

Living Planet Index in Belgium: results and discussion. 2019-11-29

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Methodology

Birds trends

We calculated 3 regional trends with shell-rtrim. These trends were combined with the tool RSWAN. This tool needs an estimation of the population in each region to weight the indices of each region. The best estimations for the 3 regions were calculated in 2010 for the Article 12 rattachement.

Habitat assignment species

For all species included in the LPI calculations, we extracted the biotope classification from the validated Flemish Red List (*i.e. which used quantitative criteria and a representative sample of occurrences across all ecological regions in Flanders for red list assessment*). The biotope given in the database is based on broad biotope classifications used in the land use map of Flanders (Gobin et al. 2009) and in Corine Land Cover (Version 18.5.1) or Natura2000 habitats (Council Directive 92/43/EEC). We classified biotopes into the different types of habitats to be used for the LPI according to the following cross-walk table:

Biotope (Flemish List)	Habitat (LPR)
Agriculture	Agriculture
Dunes	NA
Eurytopic	No habitat
Grasslands	Nature open land
Heathlands	Nature open land
Marine	NA
Marshes	Wetland
Running Waters	Wetland
Salt Marshes	Wetland
Shrubs	Woodland
Standing Waters	Wetland
Woodlands	Woodland

Because this list is based on the preferred biotope in which the species occurs in Flanders only and may occur in different habitats in Wallonia and because some species were not assigned a biotope (mainly for species that do not occur in Flanders), we asked experts from Wallonia, Flanders and Brussels to review the list and propose alternatives if they disagreed with the Habitat assigned. When experts estimated that a species occurred in more than one habitats, we assigned the species to 'eurytopic'.

For species associated with Grassland biotope in the Flemish red list (birds, butterflies and grasshoppers) a specific procedure per taxonomic group was followed in order to determine whether the species pertains more to 'intensive grassland' - that would fall under Agriculture LPI - and 'extensive grassland' that would fall under Nature open Land:

- For Birds - follow European classification of agri. Birds
- For Butterflies: follow the Eu butterfly indicators for grassland species
--> The ones classified as 'widespread' --> Assign to eurytopic

- > The ones 'specialist' --> Assign to Nature open Land
- > Unclassified --> assume it is not widespread --> Nature Open Land
- For grasshoppers: Ask the species specialists whether more “extensive grassland” or “intensive grassland species”.

Hot/Cold assignment species

The assignment to hot/cold group was performed for bird, dragonfly and butterfly species for which the STI (Standardized Temperature Index) was available in Europe. We calculated the 25% and 75% quartiles STI per taxonomic group (Butterflies, Dragonflies and Birds) then classified species as cold when their STI < 25% quartile of group STI and as hot when their STI > 75% quartile of the group STI.

Multi-species groups

We used MSI tools to create multi-species indices. This tool calculate a geometric mean of the indices of each species and combine the standard errors of each trend to give a standard error of the trend for the group.

You will find more information about the tools on <https://pecbms.info/methods/>

Correlation

We made a correlation test between the slope and the number of square for each species to check if the rarest species had a more important trend than the common.

In Belgium, the Pearson's correlation is very weak ($r = -0,06802542$, $p\text{-value} = 0,3361$)

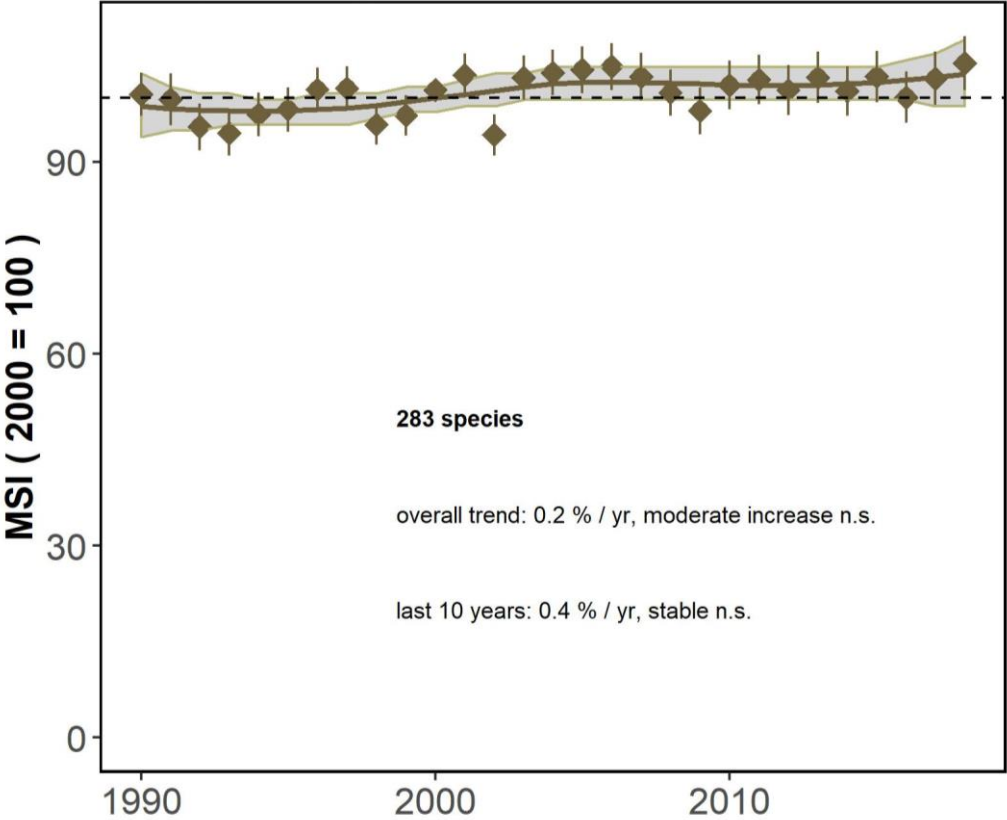
In Wallonia, the Pearson's correlation is very weak ($r = -0,06855671$, $p\text{-value} = 0,2793$)

In Flanders, the Pearson's correlation is very weak ($r = -0,0297099$, $p\text{-value} = 0,4909$)

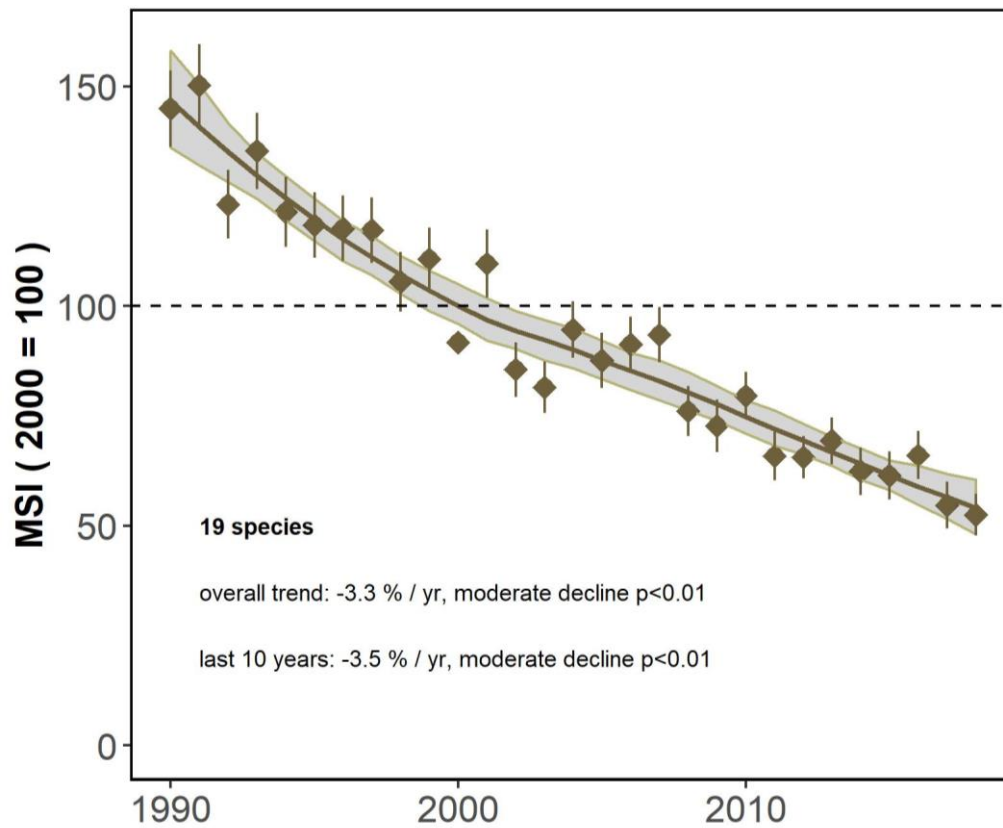
Results for Belgium

Global LPI

The global LPI regroups the trends of 283 species in Belgium. The global slope, the trend, and the p-value are precised for the long term and the last 10 years.

