First take on soil function evaluation of Ueberetsch

fabian gruber January 31, 2018

Soil functions

1 = high potential, 5 = low potential

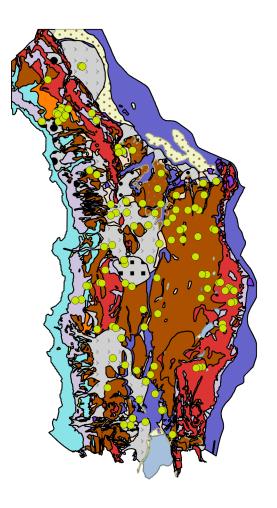
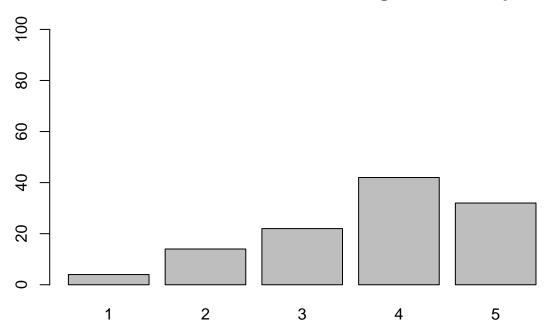


Figure 1: Overview of points in the study area.

Habitat for animals and plants

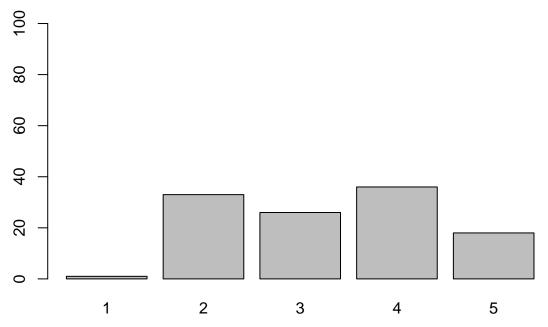
 $1\mathrm{a}.2.1$ - Potential as a habitat for drought-tolerant species:

1a.2.1 - Potential as a habitat for drought-tolerant species



1a.2.2 - Potential as a habitat for moisture-tolerant species

1a.2.2 - Potential as a habitat for moisture-tolerant species



1a.3 - Habitat for soil organisms

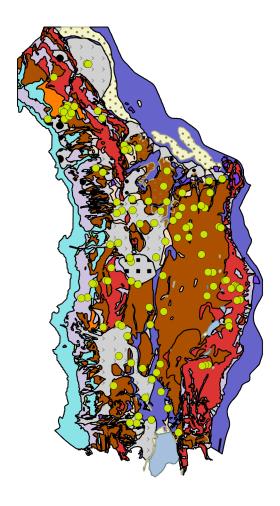
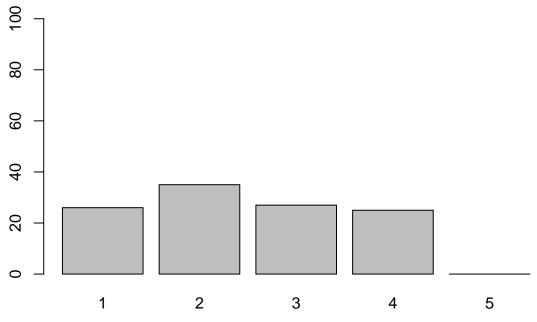


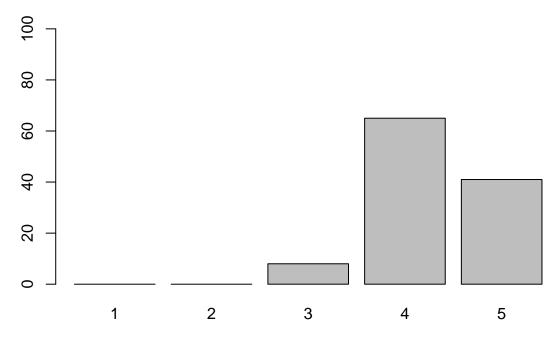
Figure 2: Overview of points in the study area.

