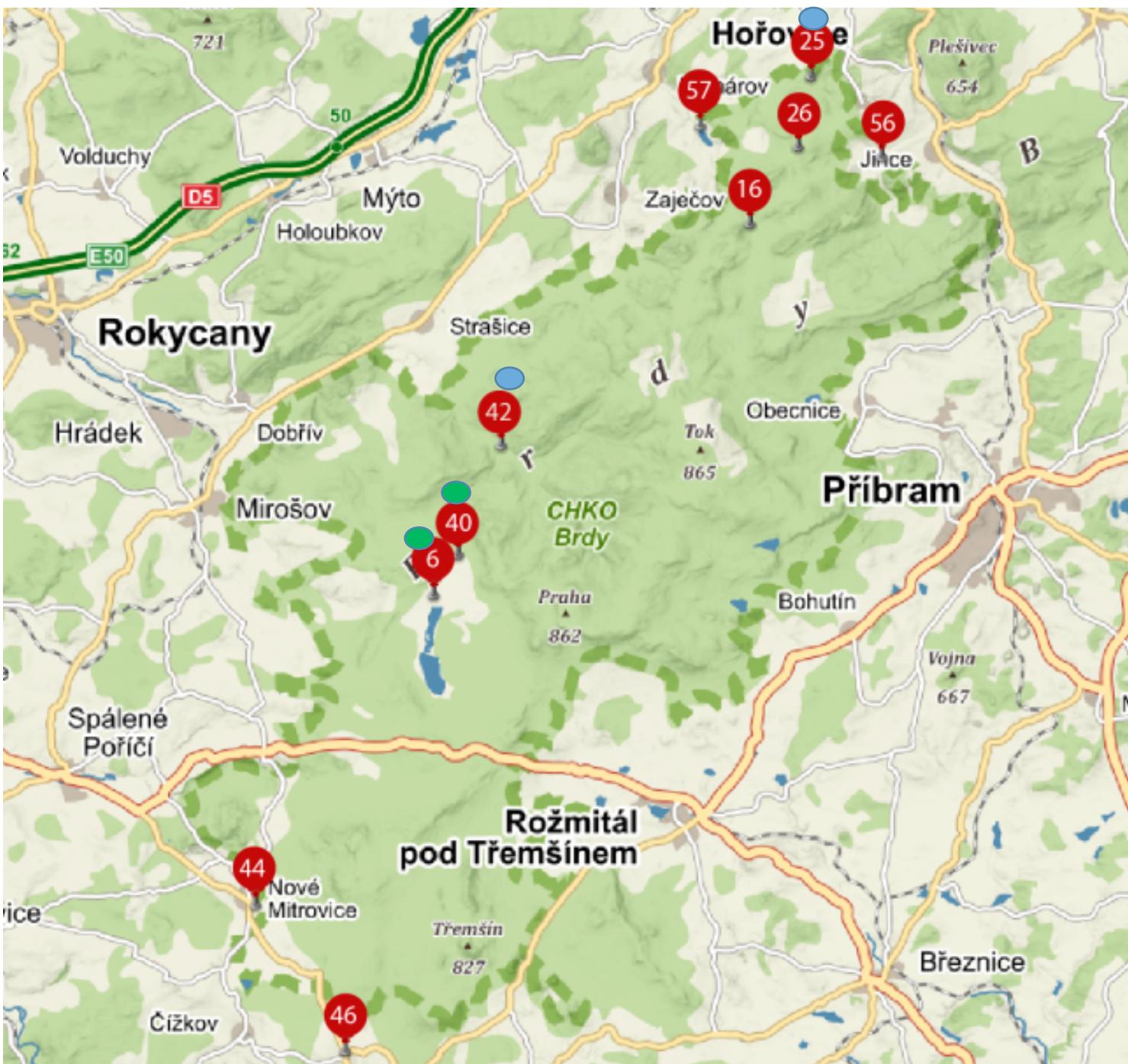


Diversity Gradient of Algae in Brdy

26.6. 2016

Pája, Péta, Roxy, Vojta



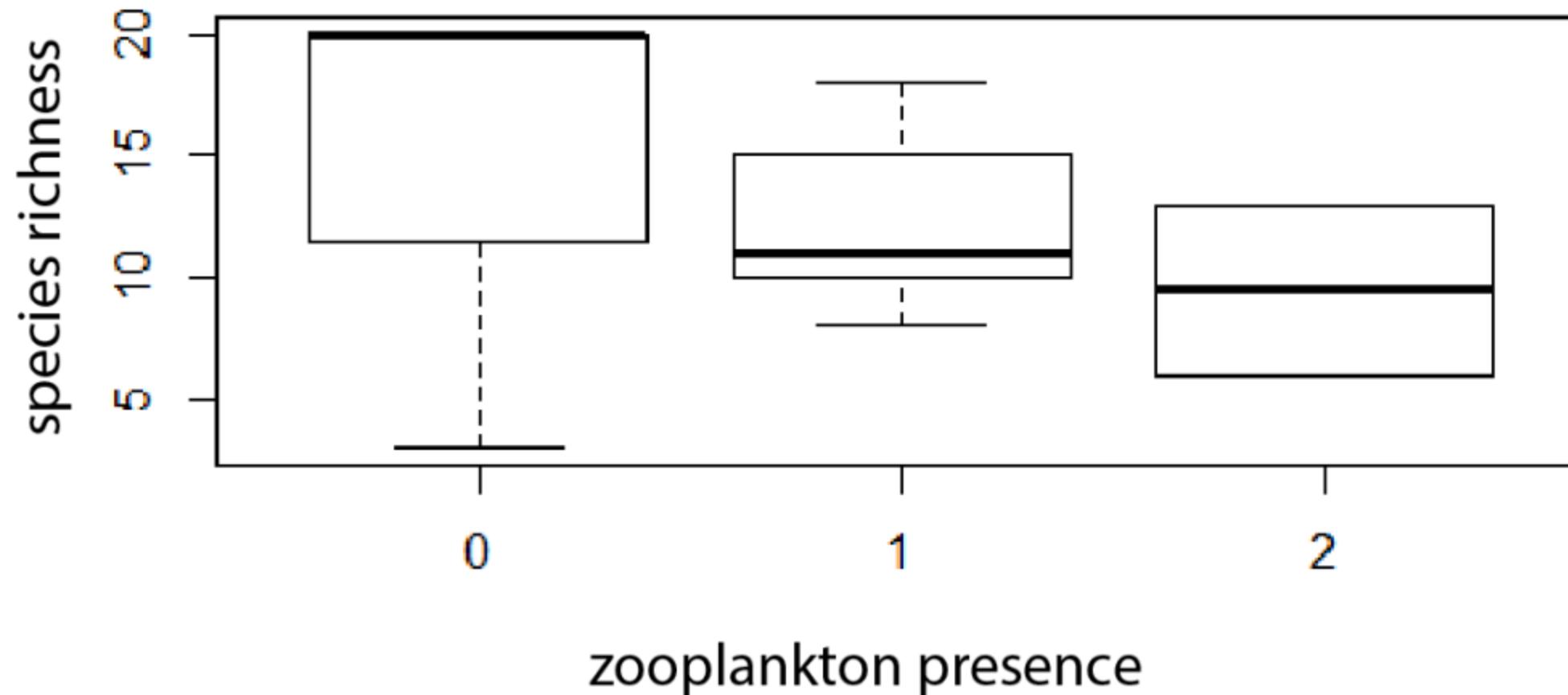
Functional diversity

shape_complexity	shape	life_form	spines	flagellate	size
Min. :1.000	oval :35	cenobium : 2	no :52	no :49	Min. : 1.00
1st Qu.:1.000	filamentous: 9	colony :23	yes:10	yes:13	1st Qu.: 10.25
Median :1.000	circular : 3	filamentous:11			Median : 25.75
Mean :1.516	curvy : 3	single :25			Mean : 42.13
3rd Qu.:2.000	flat : 3	single : 1			3rd Qu.: 59.00
Max. :3.000	globular : 3				Max. :390.00

