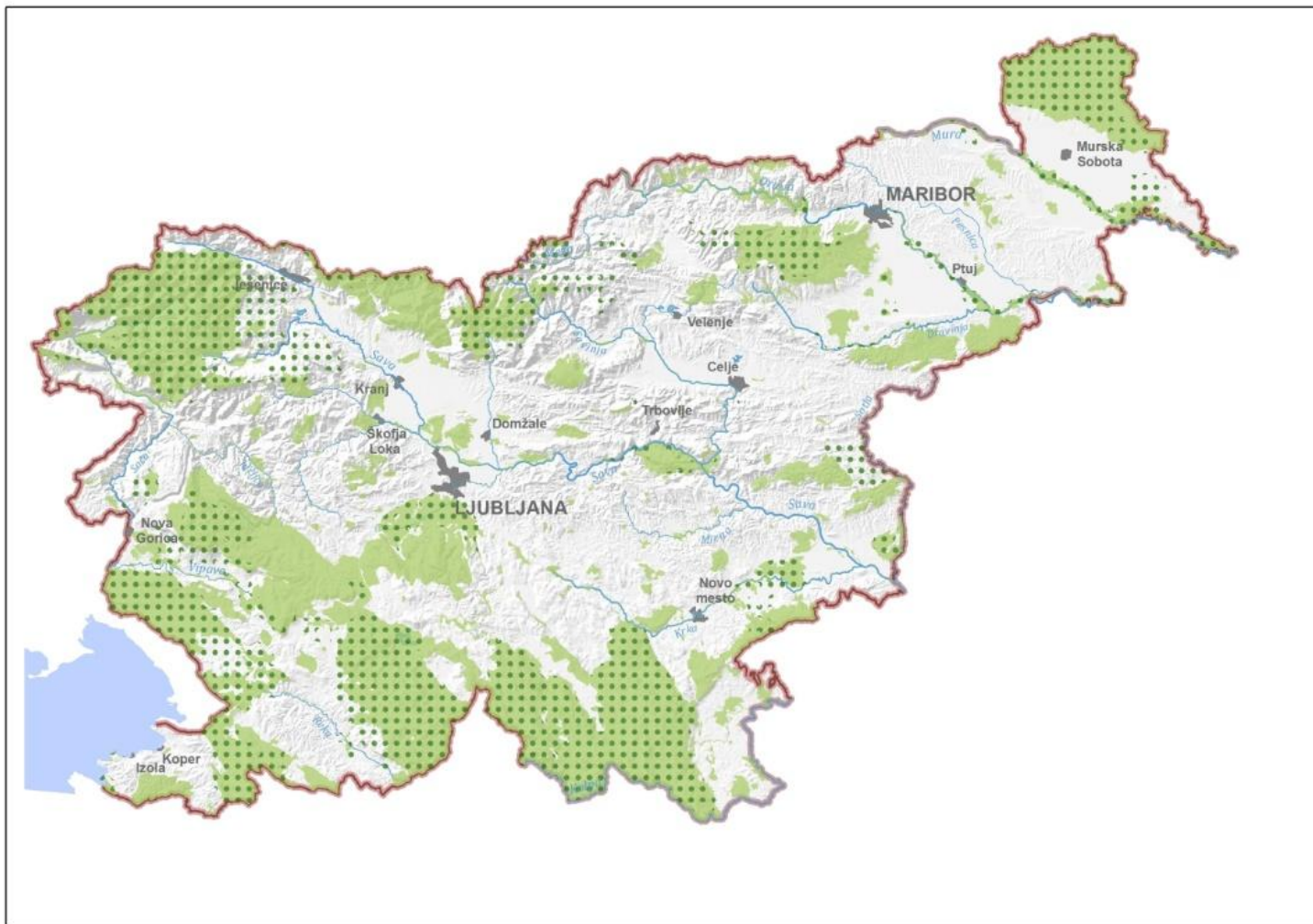


NATURA 2000 u Sloveniji

Rudi Verovnik



Niš, 18.10.2018

Šta je NATURA 2000?

Bernska konvencija (1978)



Konvencija o zaštiti evropskih divljih vrsta i prirodnih staništa

Šta je NATURA 2000?

Bernska konvencija

Dodaci

I



II

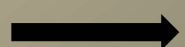


Šta je NATURA 2000?

Direktiva o pticama (1979)



Aneks I (194 vrsta)



SPA – područja posebne zaštite

Šta je NATURA 2000?

Direktiva o staništima (1992)

Aneksi

II – zaštita vrsta i njihovih staništa ➡ SAC – posebna područja očuvanja

IV – strogo zaštićene vrste



Šta je NATURA 2000?

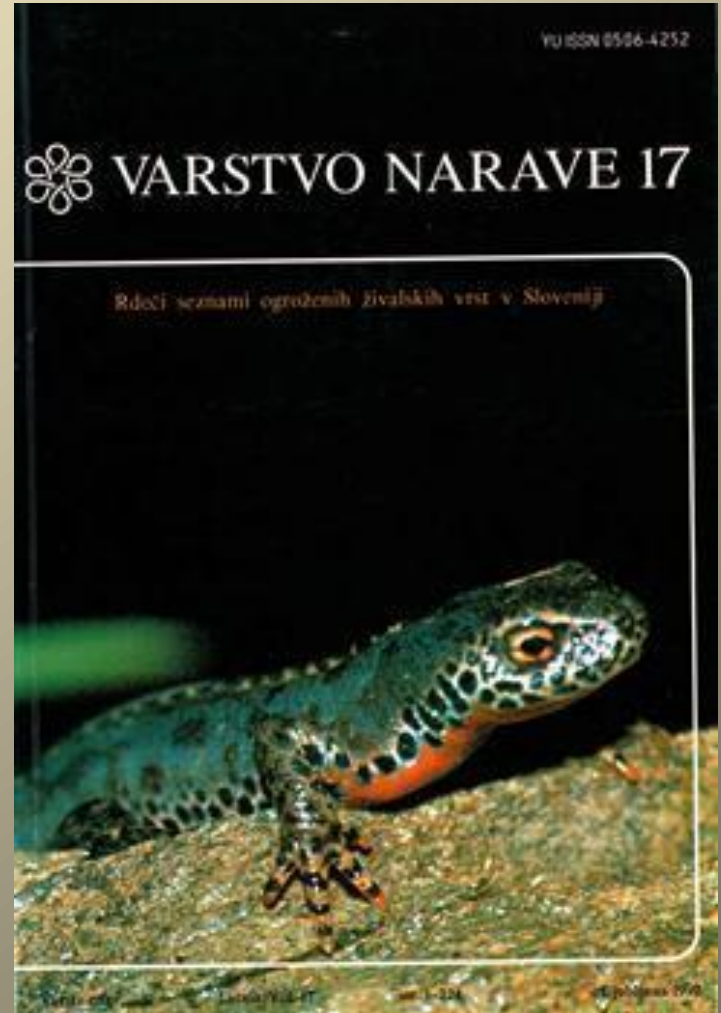
Mreža zaštićenih područja SAC + SPA

- 18% celokupne teritorije Evrope
- Ograničiti gubitak biodiverziteta
- Kompenzacija klimatskih promena
- Ekosistemske usluge



1989-1992

NATURA 2000 U SLOVENIJI



Crvene liste biljaka i životinja

NATURA 2000 U SLOVENIJI

1999



Ratifikacija Bernske konvencije

NATURA 2000 U SLOVENIJI

Uradni list
Republike Slovenije

Internet: <http://www.uradni-list.si> e-pošta: info@uradni-list.si

Št. 82 Ljubljana, torek 24. 9. 2002 Cena 1540 SIT ISSN 1318-0576 Leto XII

MINISTRSTVA

4055. Pravilnik o uvrstitvi ogroženih rastlinskih in živalskih vrst v rdeči seznam

Na podlagi tretjega in četrtega odstavka 80. člena zakona o ohranjanju narave (Uradni list RS, št. 56/99 in 31/00 – popr.) izdaja minister za okolje, prostor in energijo

PRAVILNIK
o uvrstitvi ogroženih rastlinskih in živalskih vrst v rdeči seznam

Slovenije ni verjeten, če bodo dejavniki ogrožanja delovali še naprej. Številčnost teh vrst se je zmanjšala na kritično stopnjo oziroma njihova številčnost zelo hitro upada v večjem delu areala. Skrajšana oznaka te kategorije je E.

- ranljiva vrsta je kategorija ogroženosti, v katero se uvrstijo vrste, za katere je verjetno, da bodo v bližnji prihodnosti prešle v kategorijo prizadete vrste, če bodo dejavniki ogrožanja delovali še naprej. Številčnost vrste se je v velikem delu areala zmanjšala oziroma se zmanjšuje. Vrste so zelo občutljive na kakršnekoli spremembe oziroma poseljujejo habitate, ki so na človekove vplive zelo občutljivi. Skrajšana oznaka te kategorije je V.
- redka vrsta je kategorija ogroženosti, v katero se uvrstijo vrste, ki so potencialno ogrožene zaradi svoje red-



