



Motorway edges as refugee for butterflies – preliminary results of case study from the Czech Republic

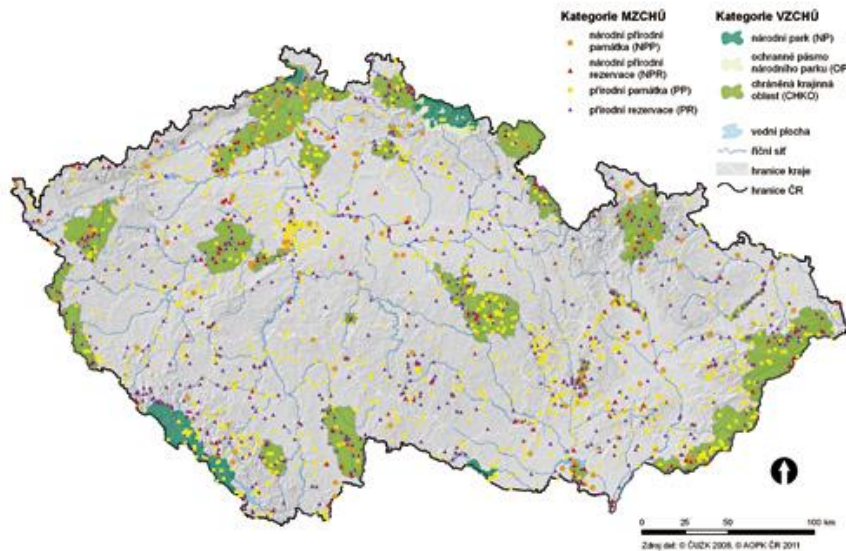
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Protected areas accross Czech republic

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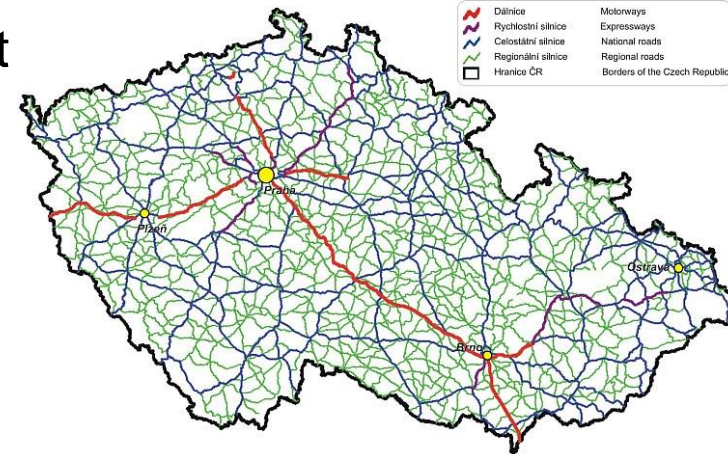
- Czech Republic has rich protected areas network
- Rest of countryside is homogenous with small spots of natural areas of grasslands
- The connection of localities is very poor