Functional diversity

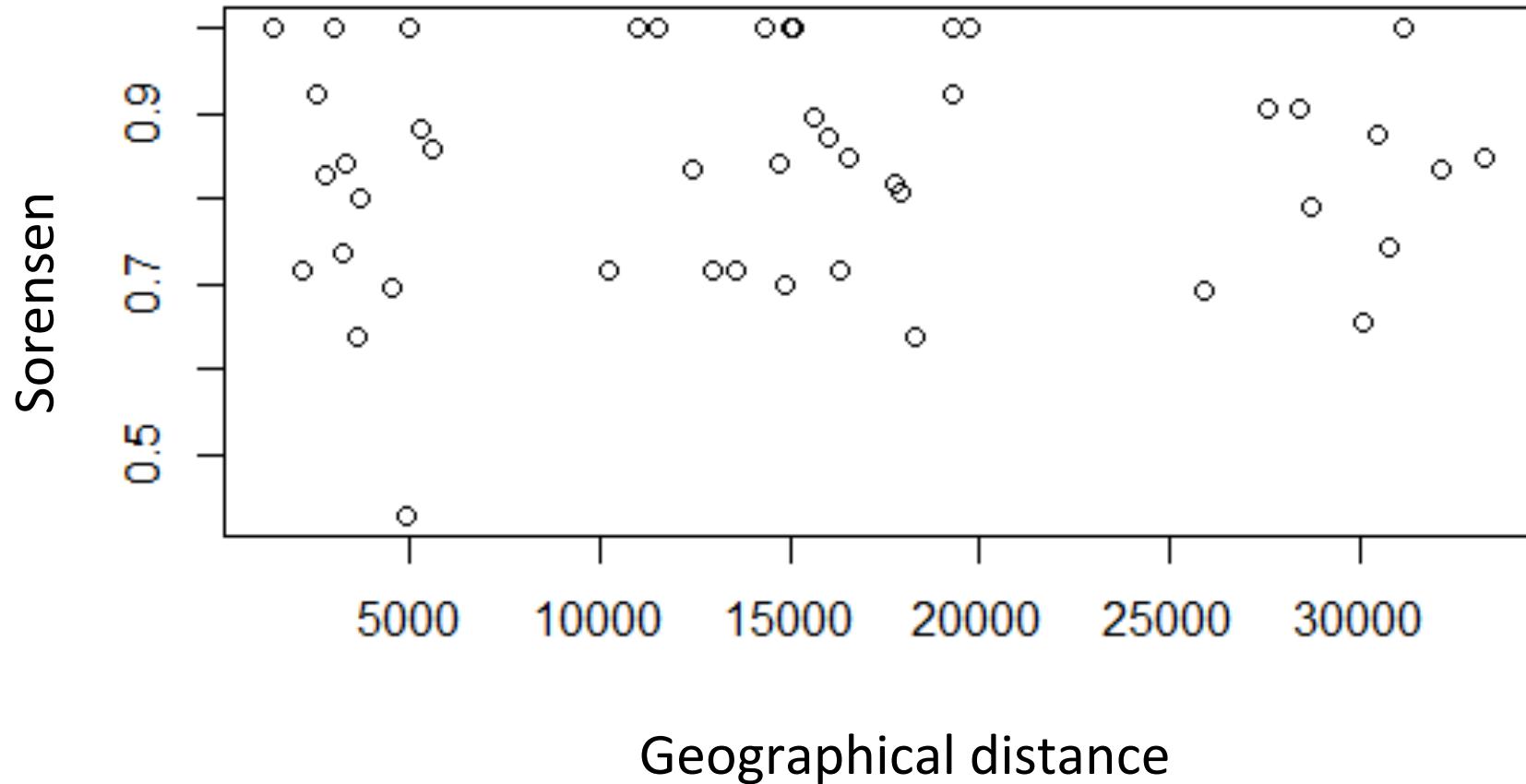


Alpha diversity



Kruskal-Wallis test
p-value = 0.6226

Beta diversity



Mantel statistic r: 0.05166
Significance: 0.344

Thank you for everything ☺

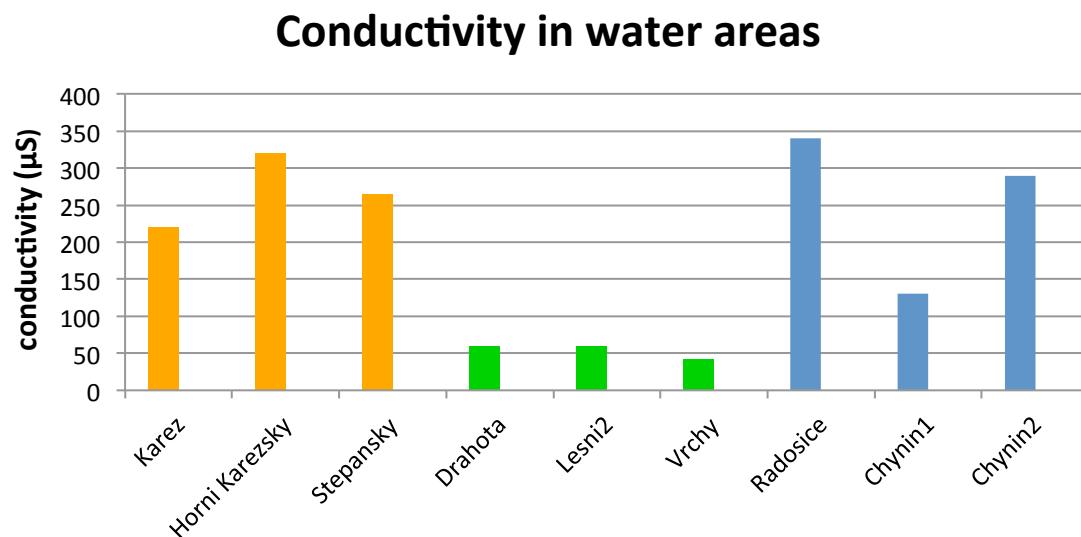
A wide-angle photograph of a river scene. In the foreground, the dark green water of the Vltava River flows from the background towards the viewer. Several clusters of small, light-colored fish are visible near the surface. The middle ground shows a lush, green forested bank on both sides of the river. The background features a clear, pale blue sky. In the upper right corner, a large, leafy branch of an oak tree hangs over the frame.