ZON – Zakon o zašiti prirode (1999) ➡ Crvene liste

NATURA 2000 U SLOVENIJI

Crvene liste

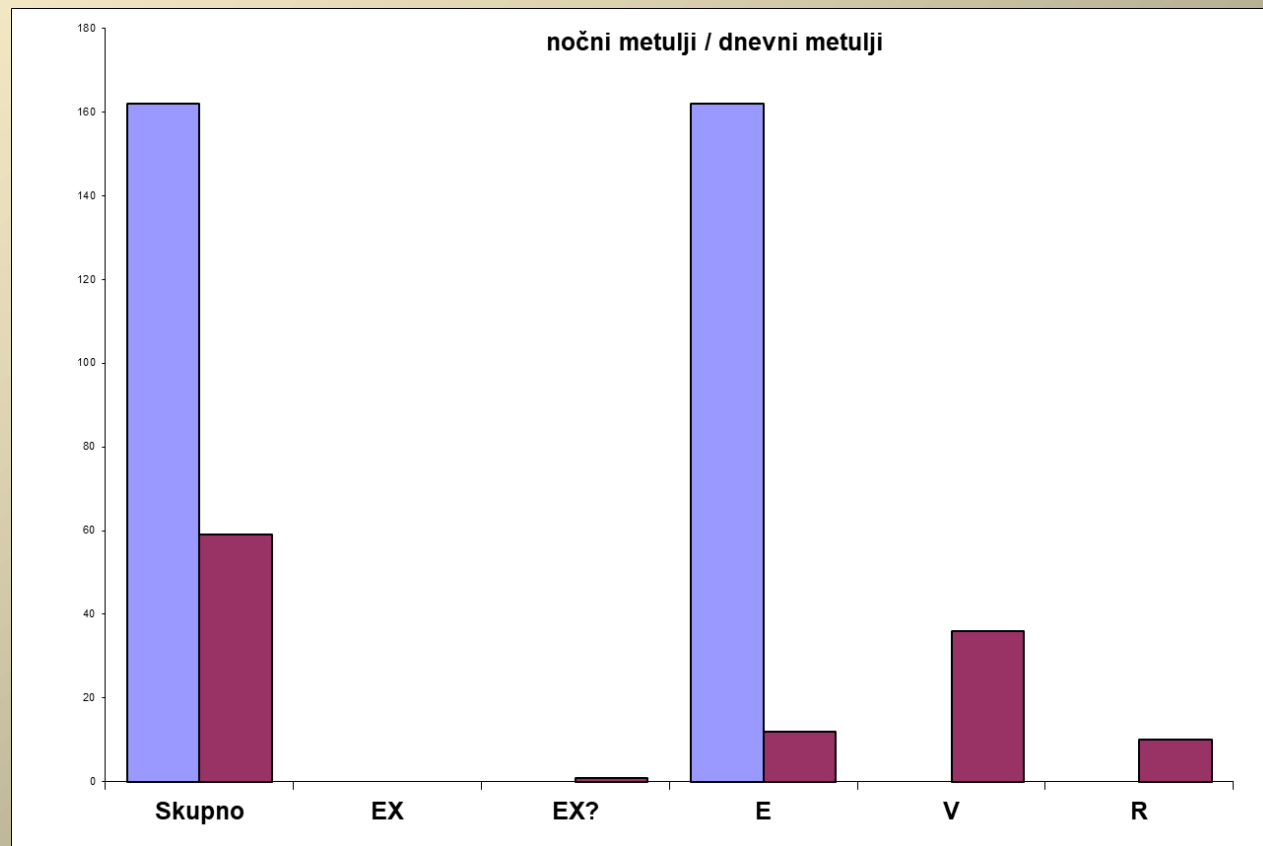
2002

Biljke – 778

Sisari – 59

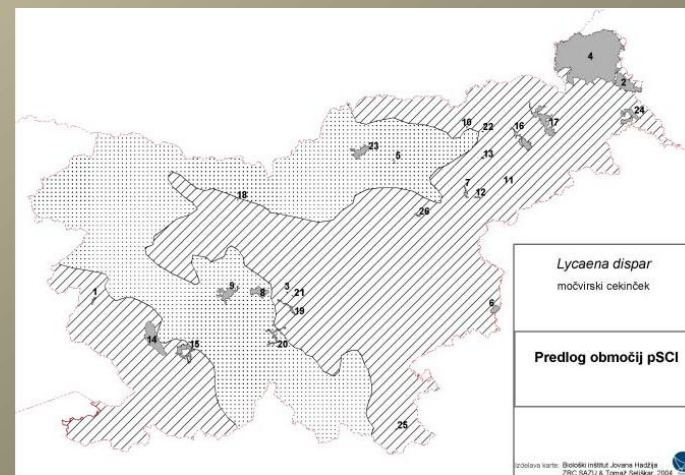
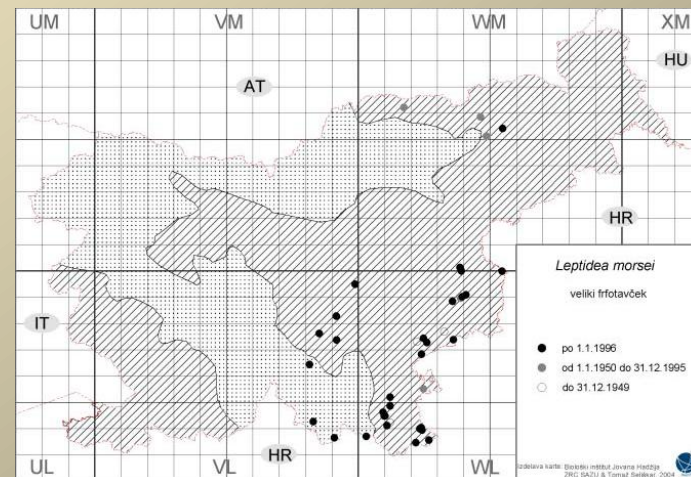
Ptice – 163

Leptiri - 221

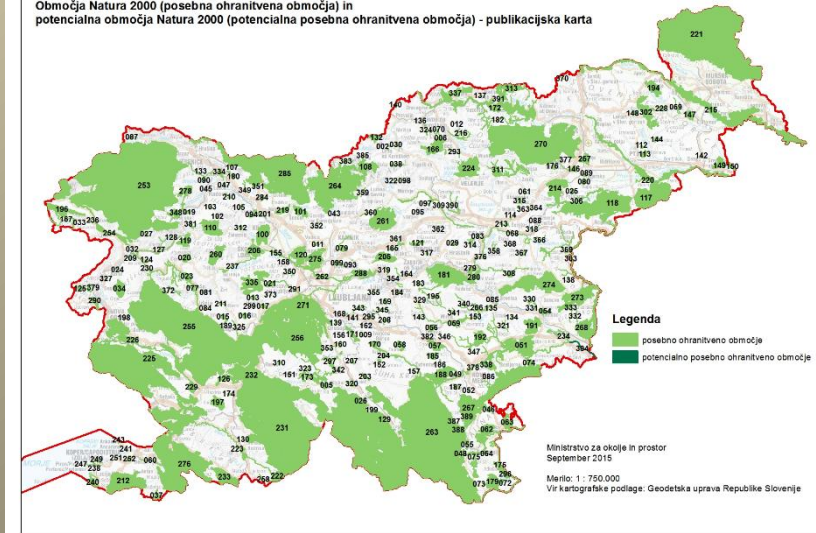


NATURA 2000 U SLOVENIJI

2001-2004



Stručne polazne osnove za uspostavljanje Natura 2000

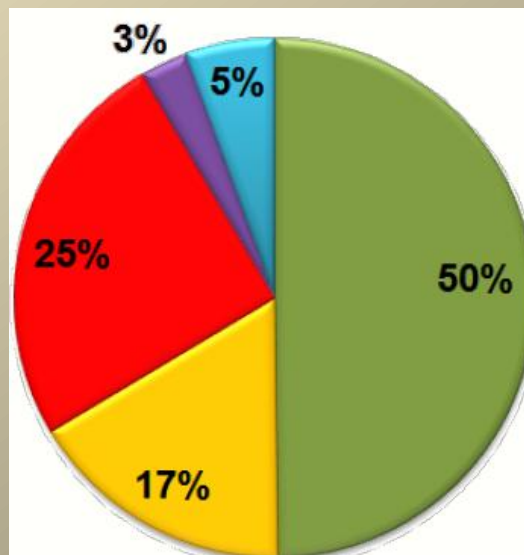


NATURA 2000 U SLOVENIJI

Abbreviation	Meaning	Action required
SUF	Sufficient,	No further sites needed
IN MIN	Insufficient minor	More sites required but habitat is present on sites already proposed for other habitats/species
IN MOD	Insufficient moderate	One or a few additional sites (or maybe extension to sites) required.
IN MAJOR	Insufficient major	No sites proposed at present and a significant effort required
Sci Res	Scientific reserve	A definite conclusion is not possible: need to investigate/clarify a scientific issue – interpretation of habitat, controversial presence of species, etc.
G	Geographical	Used to qualify an IN MOD. Indicates that the insufficiency is mainly linked to the bad geographical coverage of proposed sites – e.g. more sites needed in north-east
CD	Correction of data	Data needs to be corrected / completed / deleted
?	Scientific reserve in the reference list	No conclusion for the time being; check presence of species in the Biogeographical region

2005-2006

2010



■ SUF ■ IN MIN ■ IN MOD ■ IN MAJ ■ SR

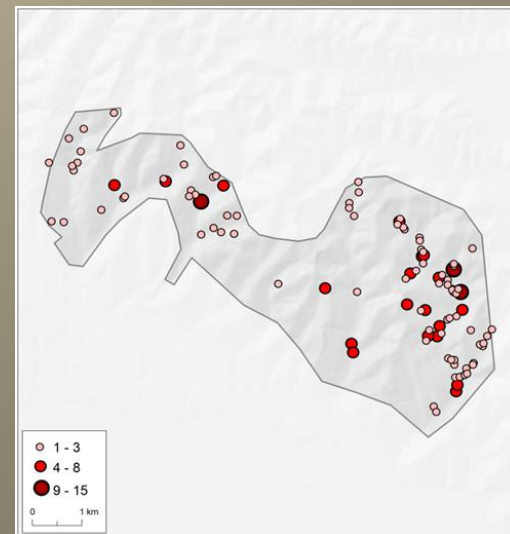
Biogeografski seminari – Alpska, Kontinentalna i Morska regija

NATURA 2000 U SLOVENIJI

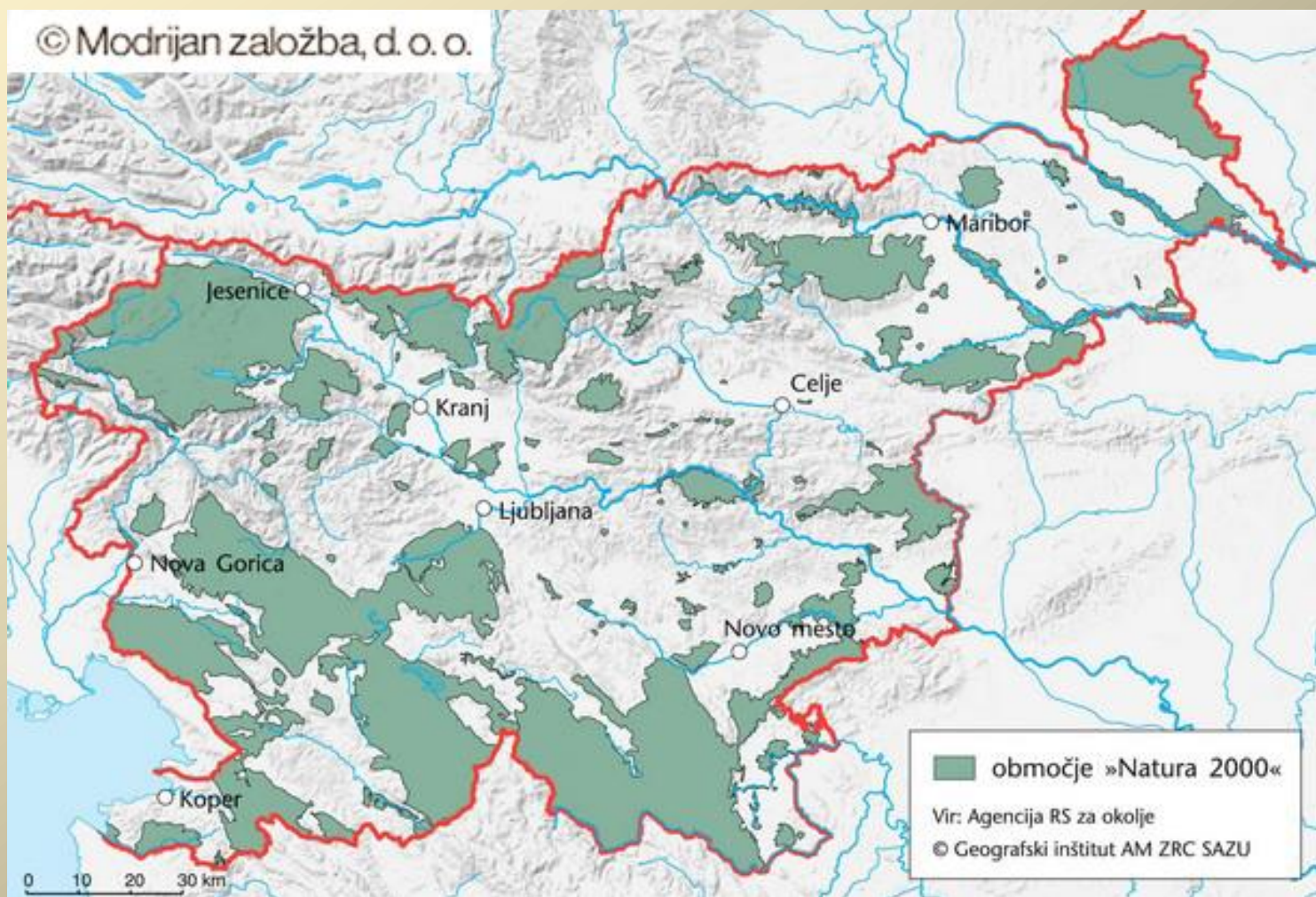
Početak monitoring za više grupa životinja:

- Sisari (zveri, šišmiši)
- Ptice
- Ribe
- Vodozemci (od 2010)
- Tvr dokrilci
- Leptiri
- Mekušci
- Rakovi desetronošci

2007



NATURA 2000 U SLOVENIJI

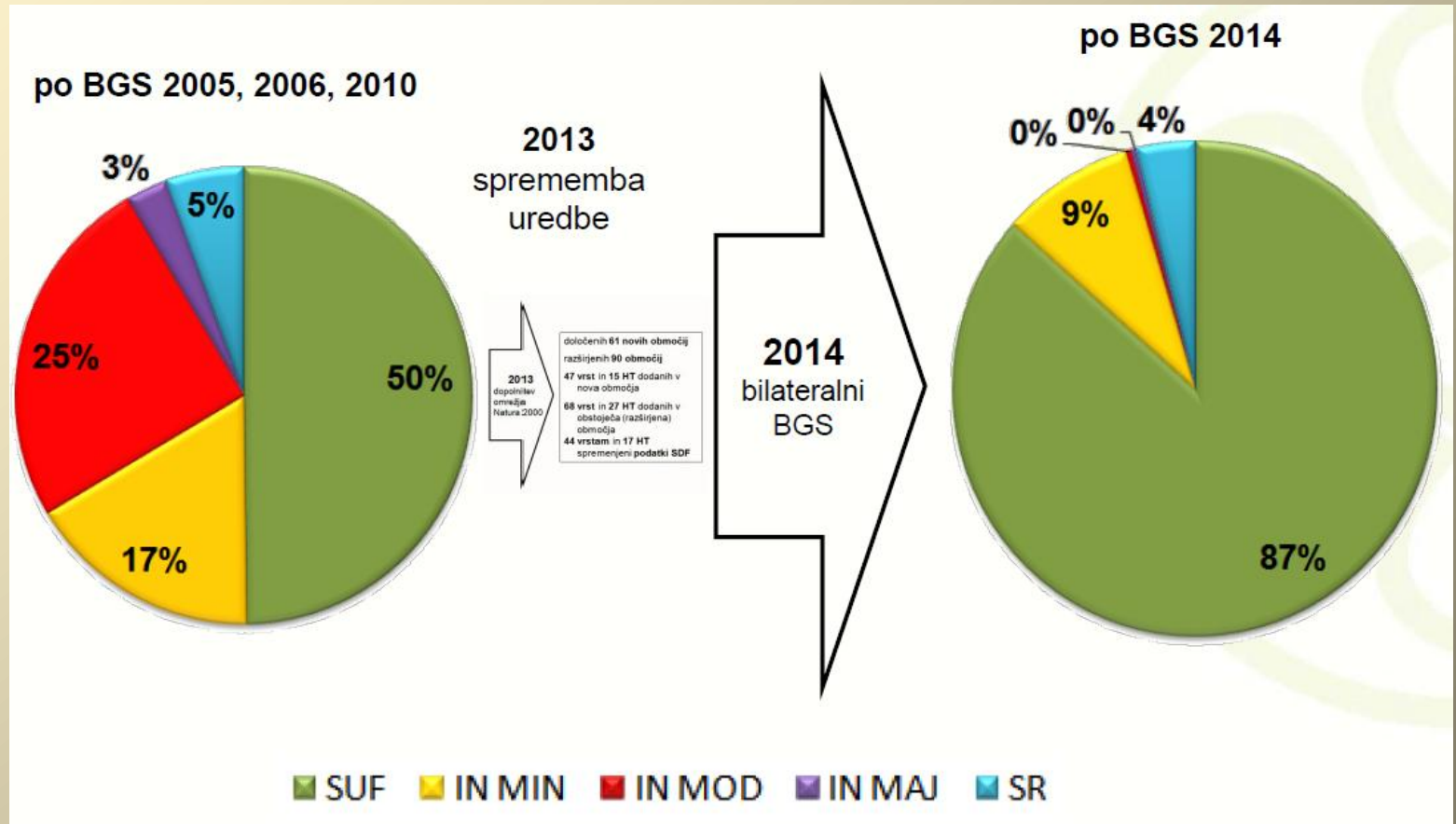


2008

34,8 %

Potvrda područja Natura 2000 u EU

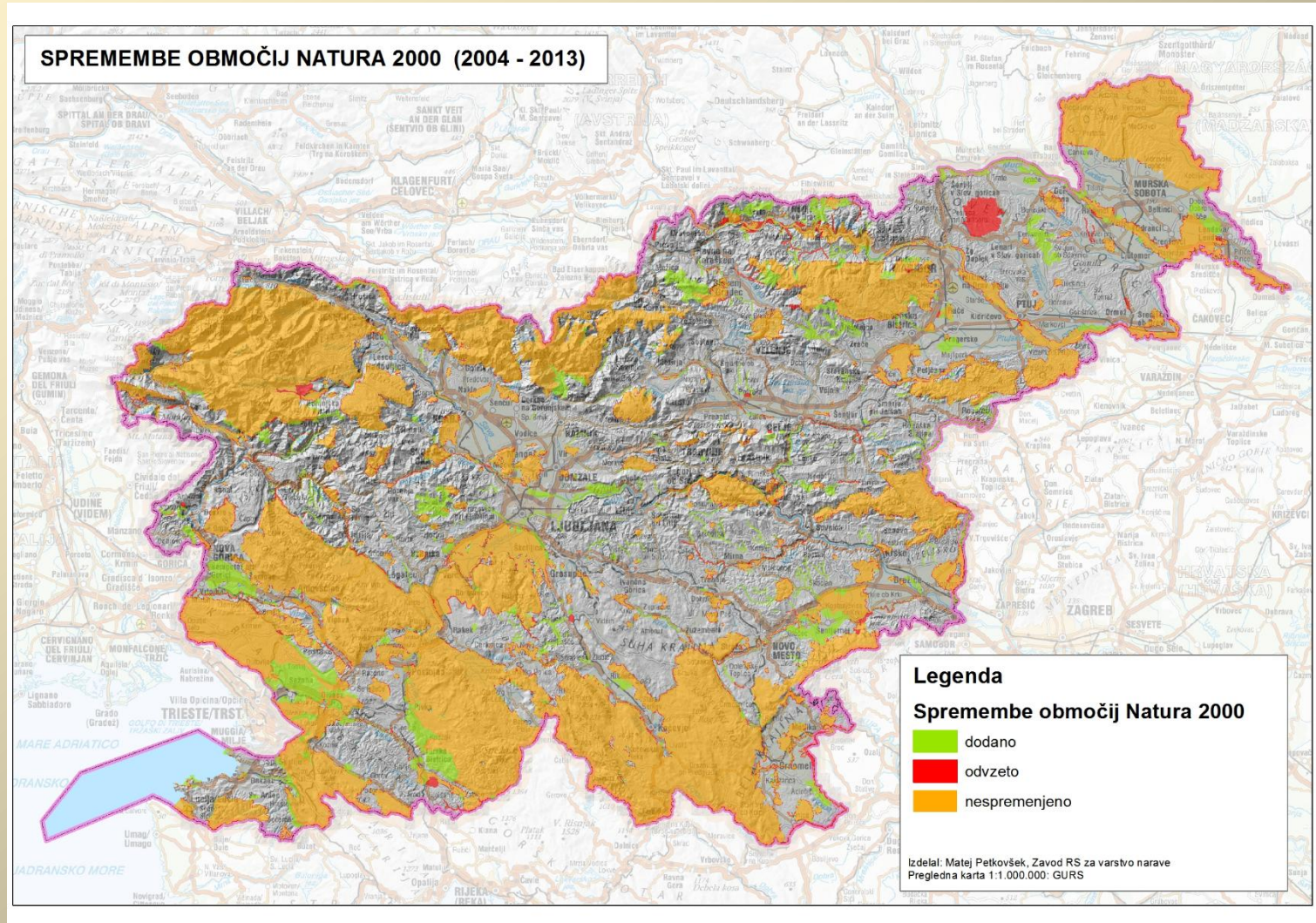
NATURA 2000 U SLOVENIJI



2014

Bilateralni biogeografski seminari i promene Natura 2000

NATURA 2000 U SLOVENIJI



2014

Promene Natura 2000

37,2 %

NATURA 2000 U SLOVENIJI

Natura 2000 obuhvata:

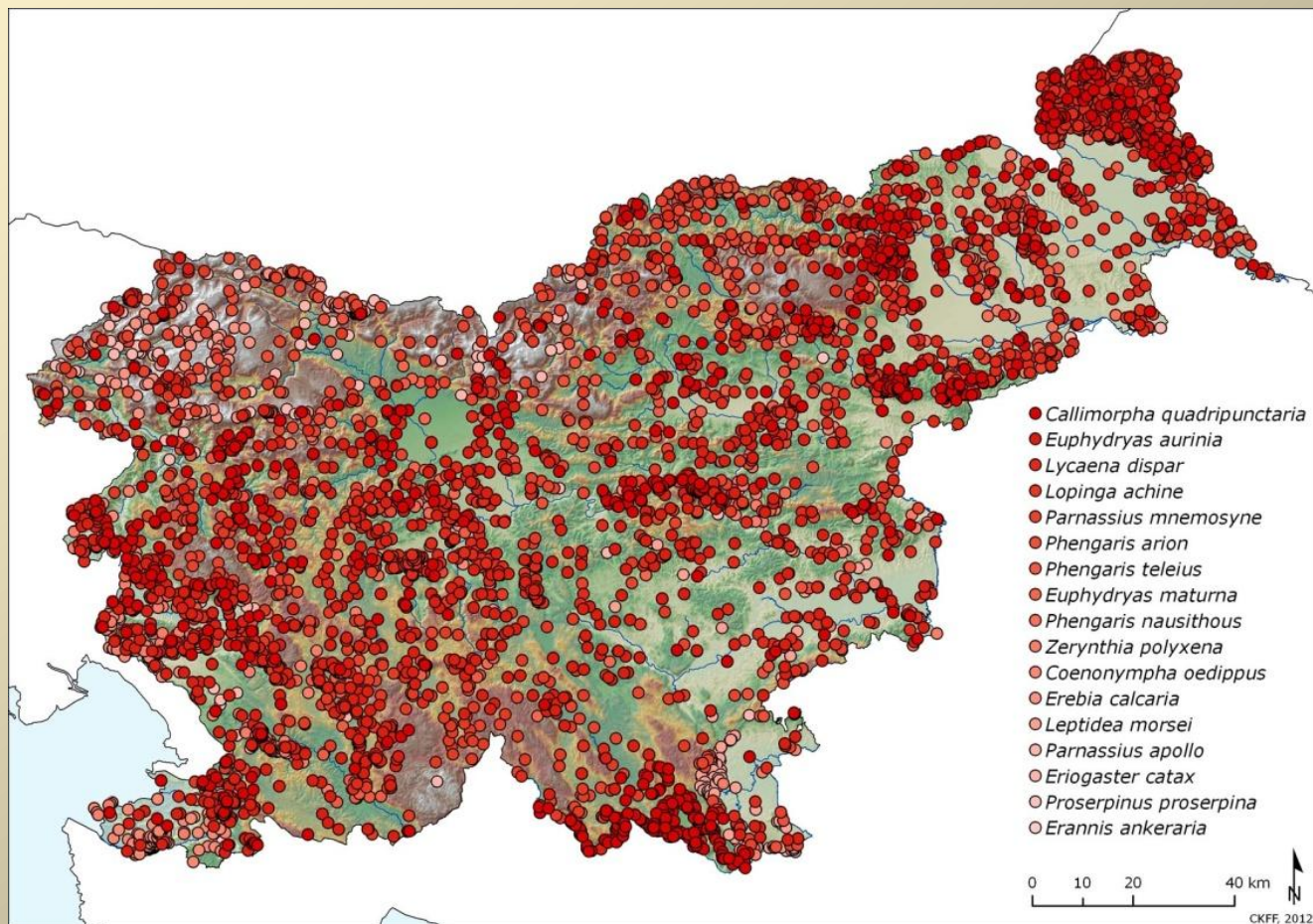
- **Ukupno 355 područja (31 – ptice)**
- **Uključeno je 114 vrsta, 60 habitatnih tipova i 119 vrsta ptica**
- **37,9 % kopnene teritorije Slovenije**
- **1,46 % morske teritorije Slovenije**
- **29 % površina Natura 2000 na zaštićenim područjima**
- **71 % površina Natura 2000 je šuma**



MONITORING – LEPTIRI

Broj podataka za HD vrste od 1990: **14.171**

Broj lokaliteta za HD vrste od 1990: **6268**



MONITORING – LEPTIRI

Tri nivoa monitoringa:

- monitoring odabranih populacija (MRR, transekti)
- monitoring odabranih područja glavnih populacija
- monitoring izolovanih populacija



Monitoring odabranih populacija

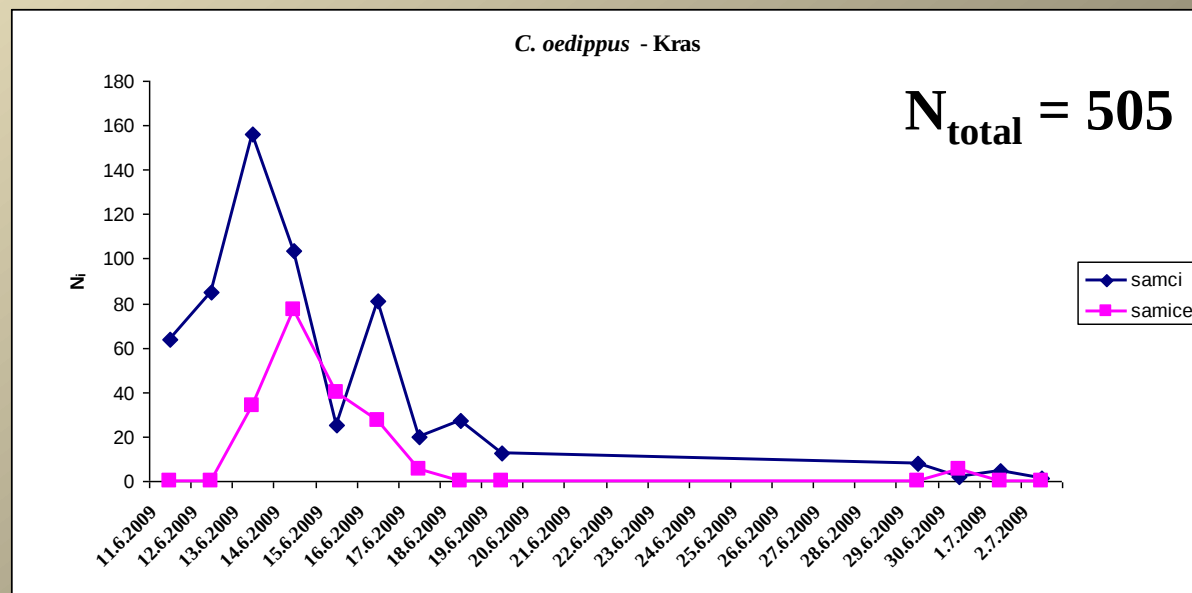
- MRR:**
- vrste sa lokalnim mnogobrojnim populacijama
 - vremenski zahtevno (do 14 dana na populaciju)



Coenonympha oedippus



SZ deo Krasa

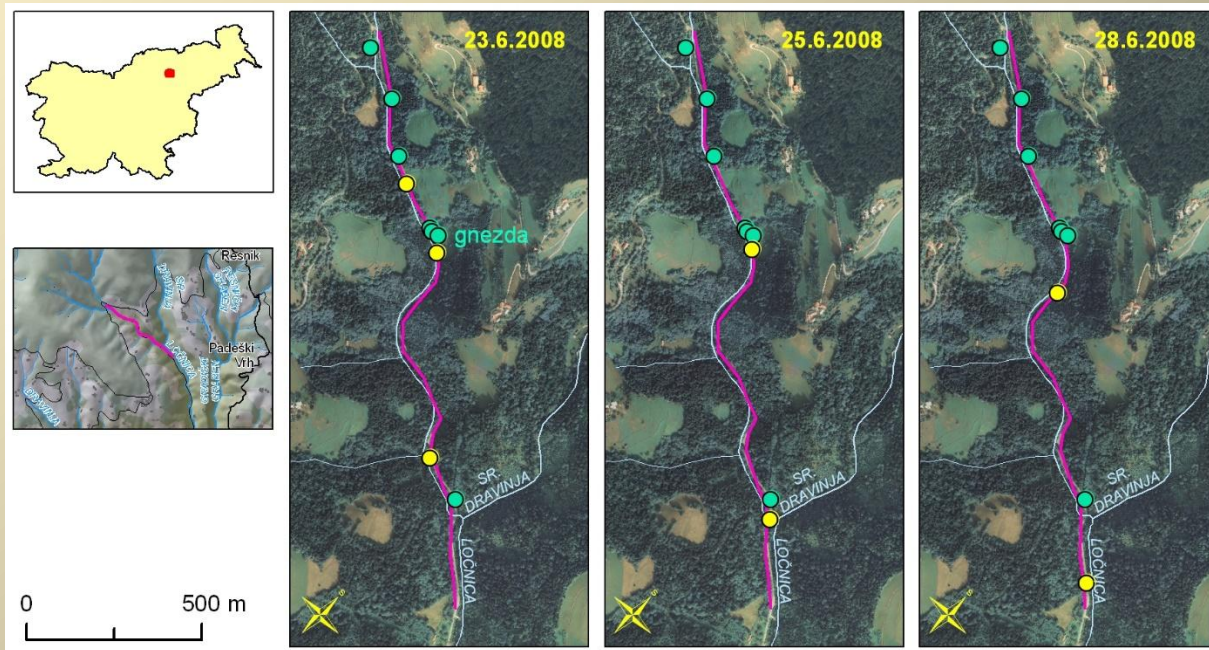


Transektni monitoring

- primeran za mobilnije vrste
- tri pregleda u vreme maksimuma odraslih
- samo relativne abundance