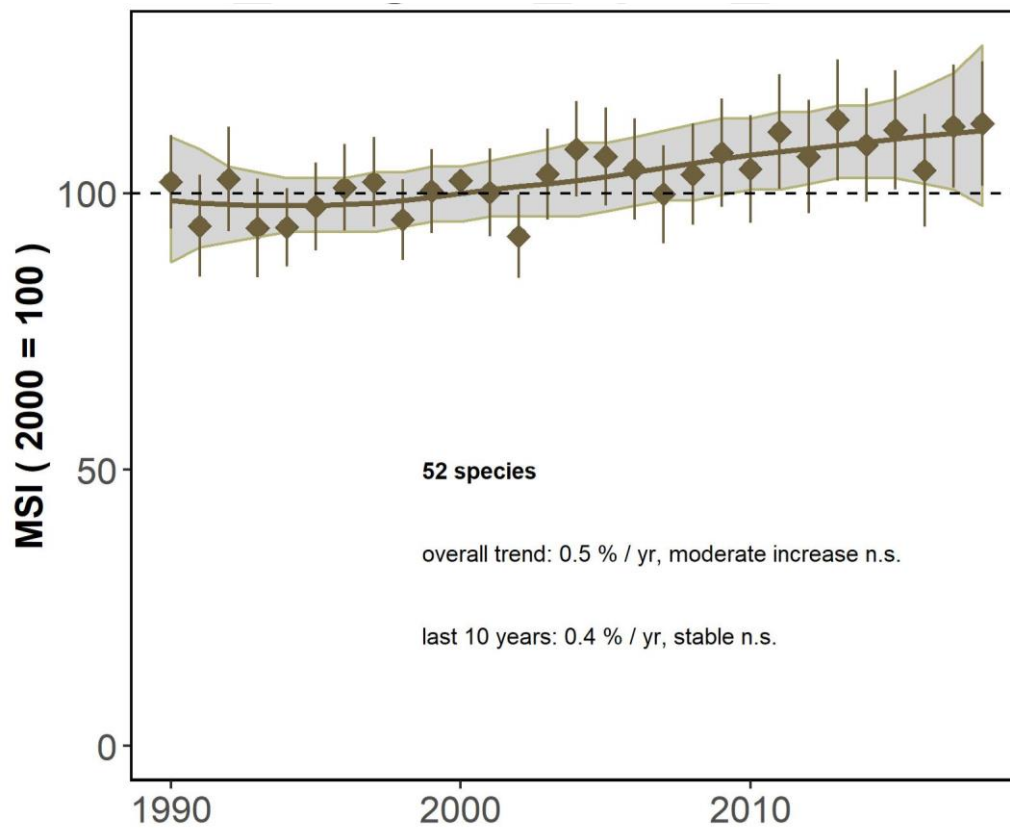


Species of agricultural lands



tax	group_tax	trend	from	to	category	methodo	n_square	slope	se_slope
Falco tinnunculus	BIR	stable	1990	2018	NA	TRIM	NA	100,70%	0,627
Perdix perdix	BIR	decrease	1990	2018	NA	TRIM	NA	93,45%	0,919
Phasianus colchicus	BIR	increase	1990	2018	NA	TRIM	NA	101,60%	0,251
Vanellus vanellus	BIR	decrease	1990	2018	NA	TRIM	NA	96,31%	0,635
Limosa limosa	BIR	decrease	2007	2018	NA	TRIM	72	90,32%	1,956
Tringa totanus	BIR	decrease	2007	2018	NA	TRIM	37	88,64%	4,553
Streptopelia turtur	BIR	decrease	1990	2018	NA	TRIM	NA	90,15%	0,749
Alauda arvensis	BIR	decrease	1990	2018	NA	TRIM	NA	96,20%	0,176
Hirundo rustica	BIR	decrease	1990	2018	NA	TRIM	NA	97,06%	0,305
Anthus pratensis	BIR	decrease	1990	2018	NA	TRIM	NA	93,93%	0,510
Motacilla flava	BIR	decrease	1990	2018	NA	TRIM	NA	99,08%	0,439
Saxicola torquatus	BIR	increase	1990	2018	NA	TRIM	NA	107,08%	0,756
Sylvia communis	BIR	increase	1990	2018	NA	TRIM	NA	100,78%	0,239
Lanius collurio	BIR	increase	1990	2018	NA	TRIM	319	103,10%	0,774
Sturnus vulgaris	BIR	decrease	1990	2018	NA	TRIM	NA	96,83%	0,266
Passer montanus	BIR	decrease	1990	2018	NA	TRIM	NA	94,63%	0,643
Carduelis cannabina	BIR	decrease	1990	2018	NA	TRIM	NA	97,84%	0,296
Emberiza citrinella	BIR	decrease	1990	2018	NA	TRIM	NA	98,22%	0,201
Miliaria calandra	BIR	decrease	1990	2018	NA	TRIM	NA	86,88%	1,053

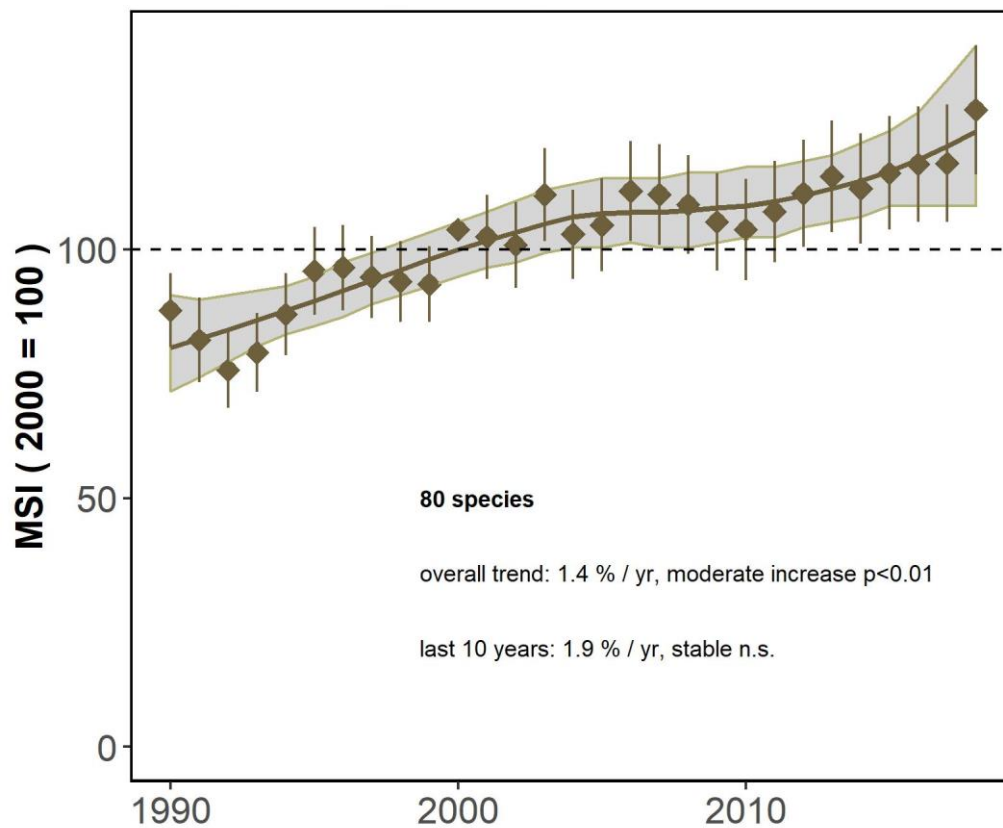
Species of natural open habitats



code	tax	group_tax	trend	from	to	category	methodo	n_square	slope	se_slope
14	Coronella austriaca	REP	increase	1996	2018	NA	SOM	624	100,64%	0,299
27	Lacerta agilis	REP	stable	1996	2018	NA	SOM	106	99,32%	0,692
58	Rana arvalis	AMF	increase	1990	2018	NA	SOM	236	104,05%	2,024
9740	Lullula arborea	BIR	uncertain	1990	2018	NA	TRIM	NA	98,13%	2,346
10090	Anthus trivialis	BIR	decrease	1990	2018	NA	TRIM	NA	98,99%	0,291
1681181	Tetrix tenuicornis	SPR	stable	1994	2018	NA	SOM	185	100,06%	1,076
1683067	Conocephalus fuscus	SPR	increase	1994	2018	NA	SOM	3188	104,16%	0,495
1685298	Platycleis albopunctata	SPR	stable	1994	2018	NA	SOM	146	99,98%	0,430
1685536	Metrioptera brachyptera	SPR	stable	1994	2018	NA	SOM	388	100,22%	0,369
1686243	Phaneroptera falcata	SPR	increase	1994	2018	NA	SOM	1571	106,40%	1,244
1688020	Leptophyes punctatissima	SPR	increase	1994	2018	NA	SOM	2020	102,11%	0,557
1688979	Bicolorana bicolor	SPR	stable	1994	2018	NA	SOM	328	99,74%	0,388
1690429	Meconema meridionale	SPR	increase	1994	2018	NA	SOM	542	116,06%	4,158
1695297	Pholidoptera griseoptera	SPR	stable	1994	2018	NA	SOM	3334	100,25%	0,129
1700023	Gomphocerippus rufus	SPR	stable	1994	2018	NA	SOM	402	100,29%	0,533
1700310	Oedipoda caerulescens	SPR	increase	1994	2018	NA	SOM	1041	101,54%	0,439
1700841	Chrysochraon dispar	SPR	increase	1994	2018	NA	SOM	2027	100,87%	0,222
1701365	Myrmeleotettix maculatus	SPR	stable	1994	2018	NA	SOM	785	99,99%	0,288
1708251	Chorthippus biguttulus	SPR	increase	1994	2018	NA	SOM	3194	100,28%	0,132
1708567	Chorthippus albomarginatus	SPR	stable	1994	2018	NA	SOM	474	100,51%	0,727
1708667	Chorthippus mollis	SPR	stable	1994	2018	NA	SOM	497	100,19%	0,659
1710755	Omocestus viridulus	SPR	stable	1994	2018	NA	SOM	742	100,15%	0,215
1710802	Omocestus rufipes	SPR	stable	1994	2018	NA	SOM	451	99,83%	0,331
1710962	Stenobothrus lineatus	SPR	stable	1994	2018	NA	SOM	133	99,40%	0,630
1716462	Gryllus campestris	SPR	increase	1994	2018	NA	SOM	652	101,36%	0,486
1720967	Oecanthus pellucens	SPR	increase	1994	2018	NA	SOM	168	105,00%	2,248
1902749	Brenthis ino	VLI	increase	1990	2018	cold	SOM	1495	100,36%	0,128