Phytoplankton Biodiversity in Brdy Area

Verča, Míša, Katka

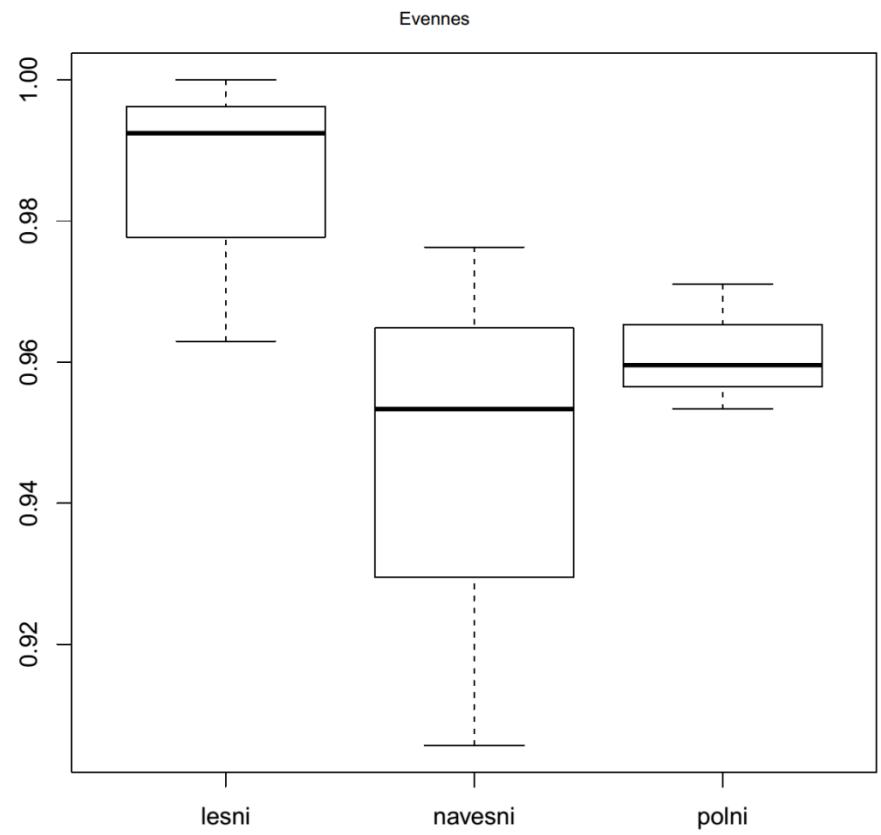
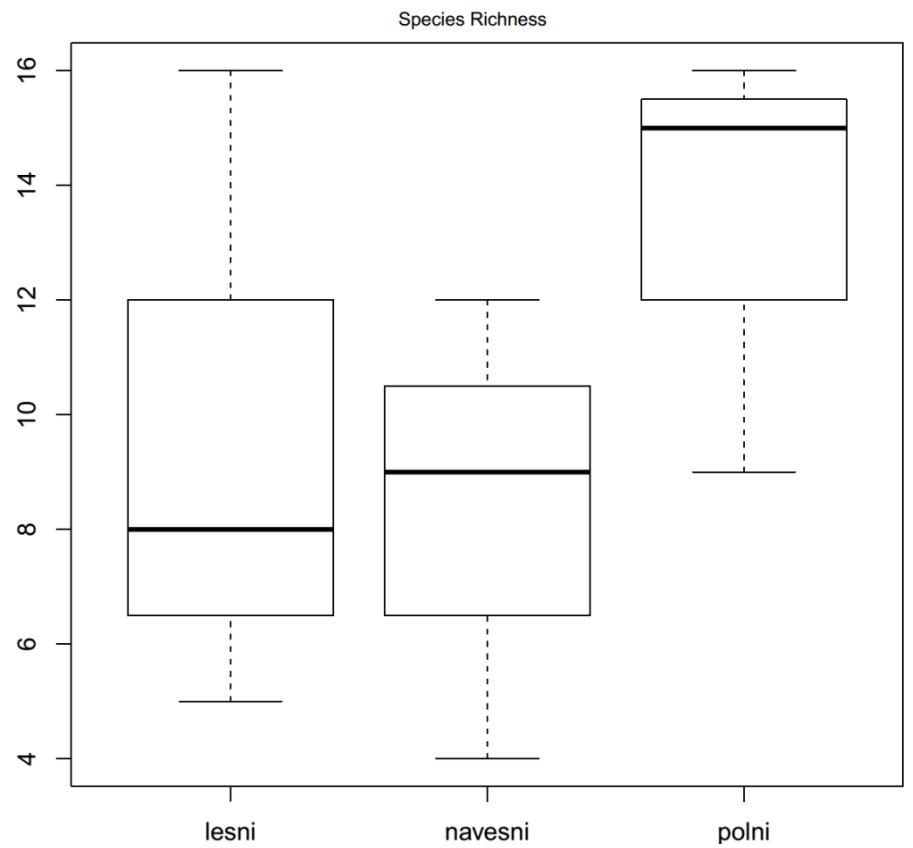
Habitats

- Field (Kařez, Horní Kařezský, Štěpánský)
- Forest (Drahota, Lesní2, Vrchy)
- Village (Radošice, Chynín1, Chynín2)