Euphydryas maturna



Average: $7,0 \pm 6,24$

Maximum: 14

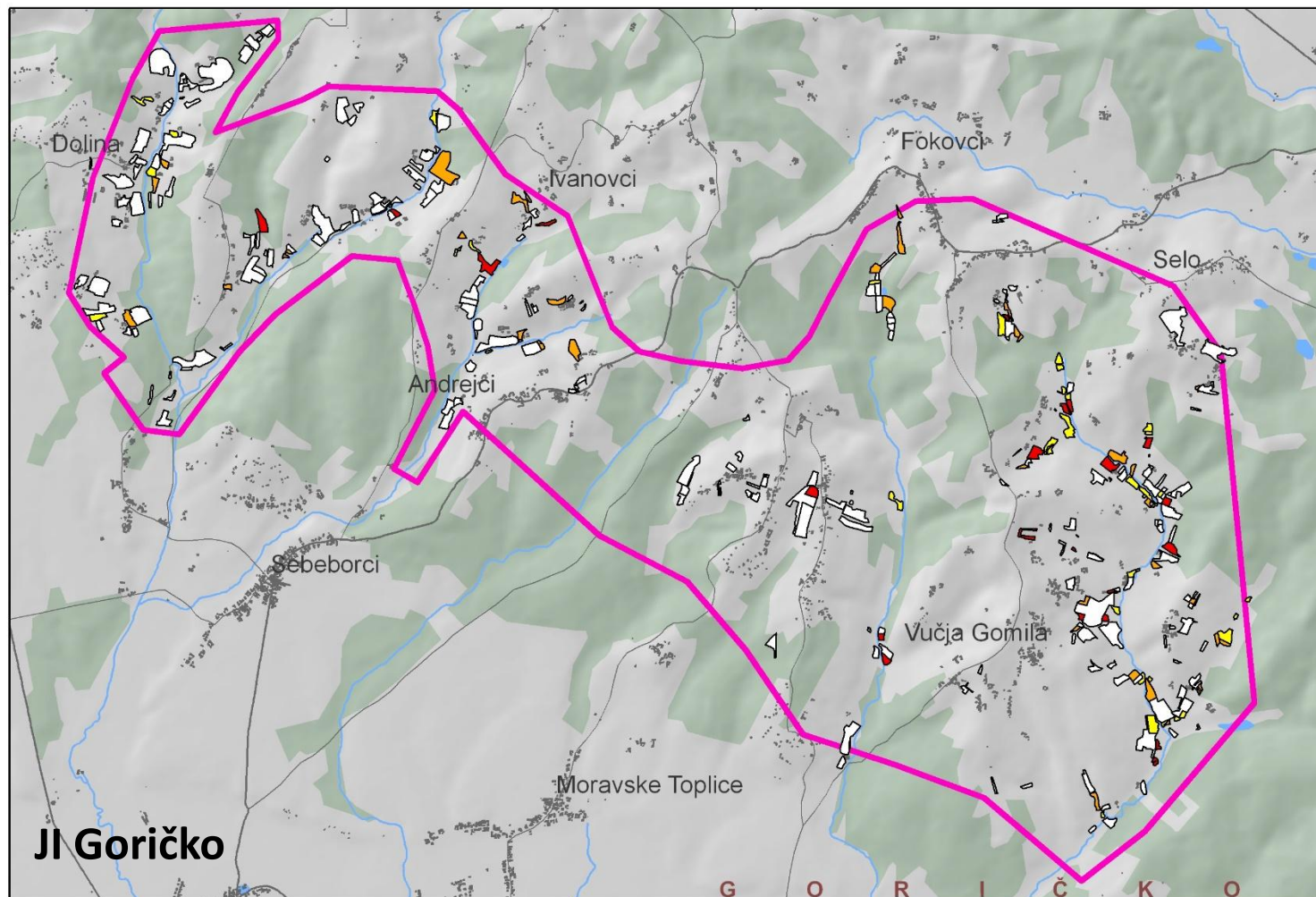
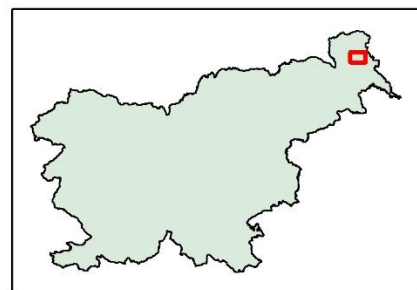
No. of nests: 7

JZ deo planine Pohorje

Monitoring centara distribucije (patch occupancy)

- pregled celokupnog primernog habitata
- pojedinačna brojanja adulta na svakom lokalitetu

Phengaris teleius

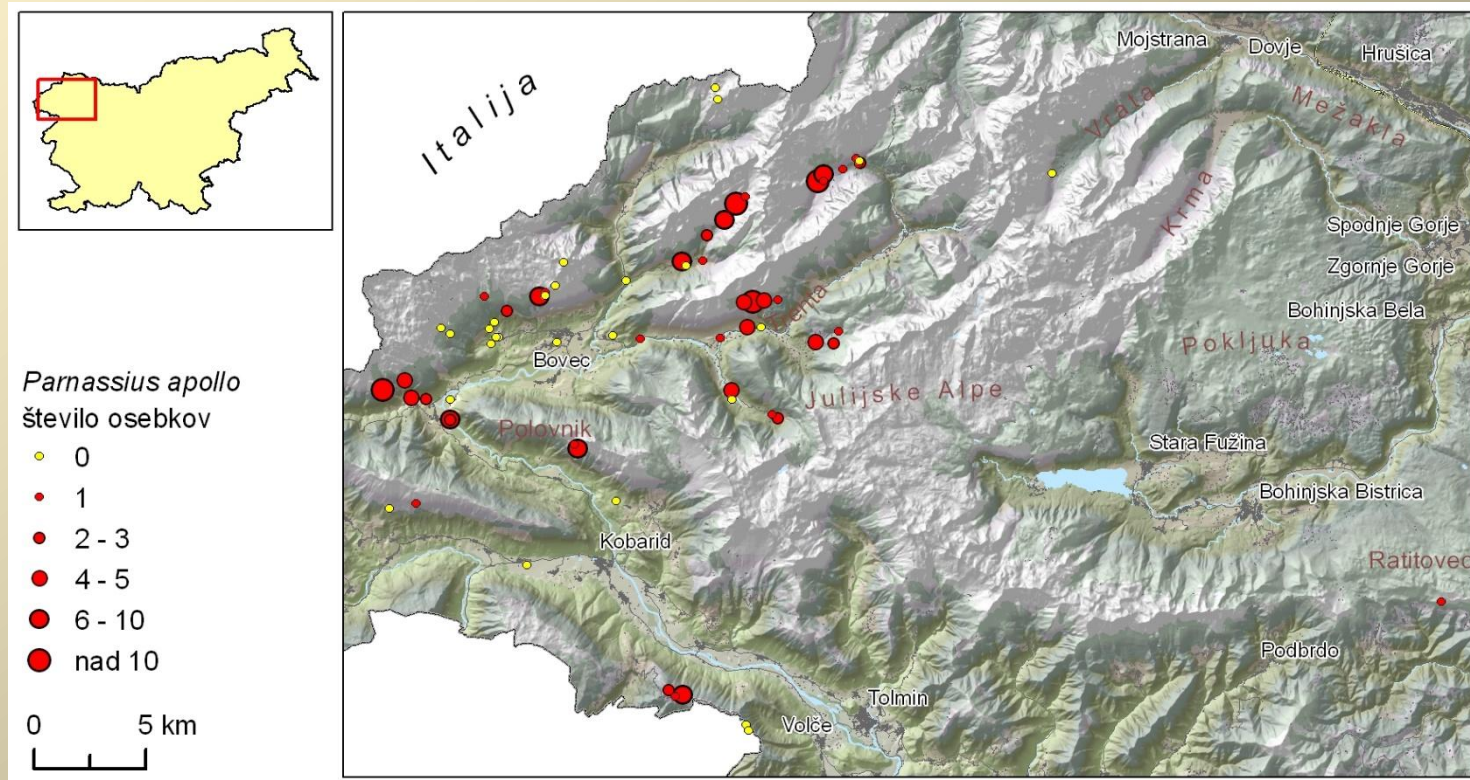


Monitoring izolovanih populacija (prisutnost)

- pregled svih poznatih nalazišta
- pojedinačna brojanja adulta na svakom lokalitetu
- beleženje negativnih promena i ugroženosti



Parnassius apollo



Julijske Alpe

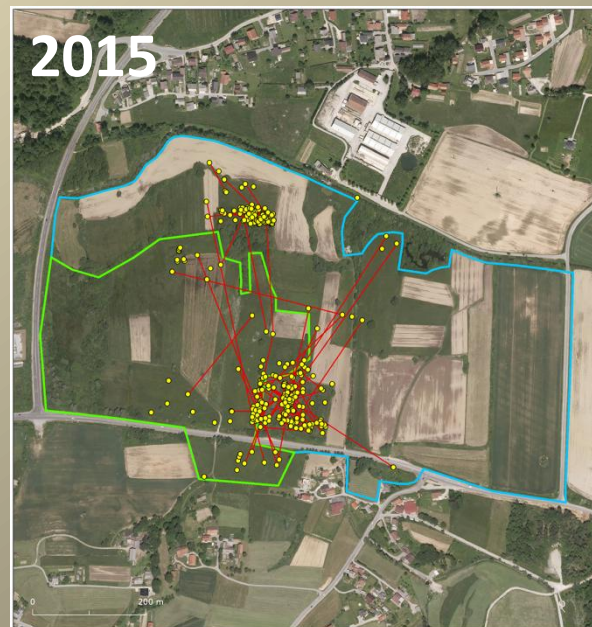
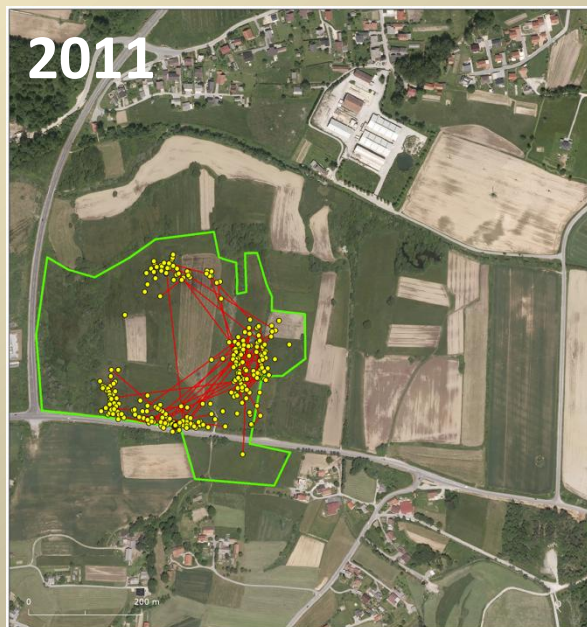
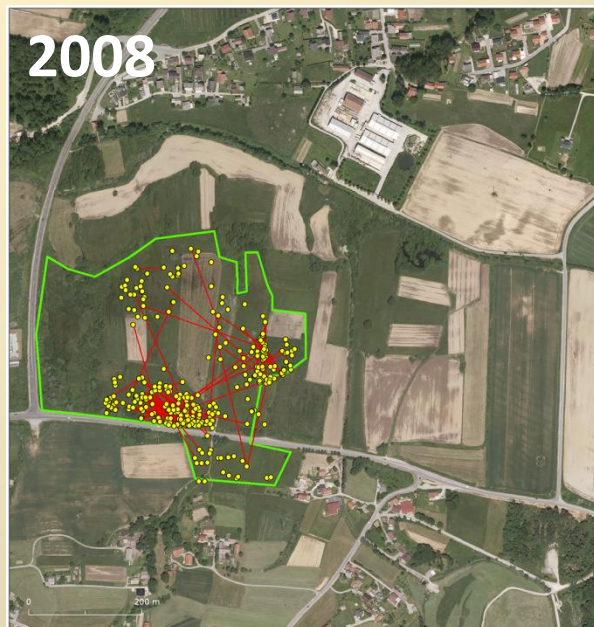
Pregled monitoringa (2007 – 2016)