1912372	Boloria aquilonaris	VLI	stable	1990	2018	cold	SOM	150	99,84%	0,726
1924097	Glaucopsyche alexis	VLI	stable	1990	2018	NA	SOM	47	100,40%	1,106
1926260	Cupido minimus	VLI	decrease	1990	2018	NA	SOM	314	98,32%	0,284
1929443	Lycaena hippothoe	VLI	decrease	1990	2018	cold	SOM	509	99,34%	0,154
1933095	Aricia agestis	VLI	increase	1990	2018	NA	SOM	3550	102,67%	0,325
1934693	Hamearis lucina	VLI	decrease	1990	2018	NA	SOM	194	97,73%	0,398
1938214	Iphiclides podalirius	VLI	decrease	1990	2018	NA	SOM	125	98,96%	0,402
1945569	Spialia sertorius	VLI	stable	1990	2018	NA	SOM	203	100,61%	0,556
4299535	Boloria eunomia	VLI	decrease	1990	2018	cold	SOM	643	99,32%	0,108
4402879	Roeseliana roeselii	SPR	increase	1994	2018	NA	SOM	1034	102,43%	0,558
4535140	Cupido argiades	VLI	increase	1990	2018	NA	SOM	313	116,78%	5,465
4535636	Lasiommata maera	VLI	stable	1990	2018	NA	SOM	157	99,98%	0,578
5134680	Erebia medusa	VLI	decrease	1990	2018	NA	SOM	275	98,63%	0,193
5138561	Plebejus argus	VLI	decrease	1990	2018	NA	SOM	405	98,99%	0,257
5139156	Cyaniris semiargus	VLI	increase	1990	2018	NA	SOM	882	101,70%	0,355
5142282	Hesperia comma	VLI	decrease	1990	2018	NA	SOM	160	97,22%	0,495
5772890	Boloria dia	VLI	stable	1990	2018	NA	SOM	121	99,58%	0,731
5882898	Lycaena tityrus	VLI	stable	1990	2018	NA	SOM	810	99,91%	0,327
7417698	Lycaena helle	VLI	decrease	1990	2018	cold	SOM	737	98,81%	0,093
7459402	Phengaris alcon	VLI	decrease	1990	2018	NA	SOM	44	97,30%	0,749
7728366	Coenonympha arcania	VLI	decrease	1990	2018	NA	SOM	549	98,62%	0,139
7854318	Melanargia galathea	VLI	stable	1990	2018	NA	SOM	1866	100,11%	0,143
8073674	Thymelicus acteon	VLI	decrease	1990	2018	NA	SOM	68	94,08%	0,744
8168644	Melitaea cinxia	VLI	increase	1990	2018	NA	SOM	238	102,40%	0,642
8176911	Hipparchia semele	VLI	decrease	1990	2018	NA	SOM	448	98,03%	0,214

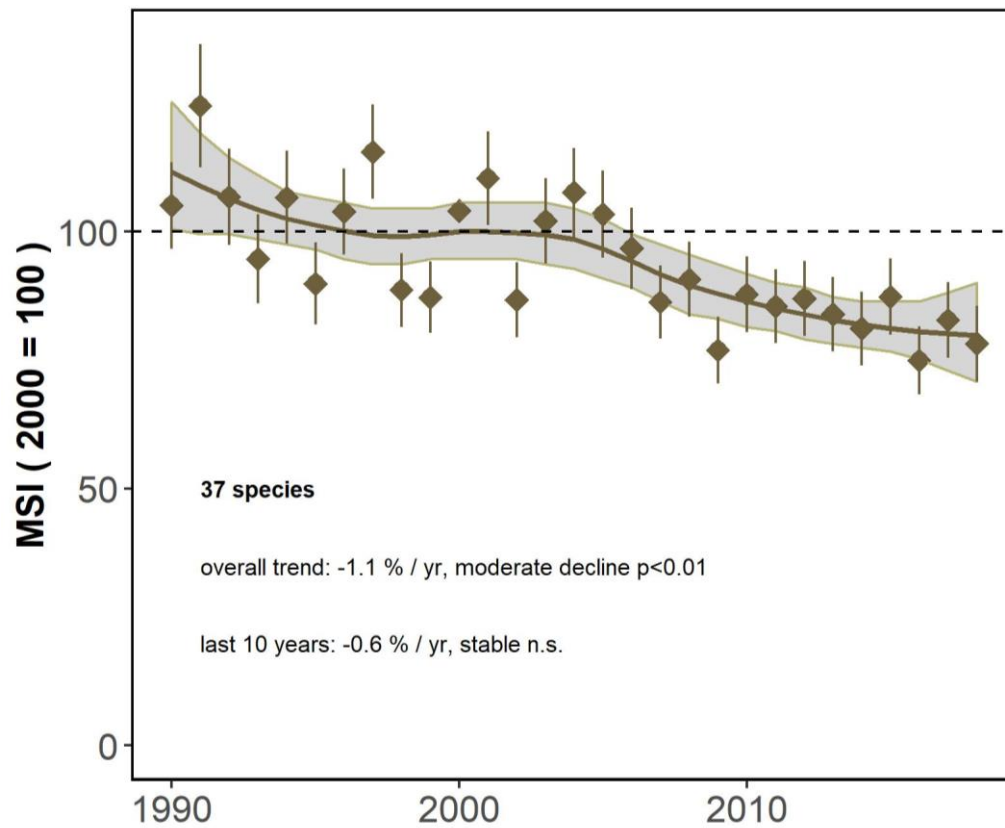
Species of wetlands



code	tax	group_tax	trend	from	to	category	methodo	n_square	slope	se_slope
23	Hyla arborea	AMF	stable	1990	2018	NA	SOM	168	100,24%	0,835
32	Lissotriton helveticus	AMF	increase	1990	2018	NA	SOM	2242	100,54%	0,199
34	Lissotriton vulgaris	AMF	increase	1990	2018	NA	SOM	3603	100,62%	0,206
72	Triturus cristatus	AMF	stable	1990	2018	NA	SOM	658	99,90%	0,272
578	Calopteryx splendens Harris, 1780	LIB	increase	1990	2018	NA	SOM	3481	101,35%	0,191
579	Calopteryx virgo Linnaeus, 1758	LIB	increase	1990	2018	NA	SOM	3293	100,94%	0,137
580	Sympecma fusca Vander Linden, 1820	LIB	increase	1990	2018	NA	SOM	1262	102,61%	0,563
581	Lestes barbarus Fabricius, 1798	LIB	increase	1990	2018	NA	SOM	534	106,07%	1,764
582	Lestes dryas Kirby, 1890	LIB	increase	1990	2018	NA	SOM	418	103,65%	0,934
583	Lestes sponsa Hansemann, 1823	LIB	stable	1990	2018	NA	SOM	1567	99,83%	0,138
584	Lestes virens Charpentier, 1825	LIB	increase	1990	2018	NA	SOM	546	108,01%	1,576
585	Chalcolestes viridis Vander Linden, 1825	LIB	increase	1990	2018	NA	SOM	3010	100,36%	0,128
587	Ischnura elegans Vander Linden, 1820	LIB	stable	1990	2018	NA	SOM	5589	99,92%	0,058
588	Ischnura pumilio Charpentier, 1825	LIB	increase	1990	2018	NA	SOM	948	105,02%	0,971
589	Pyrrhosoma nymphula Sulzer, 1776	LIB	increase	1990	2018	NA	SOM	4660	100,97%	0,152
590	Enallagma cyathigerum Charpentier, 1840	LIB	stable	1990	2018	NA	SOM	3518	99,90%	0,083
591	Coenagrion hastulatum Charpentier, 1825	LIB	stable	1990	2018	cold	SOM	81	100,03%	0,875
592	Coenagrion lunulatum Charpentier, 1840	LIB	stable	1990	2018	cold	SOM	45	98,43%	0,938
593	Coenagrion mercuriale Charpentier, 1840	LIB	increase	1990	2018	NA	SOM	62	102,88%	1,407
594	Coenagrion puella Linnaeus, 1758	LIB	increase	1990	2018	NA	SOM	5473	100,46%	0,085
595	Coenagrion pulchellum Vander Linden, 1825	LIB	stable	1990	2018	NA	SOM	399	100,24%	0,723
596	Coenagrion scitulum Rambur, 1842	LIB	increase	1990	2018	NA	SOM	749	114,24%	2,792
597	Erythromma lindenii Selys, 1840	LIB	increase	1990	2018	NA	SOM	759	102,30%	0,694
598	Erythromma najas Hansemann, 1823	LIB	increase	1990	2018	NA	SOM	1574	101,31%	0,250
599	Erythromma viridulum Charpentier, 1840	LIB	stable	1990	2018	NA	SOM	1752	100,16%	0,139
600	Ceriagrion tenellum De Villers, 1789	LIB	increase	1990	2018	hot	SOM	537	105,97%	1,334
604	Gomphus pulchellus Selys, 1840	LIB	stable	1990	2018	NA	SOM	1207	99,86%	0,234