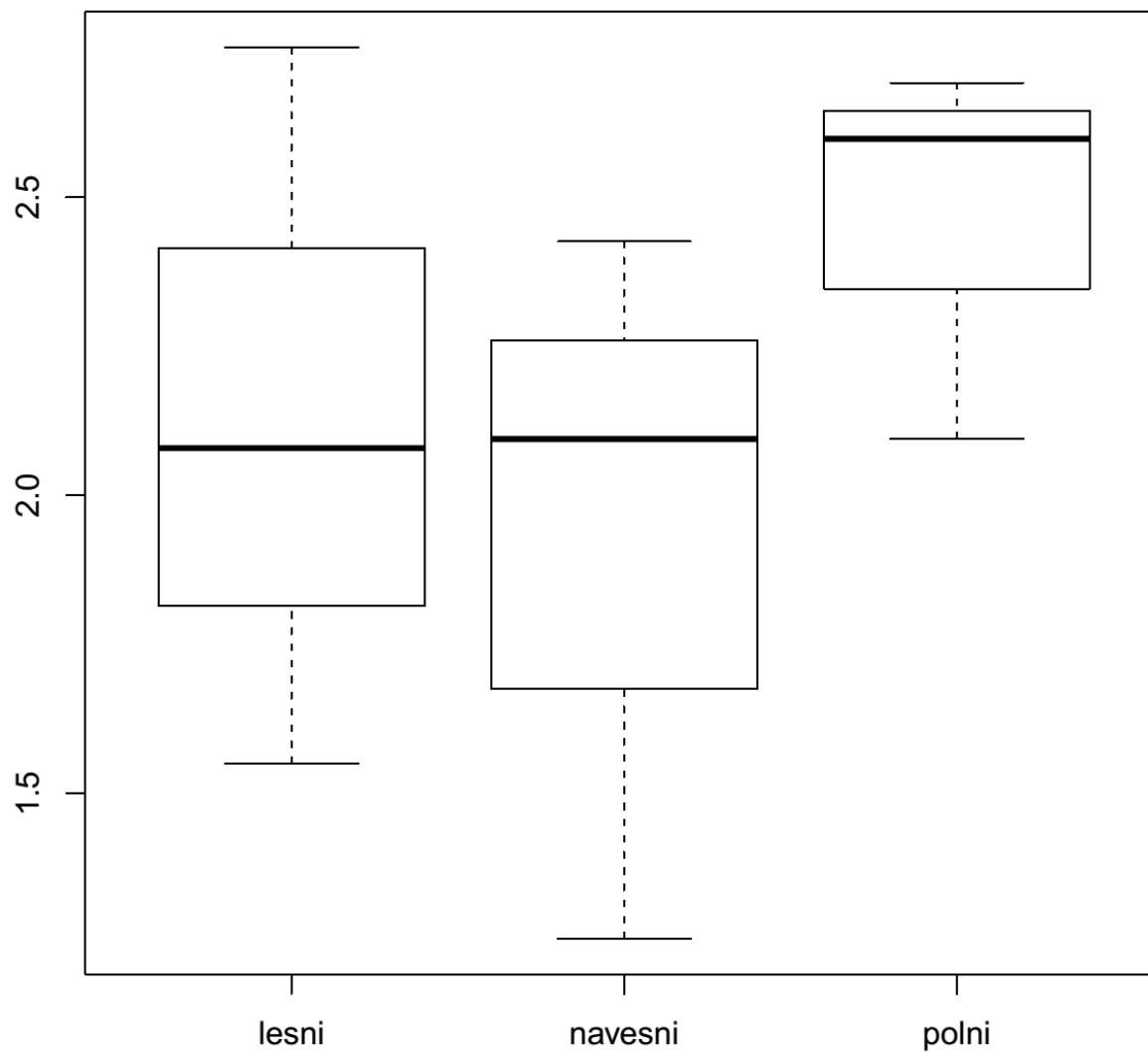


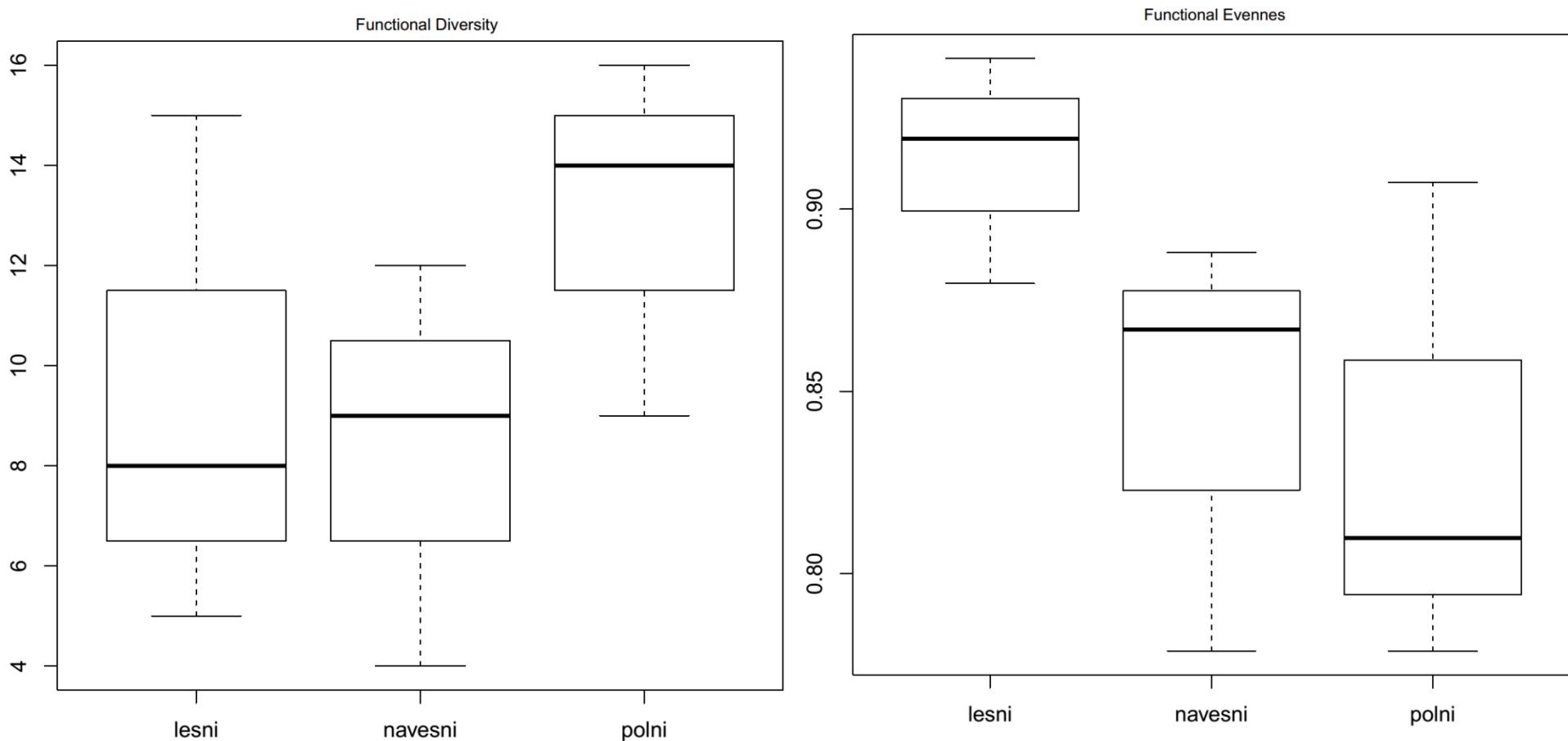
How Does the Biodiversity Change According to Habitats