Type of monitoring	populations	core areas	isolated populations	frequency
HD II.				
<i>Callimorpha quadripunctaria</i>	transects (6x)	2x	-	6 y
<i>Coenonympha oedippus</i>	MRR (2x)	3x	31	4 y
<i>Colias myrmidone</i>	-	-	6	5 y
<i>Erannis ankeraria</i>	-	1x	-	
<i>Erebia calcaria</i>	-	1x	5	5 y
<i>Eriogaster catax</i>	-	4x	14	2 y
<i>Euphydryas aurinia</i>	-	-	-	
<i>Euphydryas maturna</i>	transects (6x)	3x	35	4 y
<i>Leptidea morsei</i>	-	1x	18	3 y
<i>Lycaena dispar</i>	-	4x	96	5 y
<i>Maculinea nausithous</i>	MRR (2x)	2x	18	2 y
<i>Maculinea teleius</i>	MRR (3x)	4x	90	2 y
HD IV.				
<i>Lopinga achine</i>	-	-	-	
<i>Maculinea arion</i>	-	2x	168	3 y
<i>Parnassius apollo</i>	transects (3x)	1x	49	2 y
<i>Parnassius mnemosyne</i>	-	-	-	
<i>Proserpinus proserpina</i>	-	-	-	
<i>Zerynthia polyxena</i>	-	3x	38	5 y

Monitoring *Phengaris teleius*

MRR

Vočeke



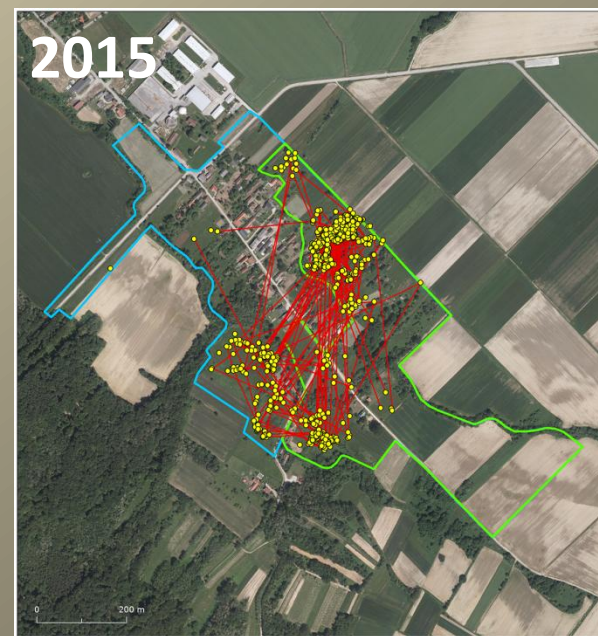
Year	Population size estimate (95 % CI)
2008	1.835 (1.476–2.336)
2011	2.777 (2.280–3.485)
2015	146 (65–312)



Monitoring *Phengaris teleius*

MRR

Motvarjevci



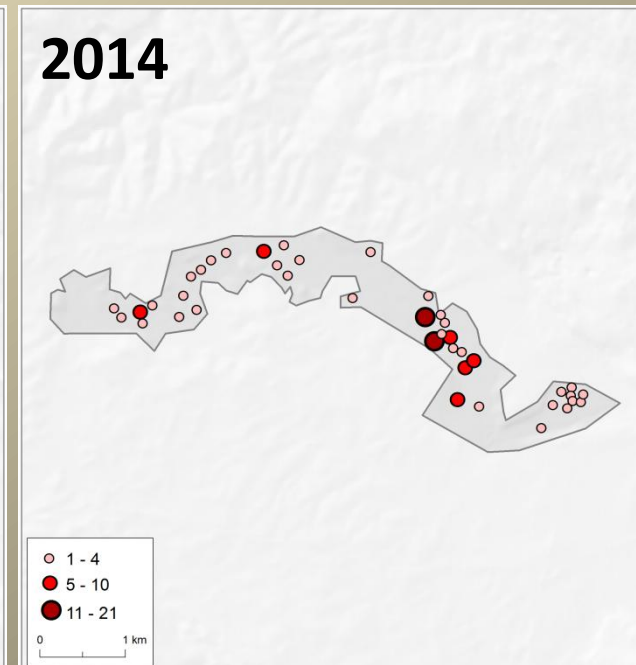
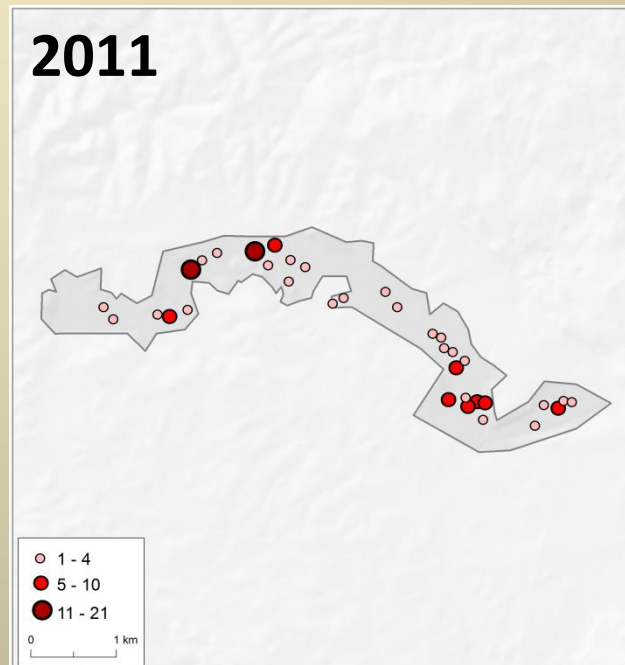
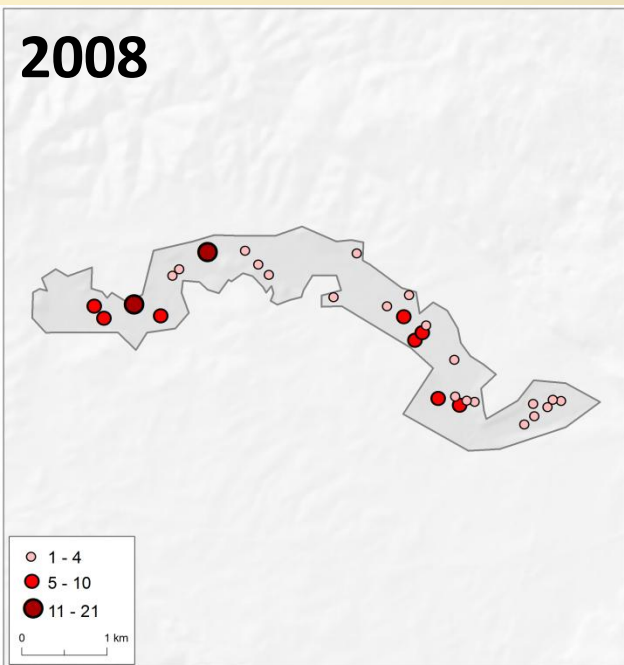
Year	Population size estimate (95 % CI)
2008	1.799 (1533–2156)
2011	1.592 (1373–1890)
2013	618 (387–998)
2015	1.268 (859–1678)



Monitoring *Phengaris teleius*

Centri distribucije

Nanošćica



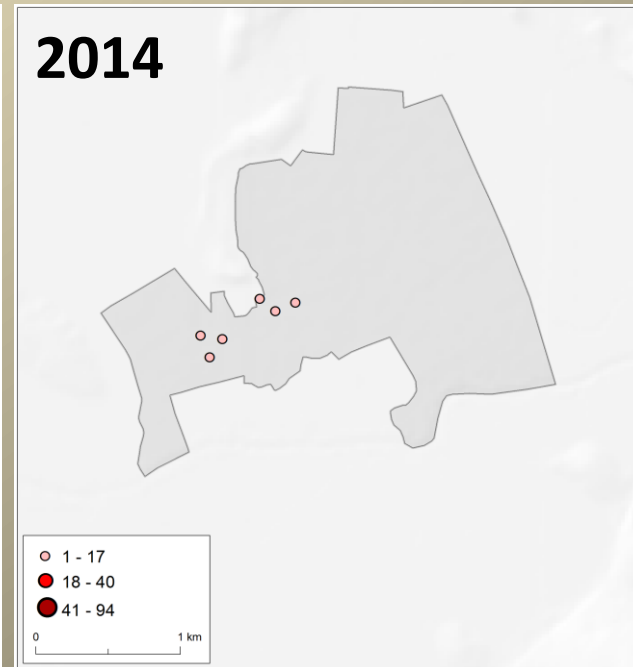
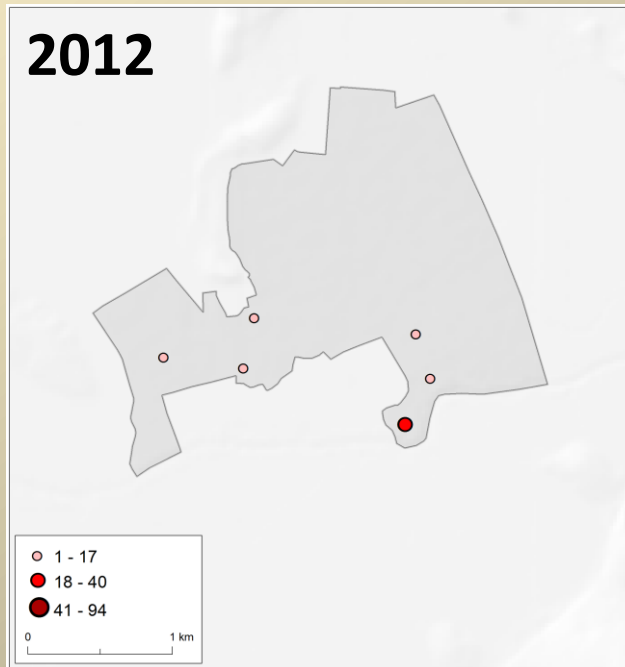
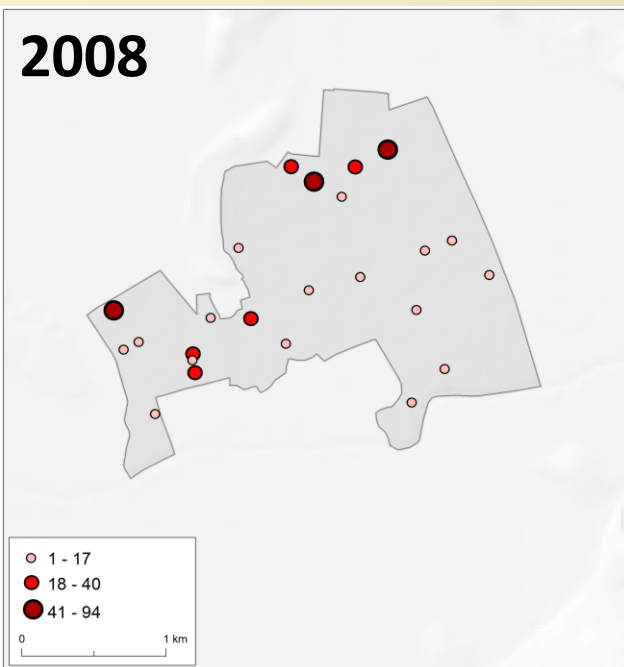
Population parameters	2008	2011	2014
No. of specimens	139	126	148
Occupied habitat (ha)	37,3	33,4	53,9
Average minimum distance between occupied patches(m)	156	202	171
Nearest neighbor index	0,67	0,77	0,75