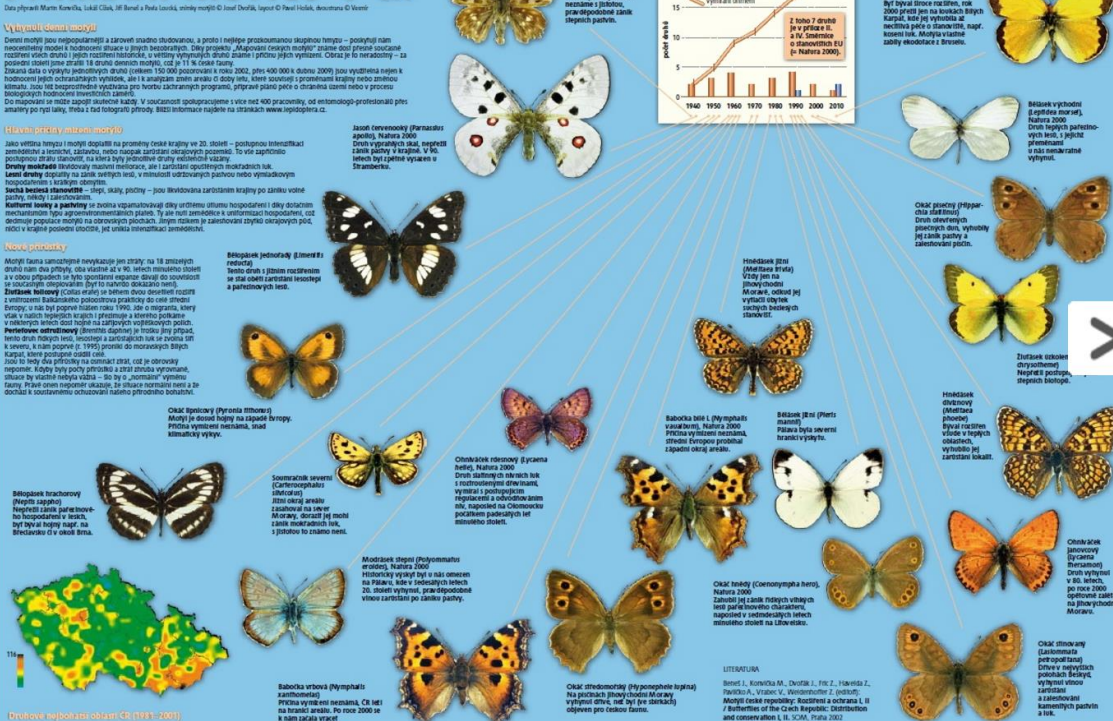
Why road wedges?

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- The network of roads (e.g. motorways) connect all protected areas around CZ
- There is plenty space to work with countryside
- There are butterflies and other nature
- There are experiences in the World



VMÍRÁNÍ MOTÝLŮ V ČR



Problem – grasses and management

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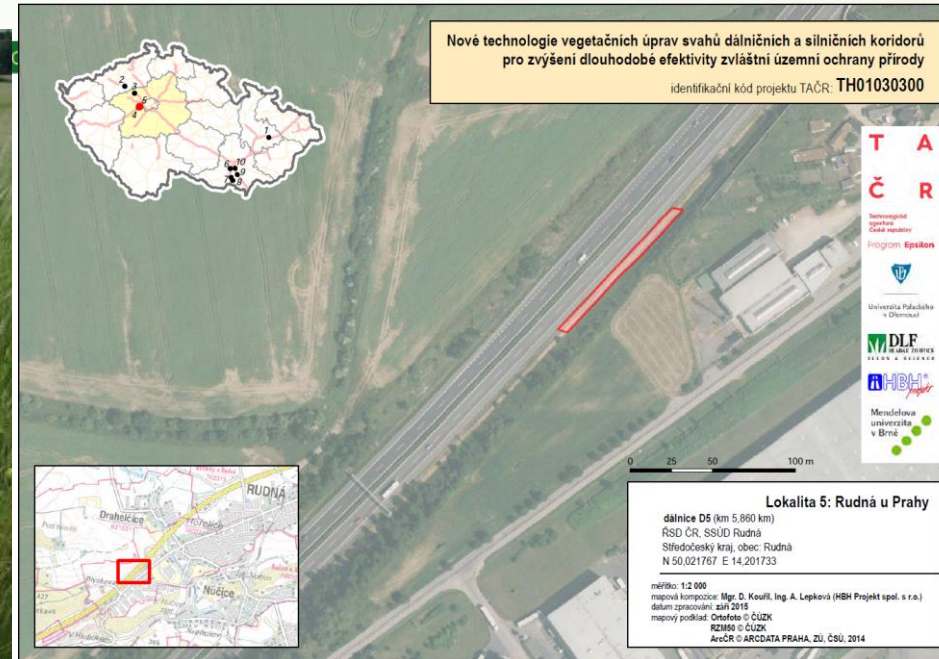
- All „new“ road wedges are usually planted by cheap grasses
- These turfs produce high volume of biomass and has to be mowed several time a yearh
- As a management is used mulching, which together with high volume of biomass leads to homogenous structure
- Such grasslands are like green deserts