When pH remains equal

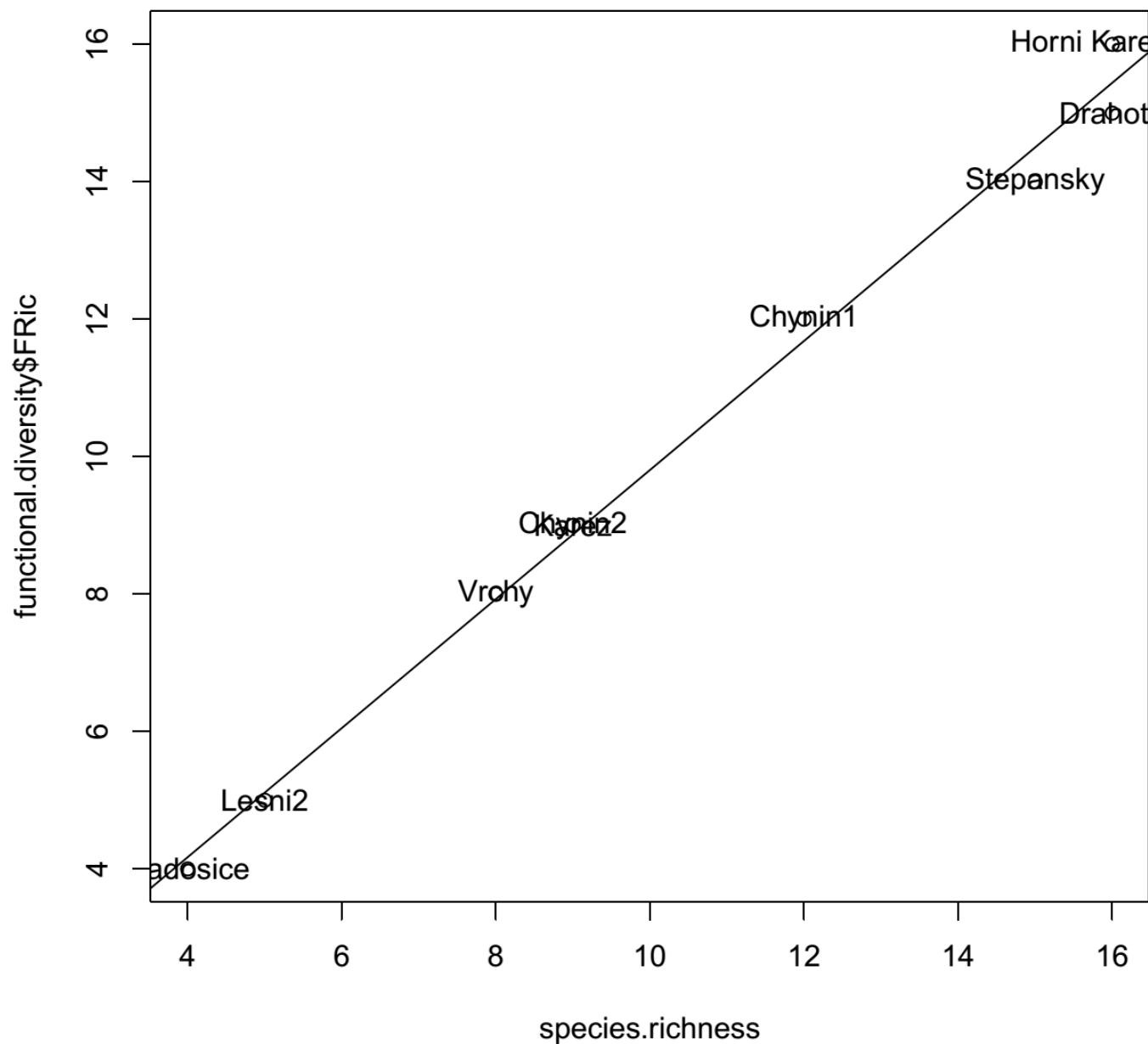


Shannon

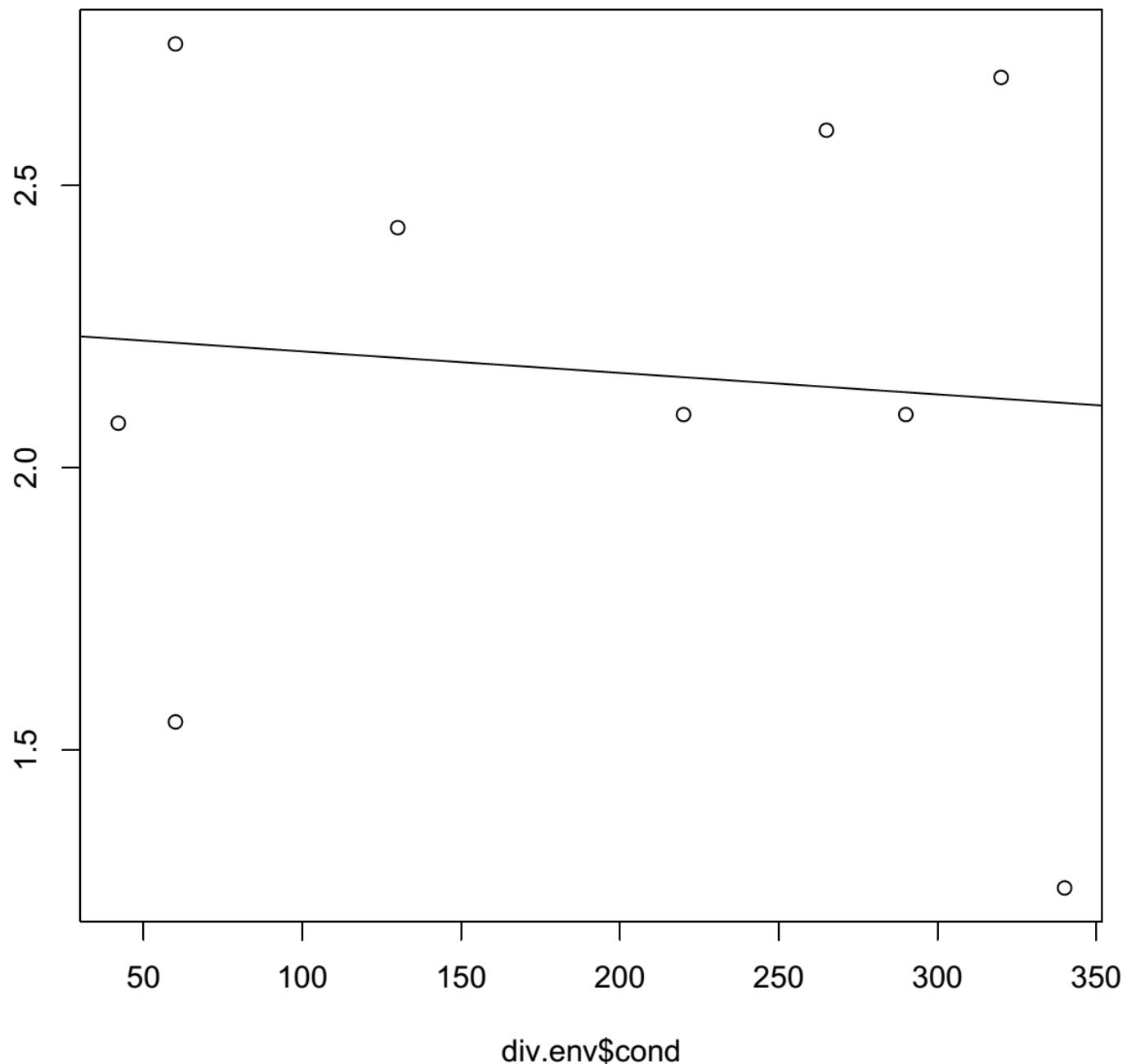




Relation between Functional Richness and Species
Richness



Relation between Conductivity and Shannon
Index



Conclusions

- 13 classes of algae; 71 species
- **Field ponds:** highest species richness x low evenness
- **Forest ponds:** low species richness x high species evenness
- **Village ponds:** average data values