606	Onychogomphus forcipatus Linnaeus, 1758	LIB	stable	1990	2018	NA	SOM	412	100,94%	0,580
608	Brachytron pratense Müller, 1764	LIB	increase	1990	2018	NA	SOM	539	103,65%	1,008
609	Aeshna affinis Vander Linden, 1820	LIB	uncertain	1990	2018	NA	SOM	177	103,13%	2,242
610	Aeshna cyanea Müller, 1764	LIB	increase	1990	2018	NA	SOM	4814	100,33%	0,098
611	Aeshna grandis Linnaeus, 1758	LIB	increase	1990	2018	cold	SOM	1685	100,52%	0,170
612	Aeshna juncea Linnaeus, 1758	LIB	stable	1990	2018	cold	SOM	427	100,08%	0,265
613	Aeshna mixta Latreille, 1805	LIB	increase	1990	2018	NA	SOM	3598	100,68%	0,155
614	Aeshna subarctica Walker, 1908	LIB	stable	1990	2018	cold	SOM	22	100,23%	0,970
615	Aeshna isoceles Müller, 1767	LIB	increase	1990	2018	NA	SOM	448	109,23%	2,330
616	Anax imperator Leach, 1815	LIB	increase	1990	2018	NA	SOM	5297	100,47%	0,086
617	Anax parthenope Selys, 1839	LIB	increase	1990	2018	NA	SOM	507	108,57%	2,347
619	Cordulegaster boltonii Donovan, 1807	LIB	stable	1990	2018	NA	SOM	974	99,87%	0,163
620	Cordulegaster bidentata Selys, 1843	LIB	increase	1990	2018	NA	SOM	70	103,48%	1,619
621	Cordulia aenea Linnaeus, 1758	LIB	increase	1990	2018	cold	SOM	1894	101,47%	0,230
622	Somatochlora arctica Zetterstedt, 1840	LIB	stable	1990	2018	cold	SOM	110	100,52%	0,939
623	Somatochlora flavomaculata Vander Linden, 1825	LIB	increase	1990	2018	NA	SOM	123	103,65%	1,028
624	Somatochlora metallica Vander Linden, 1825	LIB	stable	1990	2018	cold	SOM	955	99,98%	0,230
625	Oxygastra curtisii Dale, 1834	LIB	stable	1990	2018	hot	SOM	53	102,21%	1,355
626	Epithea bimaculata Charpentier, 1825	LIB	uncertain	1990	2018	cold	SOM	35	101,98%	1,616
627	Libellula depressa Linnaeus, 1758	LIB	increase	1990	2018	NA	SOM	4945	100,54%	0,126
628	Libellula fulva Müller, 1764	LIB	increase	1990	2018	NA	SOM	544	106,21%	1,242
629	Libellula quadrimaculata Linnaeus, 1758	LIB	increase	1990	2018	NA	SOM	2422	100,99%	0,156
630	Orthetrum brunneum Fonscolombe, 1837	LIB	increase	1990	2018	NA	SOM	369	102,62%	0,999
631	Orthetrum cancellatum Linnaeus, 1758	LIB	increase	1990	2018	NA	SOM	4788	100,26%	0,096
632	Orthetrum coerulescens Fabricius, 1798	LIB	increase	1990	2018	NA	SOM	712	105,68%	0,707
633	Crocothemis erythraea Brullé, 1832	LIB	increase	1990	2018	hot	SOM	1316	104,80%	0,800
634	Sympetrum danae Sulzer, 1776	LIB	decrease	1990	2018	cold	SOM	1341	98,56%	0,140
635	Sympetrum depressiusculum Selys, 1841	LIB	decrease	1990	2018	NA	SOM	61	95,78%	0,586
637	Sympetrum fonscolombii Selys, 1840	LIB	increase	1990	2018	hot	SOM	828	104,51%	1,720
638	Sympetrum meridionale Selys, 1841	LIB	increase	1990	2018	NA	SOM	126	108,85%	3,640
639	Sympetrum pedemontanum O.F.Müller, 1766	LIB	stable	1990	2018	NA	SOM	219	99,60%	0,711
640	Sympetrum sanguineum Müller, 1764	LIB	increase	1990	2018	NA	SOM	3514	100,63%	0,158
641	Sympetrum striolatum Charpentier, 1840	LIB	increase	1990	2018	NA	SOM	4265	100,89%	0,140
642	Sympetrum vulgatum Linnaeus, 1758	LIB	decrease	1990	2018	NA	SOM	1004	98,52%	0,162
643	Leucorrhinia caudalis Charpentier, 1840	LIB	uncertain	1990	2018	cold	SOM	16	102,98%	1,878
644	Leucorrhinia dubia Vander Linden, 1825	LIB	decrease	1990	2018	cold	SOM	462	99,40%	0,304
645	Leucorrhinia pectoralis Charpentier, 1825	LIB	uncertain	1990	2018	cold	SOM	282	102,79%	2,028
646	Leucorrhinia rubicunda Linnaeus, 1758	LIB	increase	1990	2018	cold	SOM	225	102,19%	1,065
1524	Platycnemis pennipes Pallas, 1771	LIB	increase	1990	2018	NA	SOM	2789	100,44%	0,115
1860	Anas platyrhynchos	BIR	increase	1990	2018	NA	TRIM	NA	101,09%	0,396
4240	Gallinula chloropus	BIR	decrease	1990	2018	NA	TRIM	NA	98,04%	0,624
4290	Fulica atra	BIR	uncertain	1990	2018	NA	TRIM	NA	103,32%	1,823
10190	Motacilla cinerea	BIR	stable	1990	2018	NA	TRIM	NA	99,93%	0,950
11060	Luscinia svecica	BIR	increase	1990	2018	NA	TRIM	NA	116,50%	3,861
12200	Cettia cetti	BIR	stable	1990	2018	hot	TRIM	NA	101,41%	1,623
12430	Acrocephalus schoenobaenus	BIR	increase	1990	2018	NA	TRIM	NA	109,39%	2,730
12500	Acrocephalus palustris	BIR	decrease	1990	2018	NA	TRIM	NA	98,53%	0,645
12510	Acrocephalus scirpaceus	BIR	uncertain	1990	2018	NA	TRIM	NA	98,39%	2,331
18770	Emberiza schoeniclus	BIR	decrease	1990	2018	NA	TRIM	NA	95,04%	1,043
1681054	Tetrix ceperoi	SPR	increase	1994	2018	NA	SOM	215	107,61%	2,893
1683331	Conocephalus dorsalis	SPR	decrease	1994	2018	NA	SOM	1361	99,57%	0,209
1711091	Stethophyma grossum	SPR	increase	1994	2018	NA	SOM	1168	102,03%	0,592
8423289	Pseudochorthippus montanus	SPR	stable	1994	2018	NA	SOM	147	100,42%	0,947

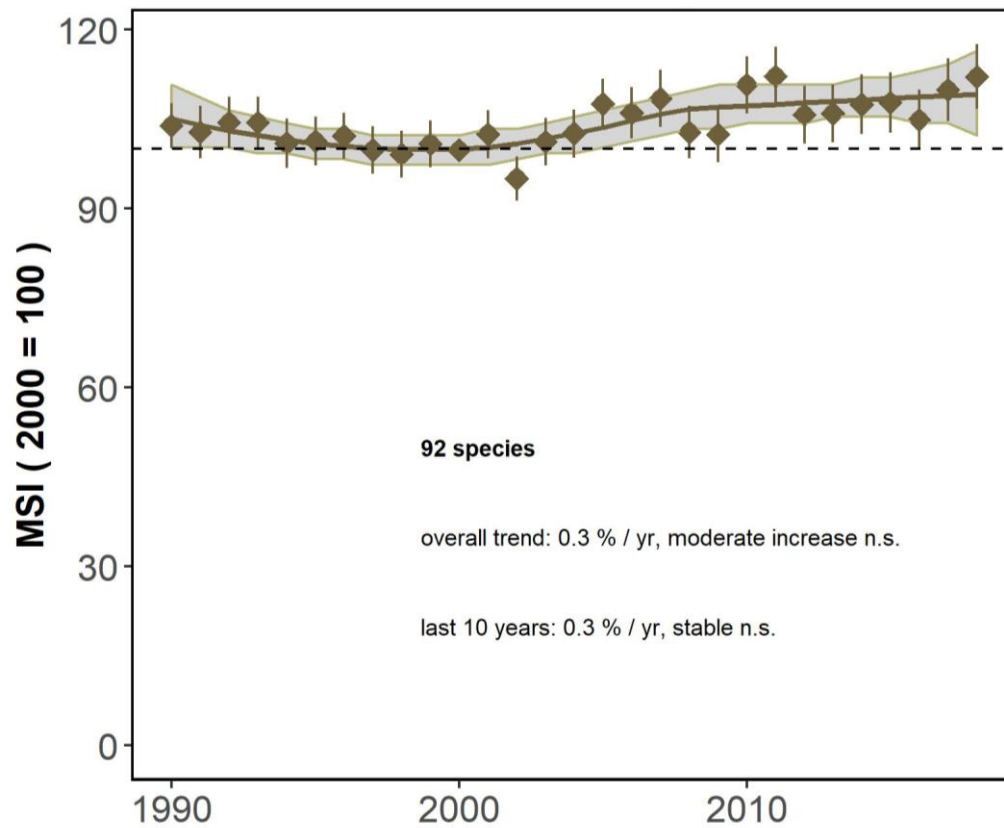
Species of woodlands



code	tax	group_tax	trend	from	to	category	methodo	n_square	slope	se_slope
64	Salamandra salamandra	AMF	stable	1990	2018	NA	SOM	1225	100,38%	0,433
389	Sciurus vulgaris Linnaeus 1758	ZOG	increase	2008	2018	NA	SOM	7062	101,04%	0,306
2690	Accipiter nisus	BIR	decrease	1990	2018	NA	TRIM	NA	96,98%	1,074
8630	Dryocopus martius	BIR	stable	1990	2018	NA	TRIM	NA	99,09%	0,731
8830	Dendrocopos medius	BIR	increase	1990	2018	NA	TRIM	NA	103,37%	0,684
8870	Dendrocopos minor	BIR	stable	1990	2018	NA	TRIM	NA	100,92%	1,060
11980	Turdus pilaris	BIR	decrease	1990	2018	NA	TRIM	737	91,83%	0,917
12020	Turdus viscivorus	BIR	decrease	1990	2018	NA	TRIM	NA	98,93%	0,312
12760	Sylvia borin	BIR	decrease	1990	2018	NA	TRIM	NA	97,03%	0,212
13080	Phylloscopus sibilatrix	BIR	decrease	1990	2018	NA	TRIM	NA	98,16%	0,299
13140	Regulus regulus	BIR	decrease	1990	2018	NA	TRIM	NA	96,98%	0,349
13150	Regulus ignicapilla	BIR	increase	1990	2018	NA	TRIM	NA	101,22%	0,392
13350	Muscicapa striata	BIR	stable	1990	2018	NA	TRIM	NA	98,30%	1,062
14370	Aegithalos caudatus	BIR	decrease	1990	2018	NA	TRIM	NA	97,96%	0,569
14400	Poecile palustris	BIR	decrease	1990	2018	NA	TRIM	NA	97,58%	0,316
14420	Poecile montanus	BIR	decrease	1990	2018	NA	TRIM	NA	96,56%	0,600
14540	Lophophanes cristatus	BIR	decrease	1990	2018	NA	TRIM	NA	96,94%	0,515
14610	Periparus ater	BIR	decrease	1990	2018	NA	TRIM	NA	97,34%	0,325
14790	Sitta europaea	BIR	stable	1990	2018	NA	TRIM	NA	99,77%	0,154
14860	Certhia familiaris	BIR	increase	1990	2018	NA	TRIM	246	102,72%	0,995
14870	Certhia brachydactyla	BIR	decrease	1990	2018	NA	TRIM	NA	99,31%	0,228
15080	Oriolus oriolus	BIR	decrease	1990	2018	NA	TRIM	NA	95,20%	0,998
15390	Garrulus glandarius	BIR	decrease	1990	2018	NA	TRIM	NA	98,45%	0,202
16540	Carduelis spinus	BIR	decrease	1990	2018	NA	TRIM	285	93,61%	1,532
16660	Loxia curvirostra	BIR	decrease	1990	2018	NA	TRIM	NA	97,47%	1,096
17100	Pyrrhula pyrrhula	BIR	stable	1990	2018	NA	TRIM	NA	99,71%	0,677
17170	Coccothraustes coccothraustes	BIR	increase	1990	2018	NA	TRIM	NA	100,85%	0,355

