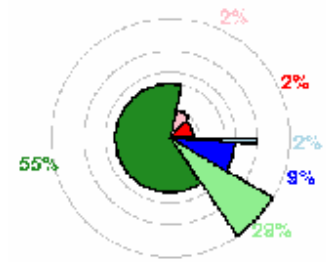
Next to every diagram is shown an overview of the percentual ratio of the vegetation categories, as far as they were bigger than one percentage point. Vegetation types with lower representation are only mentioned.

The list of the units: 1 alluvial forests; 2 Oak-hornbeam forests; 3 Ravine and slope forests; 4 Herb-rich beech forests; 5 Limestone beech forests; 6 Herb-rich fir forests; 7 Acidophilous beech forests; 8 Peri-Alpidic basiphilous thermophilous oak forests; 9 Subcontinental thermophilous oak forests; 10 Subacidophilous Central European thermophilous oak forests; 11 acidophilous *Luzula*, birch and pine oak forests; 12 basiphilous Peri-alpidic pine forests; 13 acidophilous pine forests; 14 climax and bog spruce forests; 15 montane to supramontane Athyrium spruce forests; 16 subalpine and alpine vegetation; 17 peat-bogs; 18 succession stages on anthropogenic sites; 19 water surface of Nové Mlýny a Nechanice.



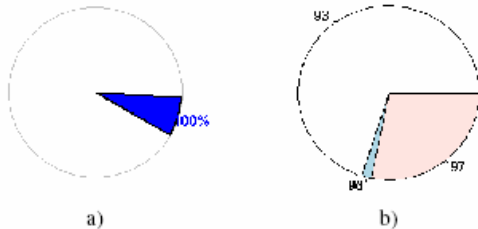
Pic. 2. Example of a doughnut diagram of the map of the potential natural vegetation of habitat L3.1

Diagrams for **phytogeographic regions** (Pic. 3) are sector charts diagram, where the angle of the sector is directly proportional to the area of the phytogeographic regions in the context of CR. Size of the sector, then its surface (not its radius) is directly proportional to the representation of the habitat in a given phytogeographic regions. The representation in percentage is shown in the periphery of the diagram. Colors of the sectors and of the text do correspond to following regions: dark green– Czech mezophyticum, light green – Carpathian mezophyticum, red – Czech thermophyticum, pink – panonian termophyticum, dark blue -Czech oreophyticum, drab blue – Carpathian oreofytikum.



Pic. 3. Example of a sector chart of phytogeographic regions for habitat L5.1

In the case, that the habitat was recorded only in one phytogeographic region (Pic. 4a) was instead of the regions used a doughnut chart of **phytogeographic districts** (Pic. 4b). This is related especially to the habitats of the category A, this means alpine: A1.1, A1.2, A2.1, A2.2, A3, A4.1, A5, A6A, A6B, A7, A8.1 and also habitats L6.3, M1.8, M2.4, V1E and V6. Numeral labeling of districts is equal to the legend of map of phytogeographic districts. Following districts are displayed in the diagrams:



Pic.4. a) Sector chart of phytogeographic regions for habitat A1.2, that is in the publication replaced by a doughnut chart

- 11 – Střední polabí,
- 17 – Mikulovská pahorkatina,
- 18 – Jihomoravský úval,
- 20 – Jihomoravská pahorkatina,
- 45 – Verneřické středohoří,
- 67 – Českomoravská vrchovina,
- 88 – Šumava,
- 92 – Jizerské hory,
- 93 – Krkonoše,
- 96 – Králický Sněžník,
- 97 – Hrubý Jeseník.

To the diagram is connected a list of districts with a percentual representation of habitats.