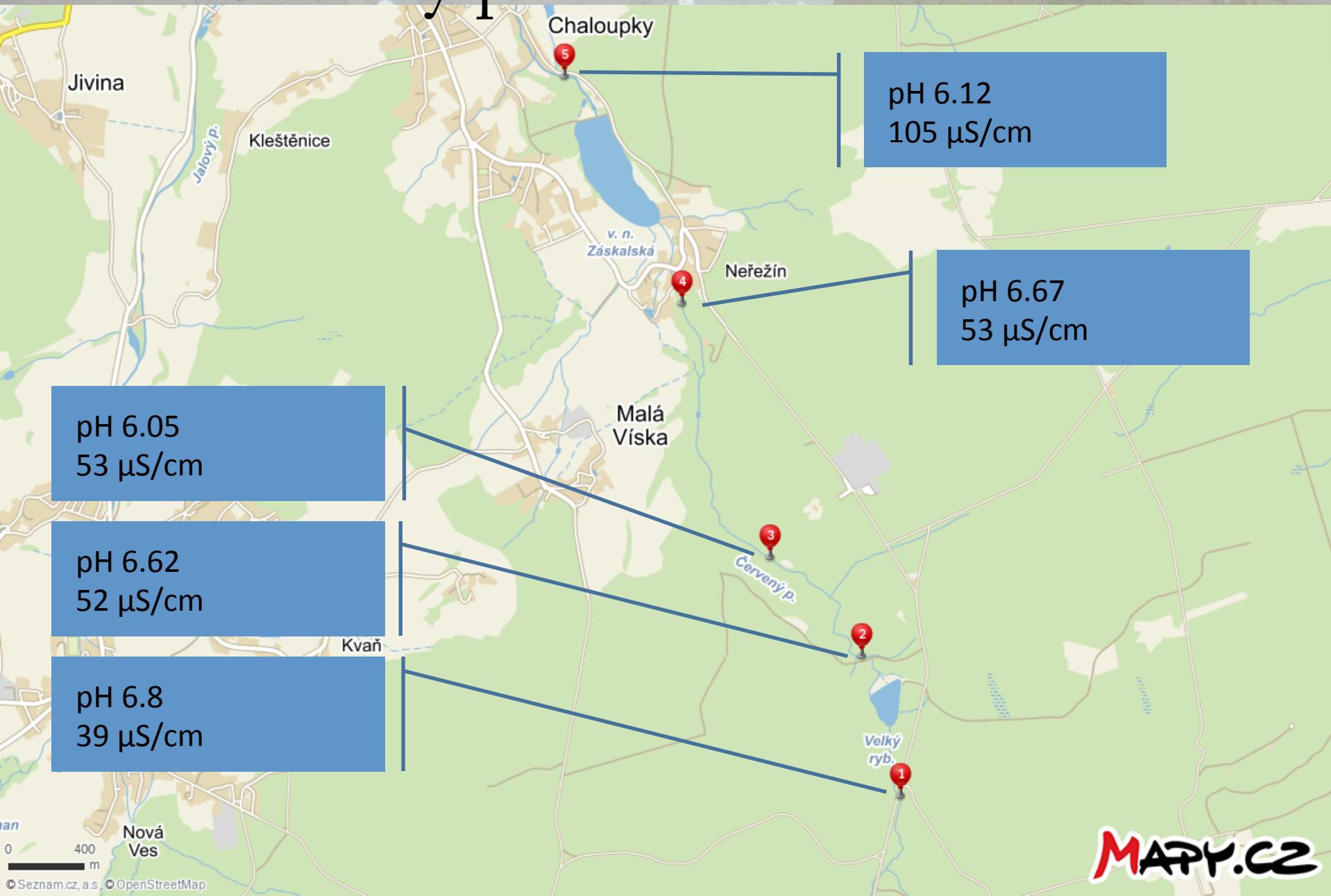
Stream team

Anna Poštulková
Marie Škvorová
Zuzana Vaiglová
Kateřina Vrbová

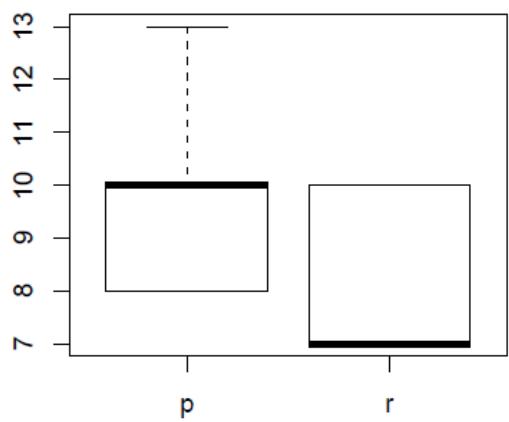
? ? ?

- fast n slow current– difference in diversity?
- Relation between species and **functional diversity**?
- Other factors:
 - pH, conductivity, upper/lower part of the stream