1690432	Meconema thalassinum	SPR	increase	1994	2018	NA	SOM	1464	100,63%	0,311
1722903	Nemobius sylvestris	SPR	increase	1994	2018	NA	SOM	1032	101,26%	0,333
1909398	Argynnis paphia	VLI	increase	1990	2018	NA	SOM	3221	100,86%	0,318
1929659	Lycaena virgaureae	VLI	decrease	1990	2018	cold	SOM	46	95,76%	1,082
4535180	Favonius quercus	VLI	increase	1990	2018	NA	SOM	2536	101,21%	0,253
5131910	Apatura iris	VLI	increase	1990	2018	NA	SOM	1702	100,79%	0,212
5772893	Boloria euphrosyne	VLI	stable	1990	2018	cold	SOM	199	100,00%	0,513
5882965	Satyrium w-album	VLI	increase	1990	2018	NA	SOM	478	106,79%	2,267
8138711	Apatura ilia	VLI	increase	1990	2018	NA	SOM	529	102,39%	0,955
8429428	Limenitis camilla	VLI	increase	1990	2018	NA	SOM	2056	101,35%	0,215

Eurytopic species

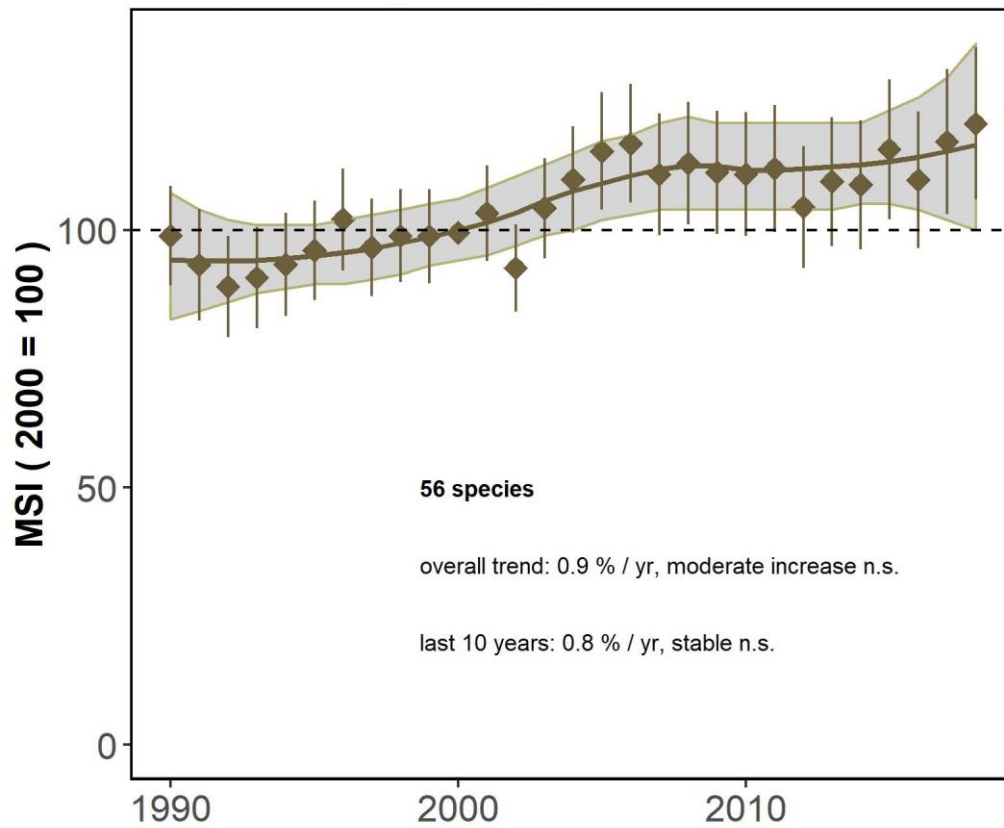


code	tax	group_tax	trend	from	to	category	methodo	n_square	slope	se_slope
1	Alytes obstetricans	AMF	decrease	1990	2018	NA	SOM	902	98,93%	0,153
8	Bufo bufo	AMF	increase	1990	2018	NA	SOM	6439	100,77%	0,180
20	Epidalea calamita	AMF	decrease	1990	2018	NA	SOM	661	99,52%	0,142
25	Ichthyosaura alpestris	AMF	increase	1990	2018	NA	SOM	4834	100,58%	0,182
38	Natrix helvetica	REP	increase	1996	2018	NA	SOM	1187	100,51%	0,235
49	Podarcis muralis	REP	increase	1996	2018	NA	SOM	898	100,36%	0,166
60	Rana esculenta	AMF	increase	1990	2018	NA	SOM	2762	101,49%	0,351
62	Rana temporaria	AMF	increase	1990	2018	NA	SOM	6840	100,74%	0,134
75	Vipera berus	REP	decrease	1996	2018	NA	SOM	172	98,42%	0,305
79	Zootoca vivipara	REP	increase	1996	2018	NA	SOM	3813	100,50%	0,109
409	Oryctolagus cuniculus (Linnaeus 1758)	ZOG	decrease	2008	2018	NA	SOM	5033	99,17%	0,276
418	Capreolus capreolus (Linnaeus 1758)	ZOG	increase	2008	2018	NA	SOM	9841	102,92%	0,278
2870	Buteo buteo	BIR	stable	1990	2018	NA	TRIM	NA	100,06%	0,277
4500	Haematopus ostralegus	BIR	stable	2007	2018	NA	TRIM	302	99,96%	1,007
6680	Columba oenas	BIR	decrease	1990	2018	NA	TRIM	NA	98,91%	0,455
6700	Columba palumbus	BIR	increase	1990	2018	NA	TRIM	NA	100,65%	0,120
6840	Streptopelia decaocto	BIR	stable	1990	2018	NA	TRIM	NA	99,98%	0,275
7240	Cuculus canorus	BIR	decrease	1990	2018	NA	TRIM	NA	95,81%	0,269
8560	Picus viridis	BIR	increase	1990	2018	NA	TRIM	NA	100,82%	0,327
8760	Dendrocopos major	BIR	decrease	1990	2018	NA	TRIM	NA	99,37%	0,168
10200	Motacilla alba	BIR	decrease	1990	2018	NA	TRIM	NA	98,80%	0,309
10660	Trogodytes troglodytes	BIR	decrease	1990	2018	NA	TRIM	NA	99,31%	0,096
10840	Prunella modularis	BIR	decrease	1990	2018	NA	TRIM	NA	99,06%	0,200
10990	Erithacus rubecula	BIR	decrease	1990	2018	NA	TRIM	NA	98,62%	0,115
11040	Luscinia megarhynchos	BIR	stable	1990	2018	NA	TRIM	NA	99,67%	0,624
11220	Phoenicurus phoenicurus	BIR	stable	1990	2018	NA	TRIM	NA	99,39%	0,656
11870	Turdus merula	BIR	decrease	1990	2018	NA	TRIM	NA	99,67%	0,084

12000	Turdus philomelos	BIR	increase	1990	2018	NA	TRIM	NA	100,39%	0,147
12360	Locustella naevia	BIR	increase	1990	2018	NA	TRIM	NA	102,65%	0,943
12590	Hippolais icterina	BIR	decrease	1990	2018	NA	TRIM	NA	93,46%	1,894
12600	Hippolais polyglotta	BIR	increase	1990	2018	hot	TRIM	161	106,24%	1,519
12740	Sylvia curruca	BIR	stable	1990	2018	NA	TRIM	NA	100,94%	0,471
12770	Sylvia atricapilla	BIR	increase	1990	2018	NA	TRIM	NA	100,47%	0,092
13110	Phylloscopus collybita	BIR	decrease	1990	2018	NA	TRIM	NA	98,64%	0,091
13120	Phylloscopus trochilus	BIR	decrease	1990	2018	NA	TRIM	NA	96,83%	0,225
13490	Ficedula hypoleuca	BIR	uncertain	1990	2018	NA	TRIM	NA	103,59%	3,365
14620	Cyanistes caeruleus	BIR	increase	1990	2018	NA	TRIM	NA	100,39%	0,157
14640	Parus major	BIR	decrease	1990	2018	NA	TRIM	NA	99,47%	0,108
15490	Pica pica	BIR	stable	1990	2018	NA	TRIM	NA	99,85%	0,235
15600	Corvus monedula	BIR	stable	1990	2018	NA	TRIM	NA	100,40%	0,465
15670	Corvus corone	BIR	decrease	1990	2018	NA	TRIM	NA	98,42%	0,141
16360	Fringilla coelebs	BIR	decrease	1990	2018	NA	TRIM	NA	99,48%	0,082
16400	Serinus serinus	BIR	decrease	1990	2018	NA	TRIM	47	92,16%	2,912
16490	Carduelis chloris	BIR	stable	1990	2018	NA	TRIM	NA	100,09%	0,388
16530	Carduelis carduelis	BIR	stable	1990	2018	NA	TRIM	NA	101,10%	0,859
1681124	Tetrix subulata	SPR	stable	1994	2018	NA	SOM	868	100,86%	0,656
1681247	Tetrix undulata	SPR	stable	1994	2018	NA	SOM	1026	99,84%	0,225
1692898	Tettigonia viridissima	SPR	increase	1994	2018	NA	SOM	5902	100,58%	0,131
1708459	Chorthippus brunneus	SPR	stable	1994	2018	NA	SOM	3136	99,83%	0,134
1894840	Aglais urticae	VLI	decrease	1990	2018	cold	SOM	12538	99,63%	0,077
1896841	Aphantopus hyperantus	VLI	increase	1990	2018	cold	SOM	6419	100,30%	0,072
1898286	Vanessa atalanta	VLI	increase	1990	2018	NA	SOM	14314	100,29%	0,062
1898544	Polygonia c-album	VLI	increase	1990	2018	NA	SOM	8540	100,59%	0,124
1899433	Melitaea athalia	VLI	stable	1990	2018	NA	SOM	305	100,27%	0,360
1902533	Araschnia levana	VLI	decrease	1990	2018	NA	SOM	7655	99,83%	0,060
1902791	Brenthis daphne	VLI	increase	1990	2018	NA	SOM	906	129,61%	6,096
1905383	Issoria lathonia	VLI	increase	1990	2018	NA	SOM	1662	103,41%	0,586
1911461	Coenonympha pamphilus	VLI	increase	1990	2018	NA	SOM	3666	100,31%	0,120
1912325	Boloria selene	VLI	stable	1990	2018	cold	SOM	1273	99,84%	0,131
1919712	Anthocharis cardamines	VLI	increase	1990	2018	NA	SOM	9005	100,51%	0,084
1920218	Aporia crataegi	VLI	increase	1990	2018	NA	SOM	1713	100,41%	0,188
1920494	Pieris napi	VLI	stable	1990	2018	NA	SOM	8821	99,92%	0,063
1920496	Pieris rapae	VLI	increase	1990	2018	NA	SOM	13568	100,40%	0,075
1920506	Pieris brassicae	VLI	increase	1990	2018	NA	SOM	10466	100,48%	0,113
1920712	Gonepteryx rhamni	VLI	stable	1990	2018	NA	SOM	10333	99,87%	0,084
1925918	Celastrina argiolus	VLI	increase	1990	2018	NA	SOM	6059	101,06%	0,168
1929270	Lycaena dispar	VLI	increase	1990	2018	NA	SOM	140	107,58%	1,593
1929697	Lycaena phlaeas	VLI	stable	1990	2018	NA	SOM	6330	99,99%	0,094
1930110	Thecla betulae	VLI	stable	1990	2018	NA	SOM	847	100,36%	0,354
1932411	Callophrys rubi	VLI	decrease	1990	2018	NA	SOM	1433	99,67%	0,160
1946844	Ochlodes sylvanus	VLI	increase	1990	2018	NA	SOM	7471	100,57%	0,083
1947335	Carterocephalus palaemon	VLI	increase	1990	2018	cold	SOM	1204	100,45%	0,214
4535632	Lasiommata megera	VLI	decrease	1990	2018	NA	SOM	2699	98,73%	0,109
4535809	Euphydryx aurinia	VLI	decrease	1990	2018	NA	SOM	94	96,09%	0,364
4535827	Aglais io	VLI	stable	1990	2018	NA	SOM	9798	100,09%	0,060
5135513	Maniola jurtina	VLI	increase	1990	2018	NA	SOM	11579	100,54%	0,058
5137903	Leptidea sinapis	VLI	stable	1990	2018	NA	SOM	925	100,27%	0,178
5140214	Polyommatus icarus	VLI	increase	1990	2018	NA	SOM	7699	100,34%	0,093
5882969	Satyrium ilicis	VLI	decrease	1990	2018	NA	SOM	289	98,90%	0,483
5882980	Satyrium pruni	VLI	increase	1990	2018	NA	SOM	501	105,14%	1,563
6221746	Speyeria aglaia	VLI	stable	1990	2018	NA	SOM	484	99,88%	0,245
7622059	Pyronia tithonus	VLI	increase	1990	2018	NA	SOM	8098	100,81%	0,083
7762841	Nymphalis polychloros	VLI	increase	1990	2018	NA	SOM	1188	102,27%	0,602