Monitoring *Phengaris teleius*

Centri distribucije

Ljubljansko barje



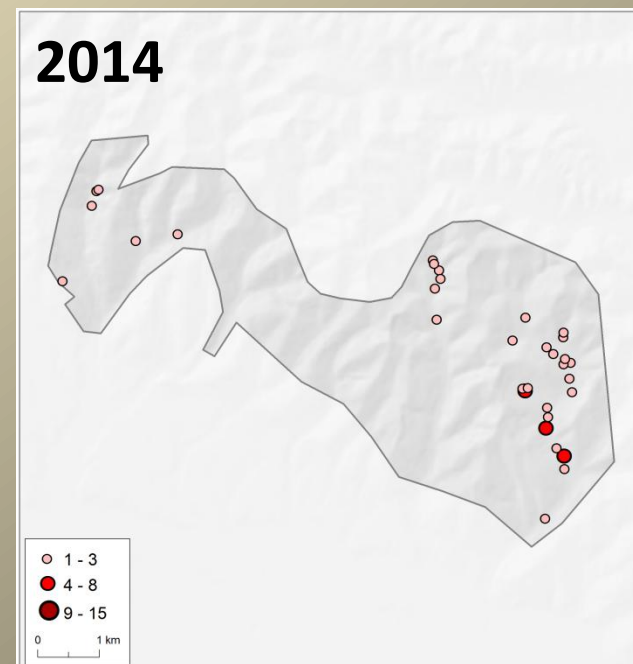
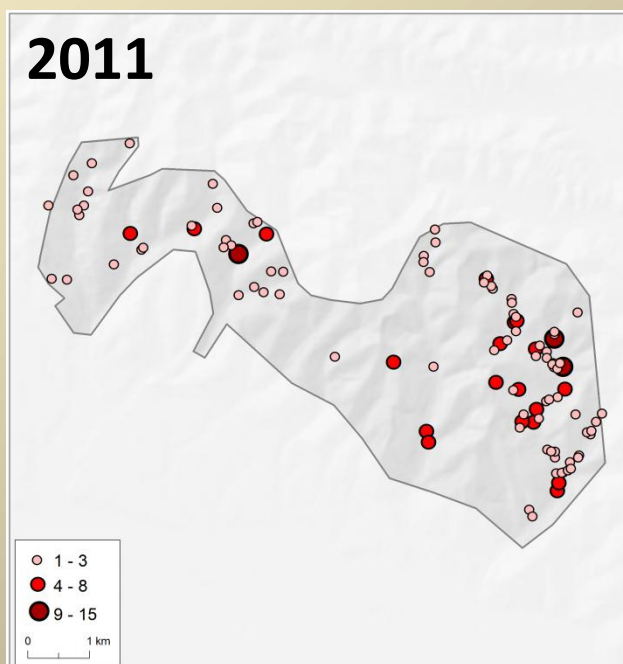
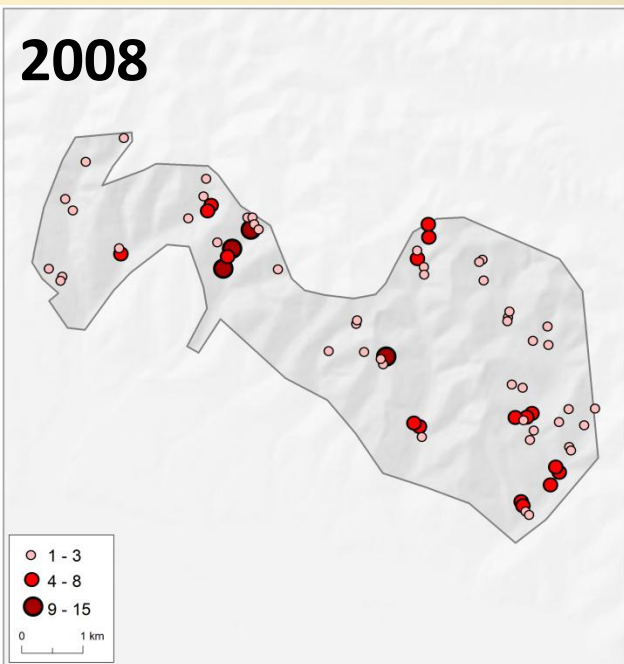
Population parameters	2008	2012	2014
No. of specimens	492	27	9
Available habitat (ha)	109,7	112,5	130,3
Occupied habitat (ha)	92	11,2	10,4
Average minimum distance between occupied patches(m)	254	375	142
Nearest neighbor index	1,24	1,73	2,15



Monitoring *Phengaris teleius*

Centri distribucije

Goričko

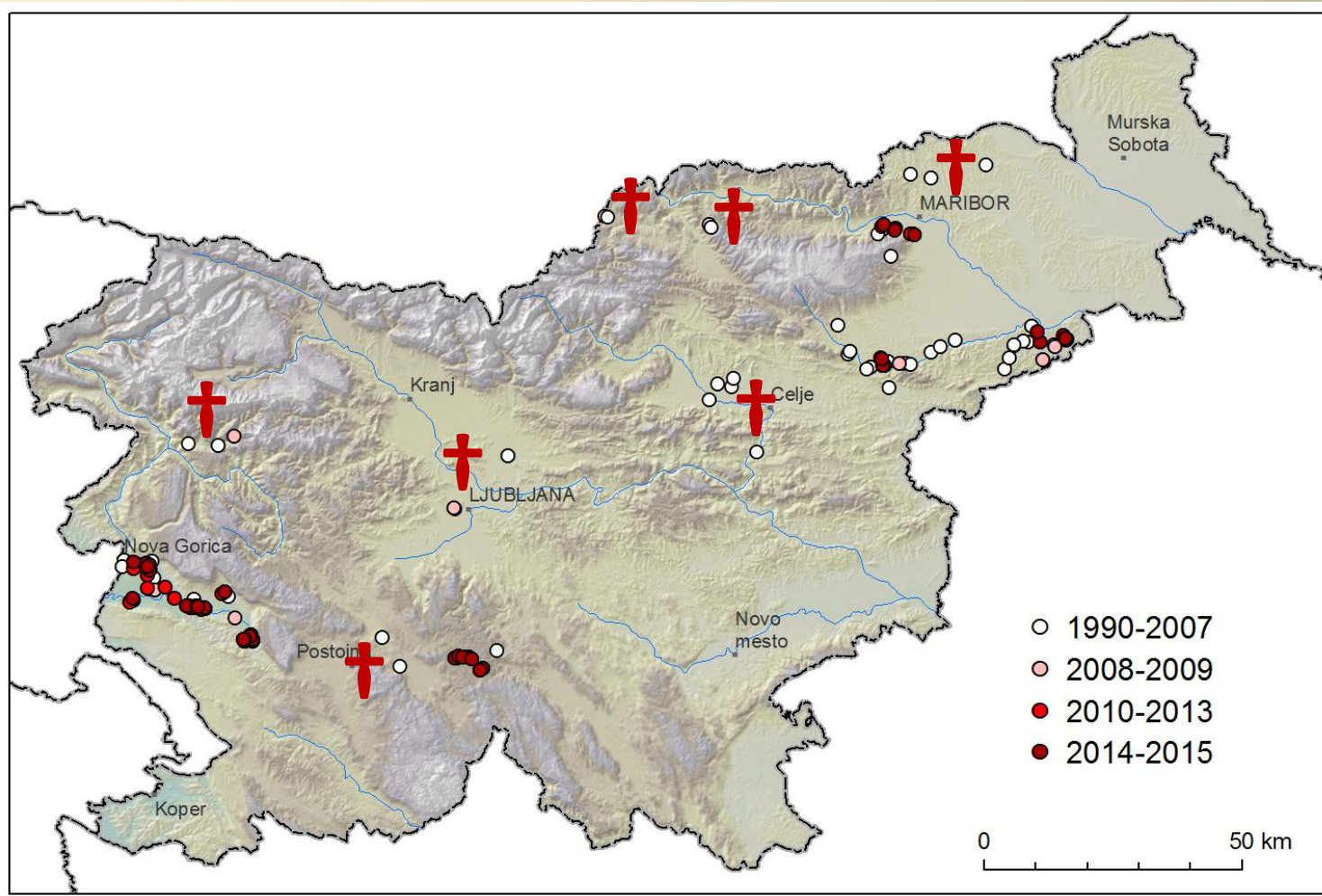


Population parameters	2008	2011	2014
No. of specimens	203	275	60
Occupied habitat (ha)	27,7	37,5	19,0
Average minimum distance between occupied patches(m)	183	158	252
Nearest neighbor index	0,54	0,56	0,56



Monitoring *Maculinea teleius*

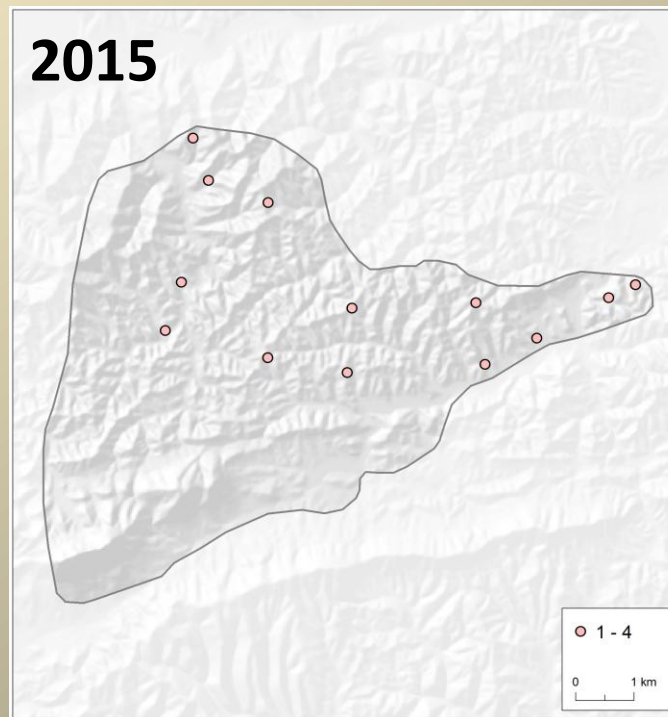
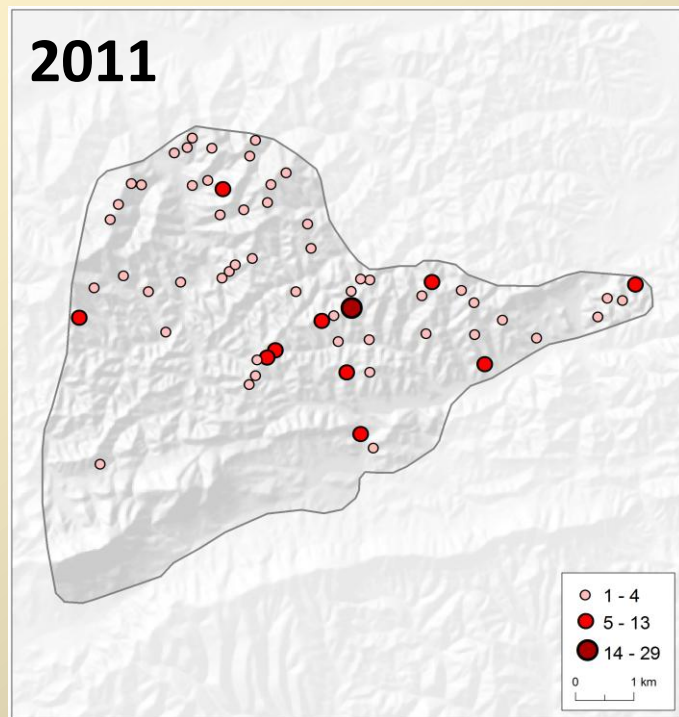
Izolovane populacije