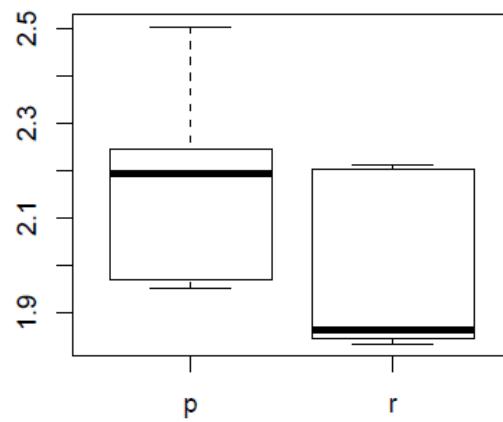
Červený potok aka Red stream



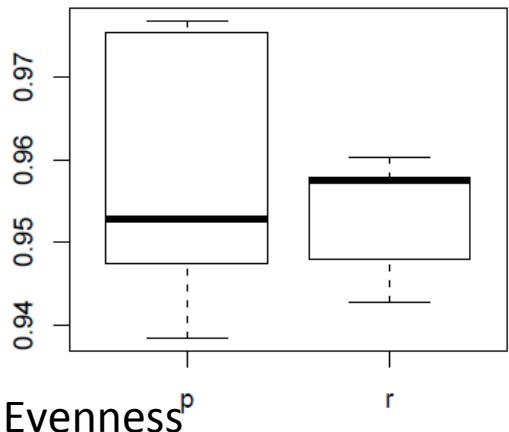
Fast n Slow sites – Comparison



Richness

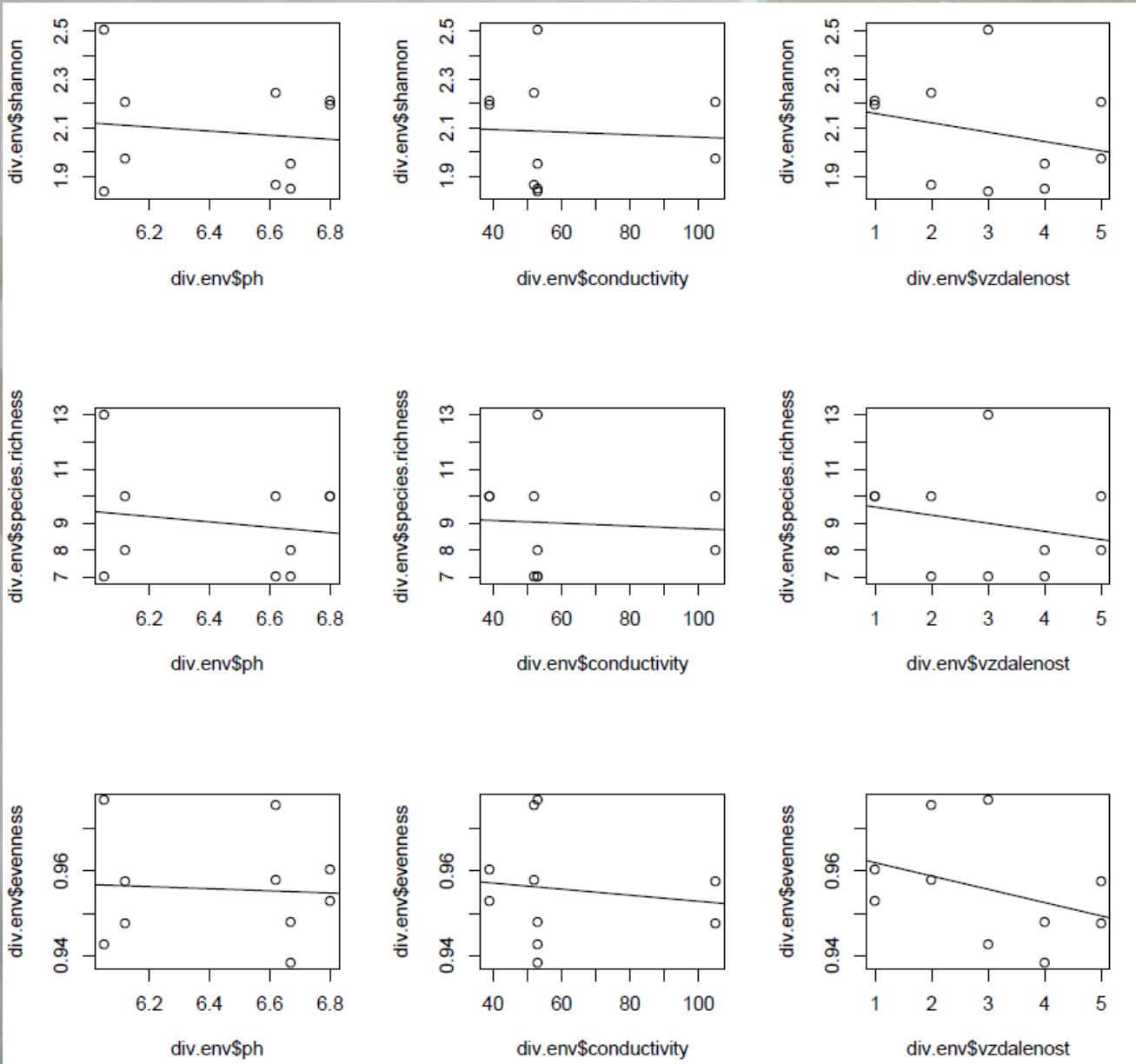


Shannon

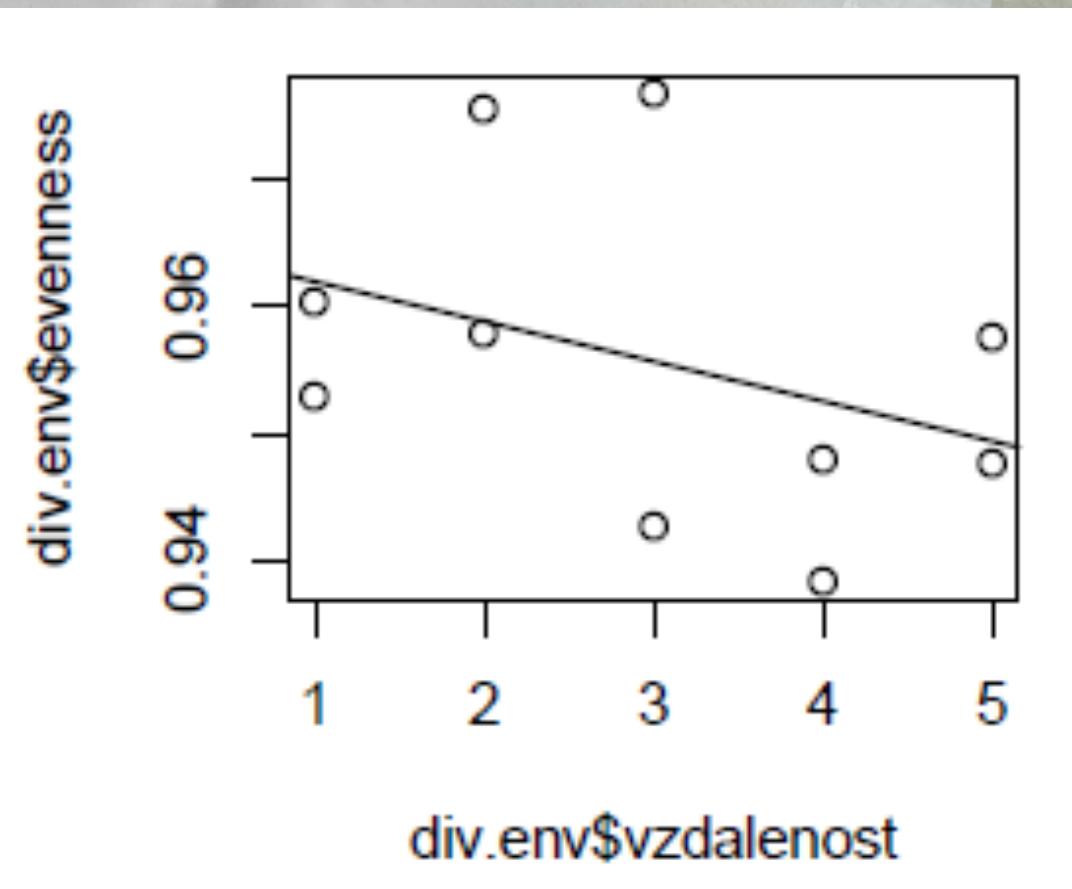


Evenness^p

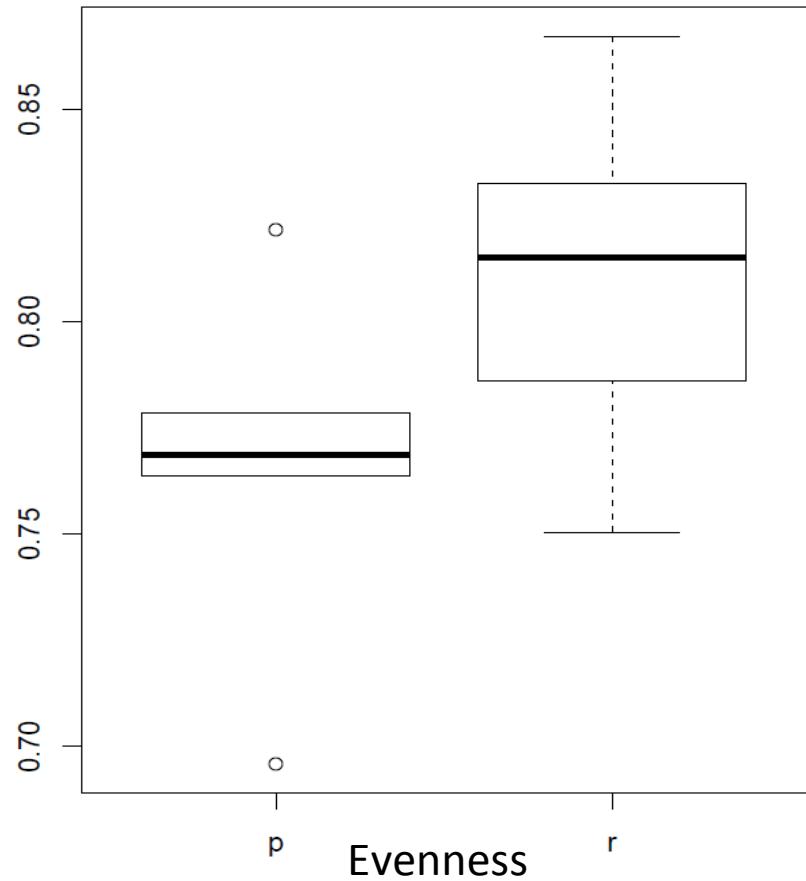
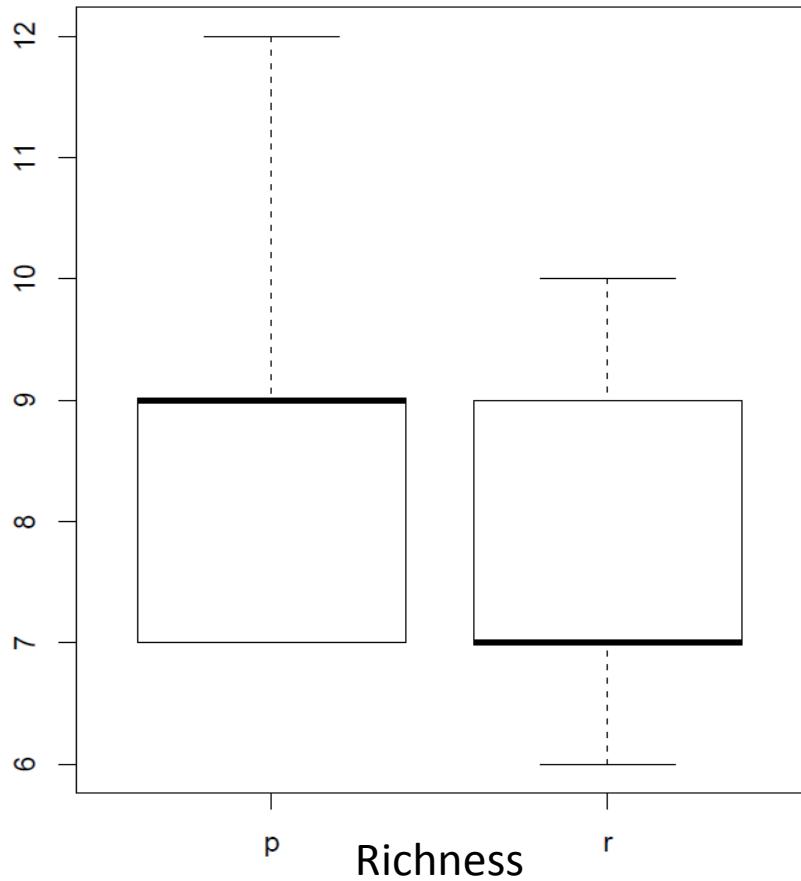
Environmental effects



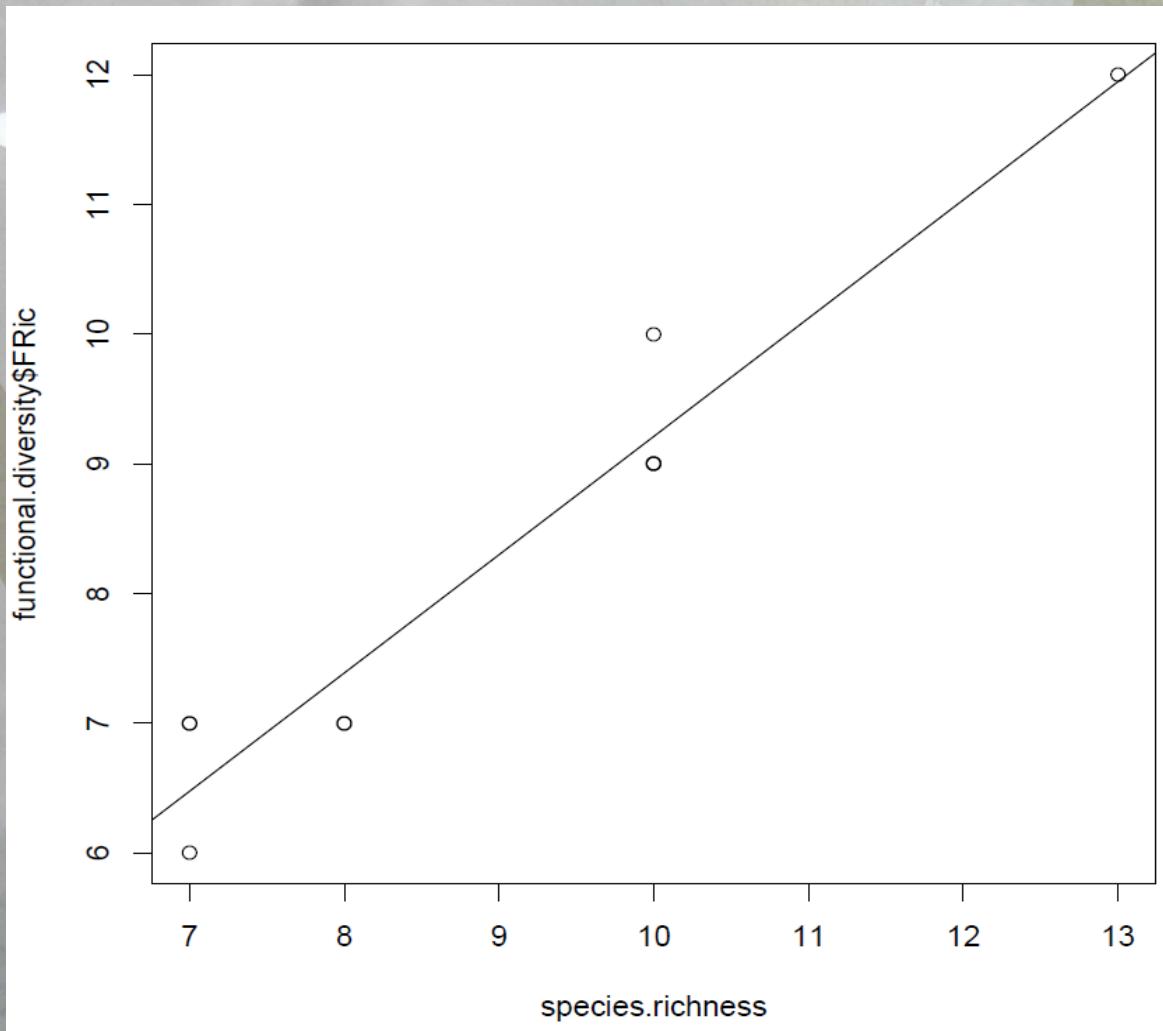
- Evenness decreases along the stream direction.



Functional diversity



- In streams functional diversity depends on species diversity.



A photograph of a person from behind, their arms raised in a 'V' shape. They are standing in front of a large, cloudy sky. Numerous small, bright white dots, resembling falling snow or stars, are scattered across the scene. The person is wearing a light-colored, possibly white, garment.

Thanks for your attention!