7768674	Melitaea diamina	VLI	increase	1990	2018	cold	SOM	750	101,93%	0,260
7792296	Pseudochorthippus parallelus	SPR	stable	1994	2018	NA	SOM	5009	100,14%	0,099
8049830	Pararge aegeria	VLI	increase	1990	2018	NA	SOM	10024	100,32%	0,084
8109173	Pyrgus malvae	VLI	stable	1990	2018	NA	SOM	1230	99,83%	0,168
8133678	Thymelicus lineola	VLI	decrease	1990	2018	NA	SOM	4816	99,33%	0,066
8225376	Papilio machaon	VLI	stable	1990	2018	NA	SOM	5144	100,10%	0,176
8273661	Thymelicus sylvestris	VLI	stable	1990	2018	NA	SOM	2394	99,89%	0,089
8277078	Carcharodus alceae	VLI	increase	1990	2018	NA	SOM	1510	101,81%	0,781
8347376	Tettigonia cantans	SPR	stable	1994	2018	NA	SOM	283	101,50%	1,067

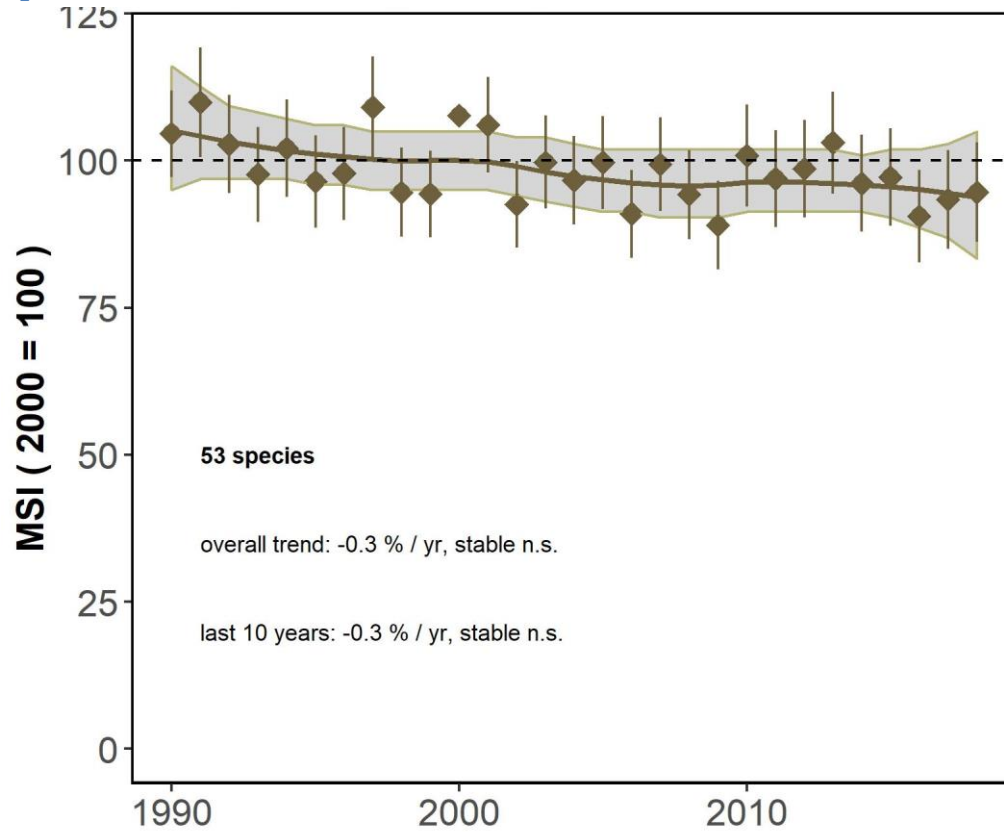
Species with STI « hot »



code	tax	group_tax	trend	from	to	habitat	methodo	n_square	slope	se_slope
580	Sympecma fusca Vander Linden, 1820	LIB	increase	1990	2018	wetlands	SOM	1262	102,61%	0,563
593	Coenagrion mercuriale Charpentier, 1840	LIB	increase	1990	2018	wetlands	SOM	62	102,88%	1,407
596	Coenagrion scitulum Rambur, 1842	LIB	increase	1990	2018	wetlands	SOM	749	114,24%	2,792
597	Erythromma lindenii Selys, 1840	LIB	increase	1990	2018	wetlands	SOM	759	102,30%	0,694
600	Ceriagrion tenellum De Villers, 1789	LIB	increase	1990	2018	wetlands	SOM	537	105,97%	1,334
604	Gomphus pulchellus Selys, 1840	LIB	stable	1990	2018	wetlands	SOM	1207	99,86%	0,234
609	Aeshna affinis Vander Linden, 1820	LIB	uncertain	1990	2018	wetlands	SOM	177	103,13%	2,242
616	Anax imperator Leach, 1815	LIB	increase	1990	2018	wetlands	SOM	5297	100,47%	0,086
617	Anax parthenope Selys, 1839	LIB	increase	1990	2018	wetlands	SOM	507	108,57%	2,347
625	Oxygastra curtisii Dale, 1834	LIB	stable	1990	2018	wetlands	SOM	53	102,21%	1,355
630	Orthetrum brunneum Fonscolombe, 1837	LIB	increase	1990	2018	wetlands	SOM	369	102,62%	0,999
632	Orthetrum coerulescens Fabricius, 1798	LIB	increase	1990	2018	wetlands	SOM	712	105,68%	0,707
633	Crocothemis erythraea Brullé, 1832	LIB	increase	1990	2018	wetlands	SOM	1316	104,80%	0,800
637	Sympetrum fonscolombii Selys, 1840	LIB	increase	1990	2018	wetlands	SOM	828	104,51%	1,720
638	Sympetrum meridionale Selys, 1841	LIB	increase	1990	2018	wetlands	SOM	126	108,85%	3,640
4240	Gallinula chloropus	BIR	decrease	1990	2018	wetlands	TRIM	NA	98,04%	0,624
4290	Fulica atra	BIR	uncertain	1990	2018	wetlands	TRIM	NA	103,32%	1,823
6840	Streptopelia decaocto	BIR	stable	1990	2018	eurytopic	TRIM	NA	99,98%	0,275
6870	Streptopelia turtur	BIR	decrease	1990	2018	agriculture	TRIM	NA	90,15%	0,749
8560	Picus viridis	BIR	increase	1990	2018	eurytopic	TRIM	NA	100,82%	0,327
8830	Dendrocopos medius	BIR	increase	1990	2018	woodlands	TRIM	NA	103,37%	0,684
9740	Lullula arborea	BIR	uncertain	1990	2018	open nature land	TRIM	NA	98,13%	2,346
10190	Motacilla cinerea	BIR	stable	1990	2018	wetlands	TRIM	NA	99,93%	0,950
11040	Luscinia megarhynchos	BIR	stable	1990	2018	eurytopic	TRIM	NA	99,67%	0,624
11210	Phoenicurus ochruros	BIR	stable	1990	2018	urban	TRIM	NA	99,46%	0,408
11390	Saxicola torquatus	BIR	increase	1990	2018	agriculture	TRIM	NA	107,08%	0,756
12200	Cettia cetti	BIR	stable	1990	2018	wetlands	TRIM	NA	101,41%	1,623