1a.3 - Habitat for soil organisms



1a.4 - Habitat for crops

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Infiltration and drainage regulation

 $1\mathrm{c.}1$ - Precipitation retention capacity

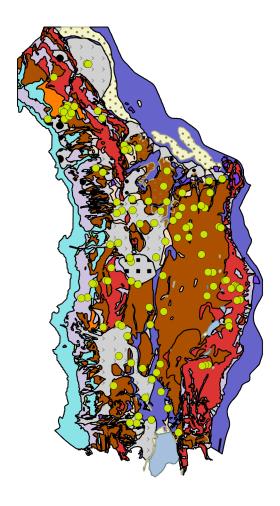


Figure 3: Overview of points in the study area.

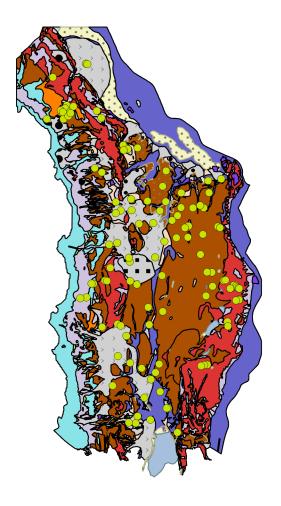
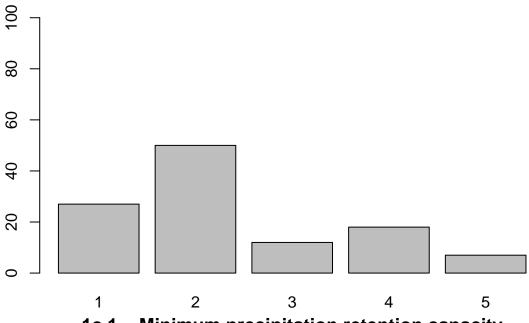
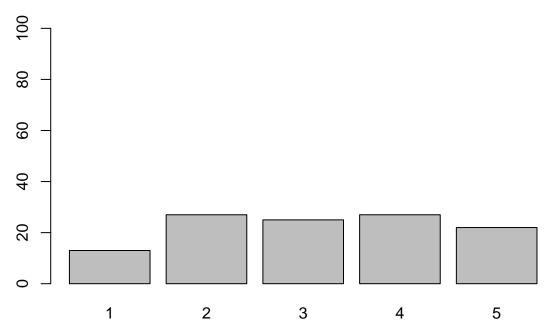


Figure 4: Overview of points in the study area.

1c.1 – Average precipitation retention capacity

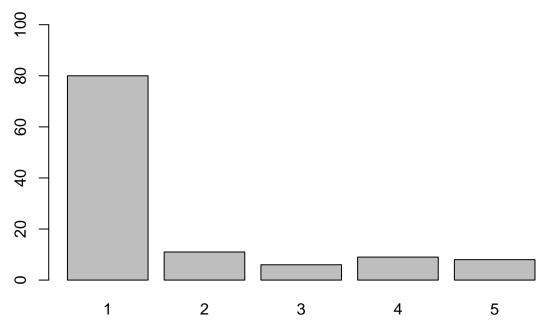


1c.1 – Minimum precipitation retention capacity



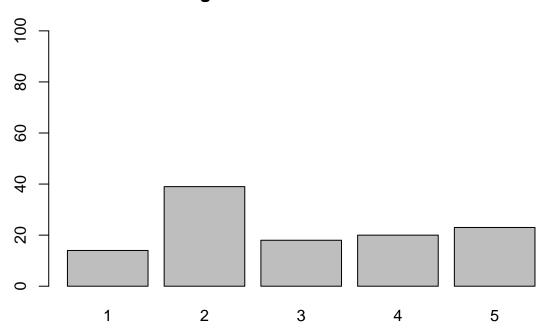
1c.2 - Retention capacity for heavy precipitation events