Monitoring *Phengaris arion*

Centri distribucije

Haloze

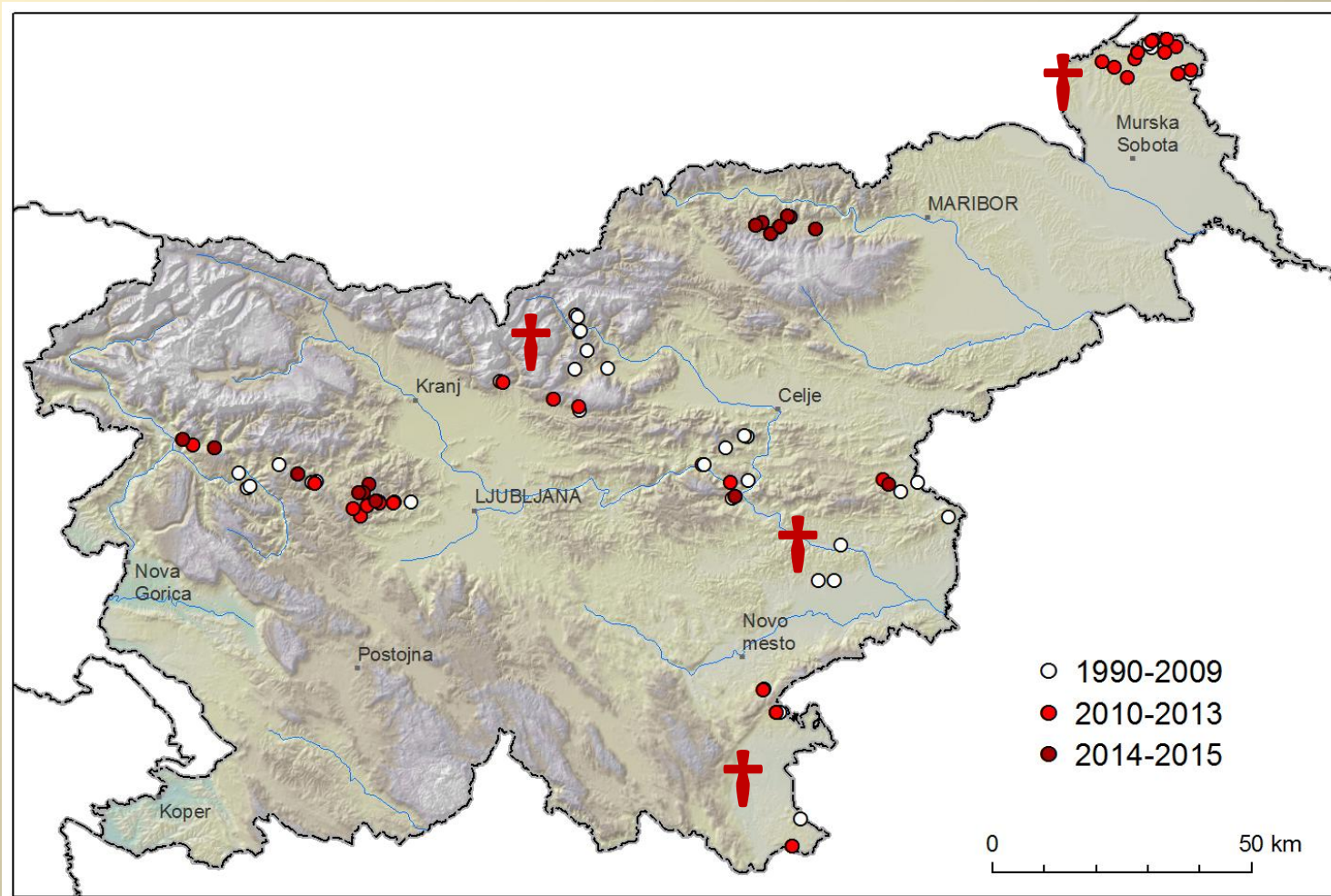


Population parameters	2011	2015
No. of specimens	190	19
Occupied habitat (%)	61,0	15,3
Average minimum distance between occupied patches(m)	378	942
Nearest neighbor index	0,83	2,21



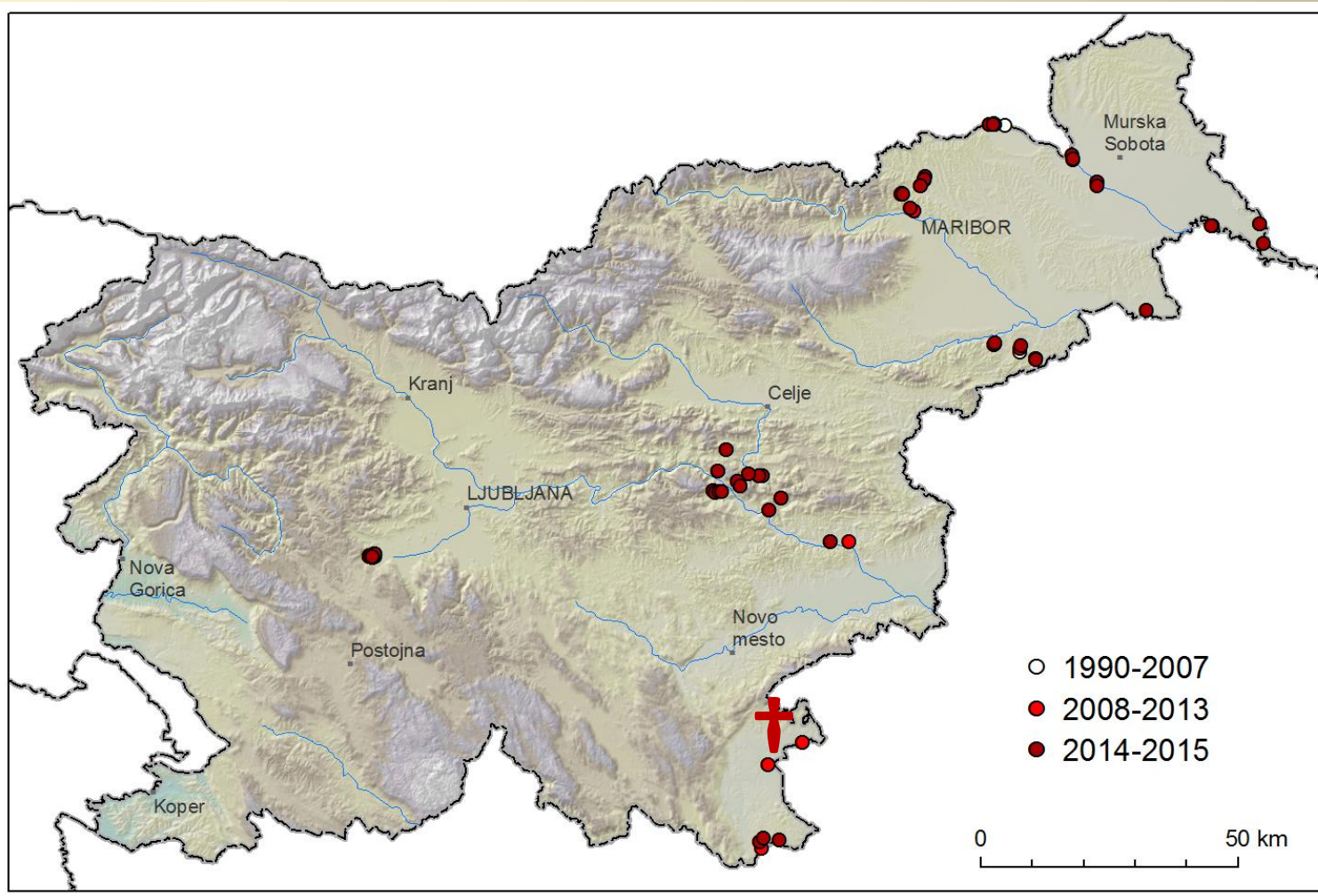
Monitoring *Phengaris arion*

Izolovane populacije



Monitoring *Zerynthia polyxena*

Izolovane populacije



PREGLED REZULTATA

	population trend	area of occupancy	habitat quality
<i>Coenonympha oedippus</i>	decline	decline	decline
<i>Euphdryas maturna</i>	poss. decline	poss. decline	poss. decline
<i>Eriogaster catax</i>	insuff. data	insuff. data	poss. stabile
<i>Leptidea morsei</i>	poss. decline	poss. decline	poss. stabile
<i>Maculinea nausithous</i>	poss. decline	decline	decline
<i>Maculinea teleius</i>	poss. decline	decline	poss. decline
<i>Maculinea arion</i>	poss. decline	poss. decline	poss. decline
<i>Parnassius apollo</i>	poss. decline	poss. decline	decline
<i>Zerynthia polyxena</i>	increase	poss. stabile	poss. stabile



ZAKLJUČCI

- **Natura 2000 obuhvata sva glavna područja distribucije HD vrsta u Sloveniji**
- **Veliki deo površina Natura 2000 su velika područja za zaštitu zveri, ili područja pod zaštitom na nacionalnom nivou**
- **Monitoring pokazuje drastično opadanje HD vrsta u svim grupama, ali naročito za vrste vezane na travnata staništa**
- **Velik nedostatak upravljanja Natura 2000 područjima**



HVALA!