12510	Acrocephalus scirpaceus	BIR	uncertain	1990	2018	wetlands	TRIM	NA	98,39%	2,331
12600	Hippolais polyglotta	BIR	increase	1990	2018	eurypic	TRIM	161	106,24%	1,519
14870	Certhia brachydactyla	BIR	decrease	1990	2018	woodlands	TRIM	NA	99,31%	0,228
15080	Oriolus oriolus	BIR	decrease	1990	2018	woodlands	TRIM	NA	95,20%	0,998
15600	Corvus monedula	BIR	stable	1990	2018	eurypic	TRIM	NA	100,40%	0,465
15980	Passer montanus	BIR	decrease	1990	2018	agriculture	TRIM	NA	94,63%	0,643
16400	Serinus serinus	BIR	decrease	1990	2018	eurypic	TRIM	47	92,16%	2,912
16530	Carduelis carduelis	BIR	stable	1990	2018	eurypic	TRIM	NA	101,10%	0,859
16600	Carduelis cannabina	BIR	decrease	1990	2018	agriculture	TRIM	NA	97,84%	0,296
17170	Coccothraustes coccothraustes	BIR	increase	1990	2018	woodlands	TRIM	NA	100,85%	0,355
1902791	Brenthis daphne	VLI	increase	1990	2018	eurypic	SOM	906	129,61%	6,096
1920496	Pieris rapae	VLI	increase	1990	2018	eurypic	SOM	13568	100,40%	0,075
1924097	Glaucopsyche alexis	VLI	stable	1990	2018	open nature land	SOM	47	100,40%	1,106
1933095	Aricia agestis	VLI	increase	1990	2018	open nature land	SOM	3550	102,67%	0,325
1938214	Iphiclides podalirius	VLI	decrease	1990	2018	open nature land	SOM	125	98,96%	0,402
1945569	Spialia sertorius	VLI	stable	1990	2018	open nature land	SOM	203	100,61%	0,556
4535180	Favonius quercus	VLI	increase	1990	2018	woodlands	SOM	2536	101,21%	0,253
4535632	Lasiommata megera	VLI	decrease	1990	2018	eurypic	SOM	2699	98,73%	0,109
4535809	Euphydryas aurinia	VLI	decrease	1990	2018	eurypic	SOM	94	96,09%	0,364
5135513	Maniola jurtina	VLI	increase	1990	2018	eurypic	SOM	11579	100,54%	0,058
5882969	Satyrium ilicis	VLI	decrease	1990	2018	eurypic	SOM	289	98,90%	0,483
7622059	Pyronia tithonus	VLI	increase	1990	2018	eurypic	SOM	8098	100,81%	0,083
7762841	Nymphalis polychloros	VLI	increase	1990	2018	eurypic	SOM	1188	102,27%	0,602
7854318	Melanargia galathea	VLI	stable	1990	2018	open nature land	SOM	1866	100,11%	0,143
8049830	Pararge aegeria	VLI	increase	1990	2018	eurypic	SOM	10024	100,32%	0,084
8073674	Thymelicus acteon	VLI	decrease	1990	2018	open nature land	SOM	68	94,08%	0,744
8168644	Melitaea cinxia	VLI	increase	1990	2018	open nature land	SOM	238	102,40%	0,642
8273661	Thymelicus sylvestris	VLI	stable	1990	2018	eurypic	SOM	2394	99,89%	0,089
8277078	Carcharodus alceae	VLI	increase	1990	2018	eurypic	SOM	1510	101,81%	0,781

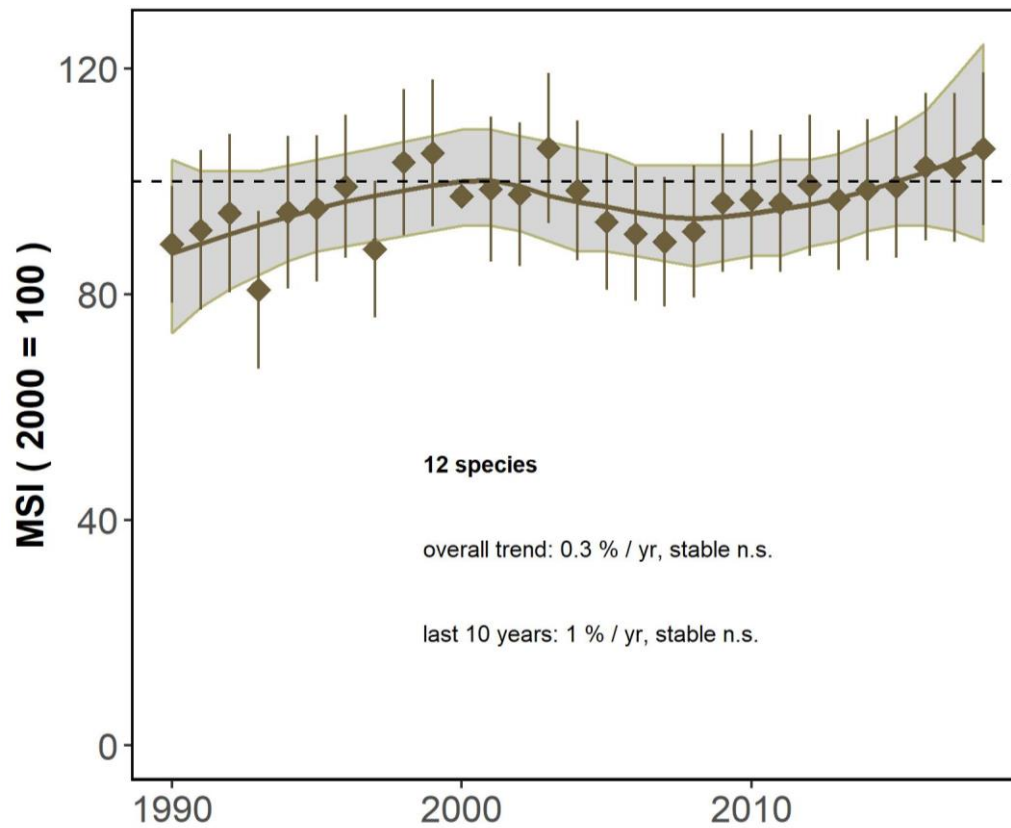
Species with STI « cold »



code	tax	group_tax	trend	from	to	habitat	n_square	slope (%)	se_slope	methodo
583	Lestes sponsa Hansemann, 1823	LIB	stable	1990	2018	wetlands	1567	99,83	0,14	SOM
591	Coenagrion hastulatum Charpentier, 1825	LIB	stable	1990	2018	wetlands	81	100,03	0,87	SOM
592	Coenagrion lunulatum Charpentier, 1840	LIB	stable	1990	2018	wetlands	45	98,43	0,94	SOM
611	Aeshna grandis Linnaeus, 1758	LIB	increase	1990	2018	wetlands	1685	100,52	0,17	SOM
612	Aeshna juncea Linnaeus, 1758	LIB	stable	1990	2018	wetlands	427	100,08	0,26	SOM
614	Aeshna subarctica Walker, 1908	LIB	stable	1990	2018	wetlands	22	100,23	0,97	SOM
621	Cordulia aenea Linnaeus, 1758	LIB	increase	1990	2018	wetlands	1894	101,47	0,23	SOM
622	Somatochlora arctica Zetterstedt, 1840	LIB	stable	1990	2018	wetlands	110	100,52	0,94	SOM
624	Somatochlora metallica Vander Linden, 1825	LIB	stable	1990	2018	wetlands	955	99,98	0,23	SOM
626	Epiheca bimaculata Charpentier, 1825	LIB	uncertain	1990	2018	wetlands	35	101,98	1,62	SOM
634	Sympetrum danae Sulzer, 1776	LIB	decrease	1990	2018	wetlands	1341	98,56	0,14	SOM
643	Leucorrhinia caudalis Charpentier, 1840	LIB	uncertain	1990	2018	wetlands	16	102,98	1,88	SOM
644	Leucorrhinia dubia Vander Linden, 1825	LIB	decrease	1990	2018	wetlands	462	99,40	0,30	SOM
645	Leucorrhinia pectoralis Charpentier, 1825	LIB	uncertain	1990	2018	wetlands	282	102,79	2,03	SOM
646	Leucorrhinia rubicunda Linnaeus, 1758	LIB	increase	1990	2018	wetlands	225	102,19	1,06	SOM
4500	Haematopus ostralegus	BIR	stable	2007	2018	eurytopic	302	99,96	1,01	TRIM
5460	Tringa totanus	BIR	decrease	2007	2018	agriculture	37	88,64	4,55	TRIM
8630	Dryocopus martius	BIR	stable	1990	2018	woodlands	NA	99,09	0,73	TRIM
10090	Anthus trivialis	BIR	decrease	1990	2018	open nature land	NA	98,99	0,29	TRIM
10110	Anthus pratensis	BIR	decrease	1990	2018	agriculture	NA	93,93	0,51	TRIM
10840	Prunella modularis	BIR	decrease	1990	2018	eurytopic	NA	99,06	0,20	TRIM
11060	Luscinia svecica	BIR	increase	1990	2018	wetlands	NA	116,50	3,86	TRIM
11220	Phoenicurus phoenicurus	BIR	stable	1990	2018	eurytopic	NA	99,39	0,66	TRIM
11980	Turdus pilaris	BIR	decrease	1990	2018	woodlands	737	91,83	0,92	TRIM
12430	Acrocephalus schoenobaenus	BIR	increase	1990	2018	wetlands	NA	109,39	2,73	TRIM
12590	Hippolais icterina	BIR	decrease	1990	2018	eurytopic	NA	93,46	1,89	TRIM
12760	Sylvia borin	BIR	decrease	1990	2018	woodlands	NA	97,03	0,21	TRIM