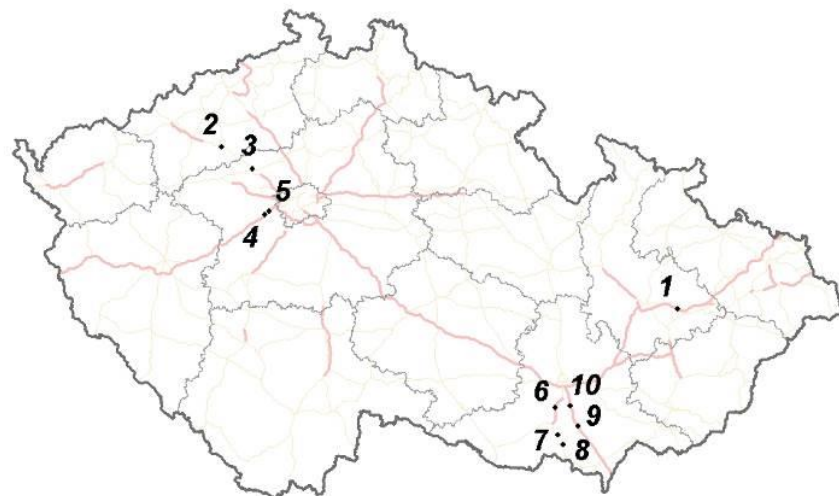






Methods





Locality	Road
Louny	I/7
Slaný	I/7
Loděnice	D5
Rudná u Prahy	D5
Sobotovice	R52
Pasohlávky	I/52
Perná	I/52
Hustopeče	D2
Blučina	D2
Dolní Újezd	D1

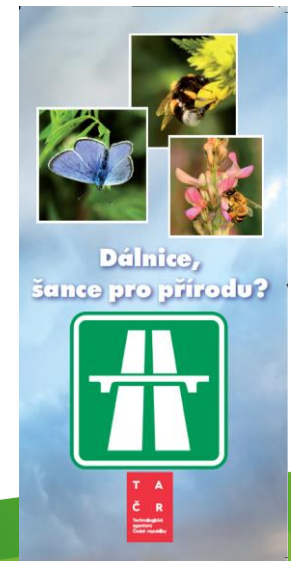
PRELIMINARY RESULTS

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- Untill now we have only preliminary results
- Only butterflies fauna before an application of Rhinanthus
- We collected 27 species (363 specimens, 2015)
- Among common ubiquitous species we found also some rare and endangered species (*Polyommatus bellargus*, *P. thersites*, *Coenonympha arcania*, *Brintesia circe*, *Colias alfacariensis*) or typically xerophilous common species (*Plebejus spp.*, *Zygaena loti*) during 2015 season. During 2016 were found other very interesting species like *Carcharodus alcae*, *Glaucopsyche alexis* and *Zerinthia polyxena* (NATURA2000).
- 3 EN, 4 VU, 1 NT species according Red list of invertebrates of the Czech Republic (Farkač et al., 2015).



- There is source of butterflies which we can support by vegetation change
- The vegetation changed during the year 2016 and populations changes will be visible probably next year (data are under investigation now, last collecting were held 25.8.2016)
- We need to support even very common species which are disappearing from our nature and here are present even rare species
- The motorways could be used as new corridors for grassland species
- Will see changes 😊



Thank you for your attention!

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„New technologies landscaping slopes of highway and road corridors to enhance the long-term effectiveness of specific territorial nature protection“

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