1c.2 - Retention capacity for heavy precipitation events



1c.3 - groundwater reformation rate

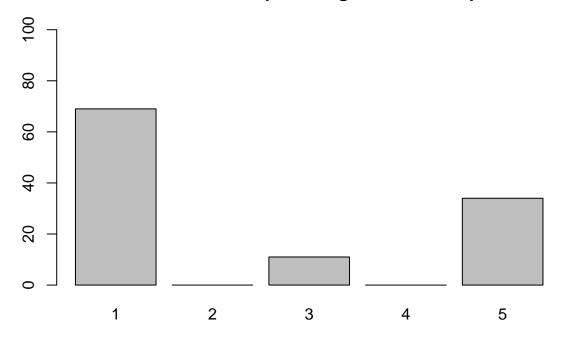
1c.3 - groundwater reformation rate



Natural soil fertility

 $1\mathrm{c.4}$ - Potential for providing nutrients for plants

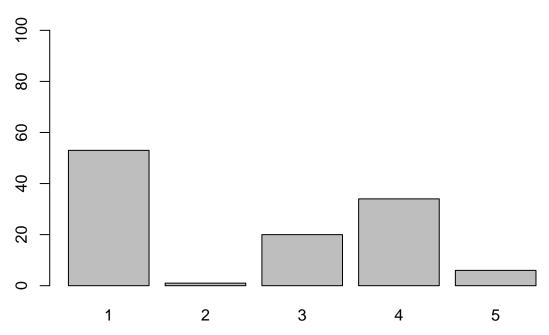
1c.4 - Potential for providing nutrients for plants



Filter and buffer for pollutants

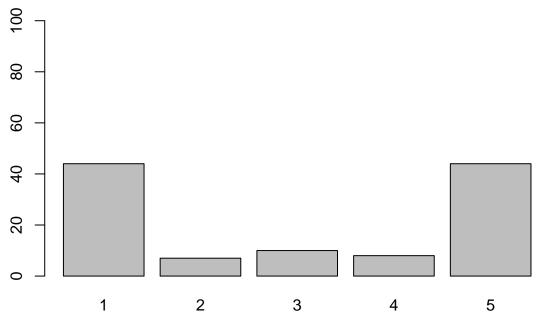
 $1\mathrm{c.5}$ - Potential as a CO2 sink

1c.5 - Potential as a CO2 sink



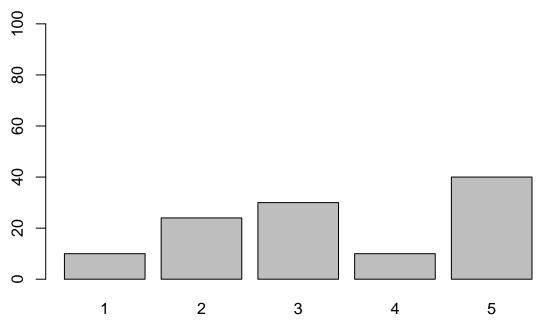
1d.1 - Potential for retention of heavy metals

1d.1 - Potential for retention of heavy metals



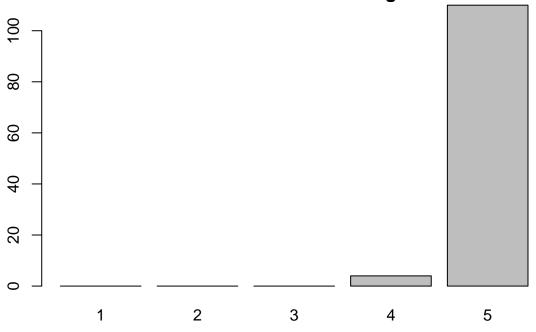
1d.2 - Potential for transforming organic contaminants

1d.2 - Potential for transforming organic contaminants



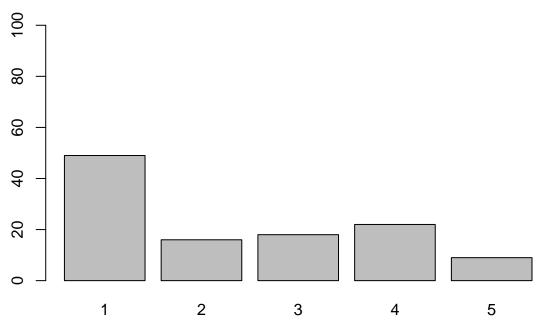
 $1\mathrm{d}.3$ - Potential as filter and buffer for organic contaminants

1d.3 - Potential as filter and buffer for organic contaminants



1d.4 - Potential for retention of water-soluble contaminants

1d.4 - Potential for retention of water-soluble contaminants



1d.5 - Potential as buffer for acidic contaminants