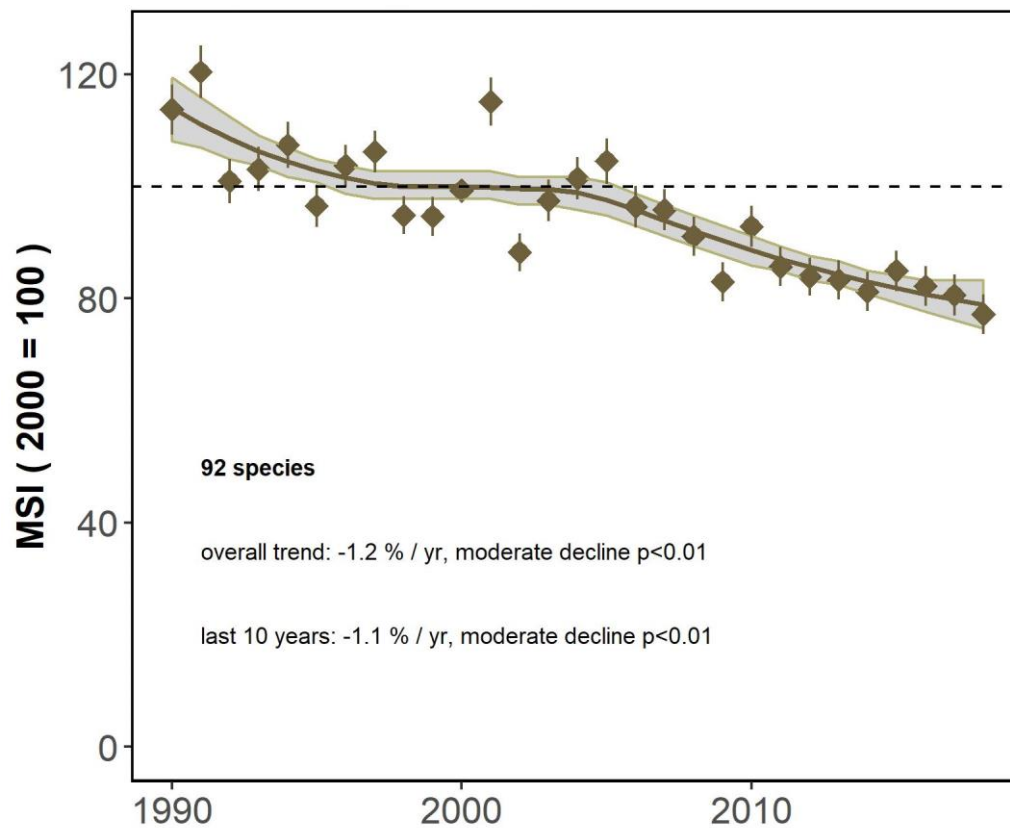
13080	Phylloscopus sibilatrix	BIR	decrease	1990	2018	woodlands	NA	98,16	0,30	TRIM
13120	Phylloscopus trochilus	BIR	decrease	1990	2018	eurytopic	NA	96,83	0,22	TRIM
13140	Regulus regulus	BIR	decrease	1990	2018	woodlands	NA	96,98	0,35	TRIM
14860	Certhia familiaris	BIR	increase	1990	2018	woodlands	246	102,72	1,00	TRIM
16540	Carduelis spinus	BIR	decrease	1990	2018	woodlands	285	93,61	1,53	TRIM
16660	Loxia curvirostra	BIR	decrease	1990	2018	woodlands	NA	97,47	1,10	TRIM
17100	Pyrrhula pyrrhula	BIR	stable	1990	2018	woodlands	NA	99,71	0,68	TRIM
18770	Emberiza schoeniclus	BIR	decrease	1990	2018	wetlands	NA	95,04	1,04	TRIM
1894840	Aglais urticae	VLI	decrease	1990	2018	eurytopic	12538	99,63	0,08	SOM
1896841	Aphantopus hyperantus	VLI	increase	1990	2018	eurytopic	6419	100,30	0,07	SOM
1899433	Melitaea athalia	VLI	stable	1990	2018	eurytopic	305	100,27	0,36	SOM
1902749	Brenthis ino	VLI	increase	1990	2018	open nature land	1495	100,36	0,13	SOM
1912325	Boloria selene	VLI	stable	1990	2018	eurytopic	1273	99,84	0,13	SOM
1912372	Boloria aquilonaris	VLI	stable	1990	2018	open nature land	150	99,84	0,73	SOM
1919712	Anthocharis cardamines	VLI	increase	1990	2018	eurytopic	9005	100,51	0,08	SOM
1920494	Pieris napi	VLI	stable	1990	2018	eurytopic	8821	99,92	0,06	SOM
1929443	Lycaena hippothoe	VLI	decrease	1990	2018	open nature land	509	99,34	0,15	SOM
1929659	Lycaena virgaureae	VLI	decrease	1990	2018	woodlands	46	95,76	1,08	SOM
1947335	Carterocephalus palaemon	VLI	increase	1990	2018	eurytopic	1204	100,45	0,21	SOM
4299535	Boloria eunomia	VLI	decrease	1990	2018	open nature land	643	99,32	0,11	SOM
5139156	Cyaniris semiargus	VLI	increase	1990	2018	open nature land	882	101,70	0,36	SOM
5772893	Boloria euphrosyne	VLI	stable	1990	2018	woodlands	199	100,00	0,51	SOM
5882980	Satyrium pruni	VLI	increase	1990	2018	eurytopic	501	105,14	1,56	SOM
6221746	Speyeria aglaia	VLI	stable	1990	2018	eurytopic	484	99,88	0,24	SOM
7417698	Lycaena helle	VLI	decrease	1990	2018	open nature land	737	98,81	0,09	SOM
7768674	Melitaea diamina	VLI	increase	1990	2018	eurytopic	750	101,93	0,26	SOM

Amphibians



code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
1	Alytes obstetricans	decrease	1990	2018	eurytopic	NA	SOM	902	98,93%	0,153
8	Bufo bufo	increase	1990	2018	eurytopic	NA	SOM	6439	100,77%	0,180
20	Epidalea calamita	decrease	1990	2018	eurytopic	NA	SOM	661	99,52%	0,142
23	Hyla arborea	stable	1990	2018	wetlands	NA	SOM	168	100,24%	0,835
25	Ichthyosaura alpestris	increase	1990	2018	eurytopic	NA	SOM	4834	100,58%	0,182
32	Lissotriton helveticus	increase	1990	2018	wetlands	NA	SOM	2242	100,54%	0,199
34	Lissotriton vulgaris	increase	1990	2018	wetlands	NA	SOM	3603	100,62%	0,206
58	Rana arvalis	increase	1990	2018	open nature land	NA	SOM	236	104,05%	2,024
60	Rana esculenta	increase	1990	2018	eurytopic	NA	SOM	2762	101,49%	0,351
62	Rana temporaria	increase	1990	2018	eurytopic	NA	SOM	6840	100,74%	0,134
64	Salamandra salamandra	stable	1990	2018	woodlands	NA	SOM	1225	100,38%	0,433
72	Triturus cristatus	stable	1990	2018	wetlands	NA	SOM	658	99,90%	0,272

Birds

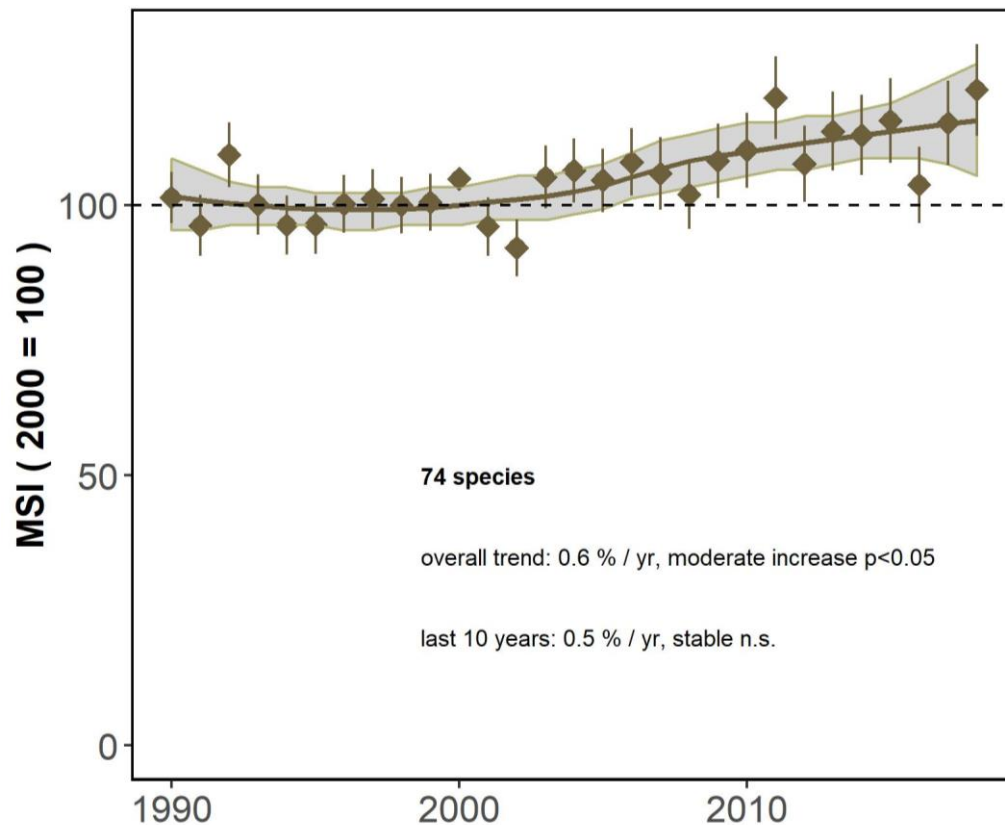


code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
1860	Anas platyrhynchos	increase	1990	2018	wetlands	NA	TRIM	NA	101,09%	0,396
2690	Accipiter nisus	decrease	1990	2018	woodlands	NA	TRIM	NA	96,98%	1,074
2870	Buteo buteo	stable	1990	2018	eurytopic	NA	TRIM	NA	100,06%	0,277
3040	Falco tinnunculus	stable	1990	2018	agriculture	NA	TRIM	NA	100,70%	0,627
3670	Perdix perdix	decrease	1990	2018	agriculture	NA	TRIM	NA	93,45%	0,919
3940	Phasianus colchicus	increase	1990	2018	agriculture	NA	TRIM	NA	101,60%	0,251
4240	Gallinula chloropus	decrease	1990	2018	wetlands	hot	TRIM	NA	98,04%	0,624
4290	Fulica atra	uncertain	1990	2018	wetlands	hot	TRIM	NA	103,32%	1,823
4500	Haematopus ostralegus	stable	2007	2018	eurytopic	cold	TRIM	302	99,96%	1,007
4930	Vanellus vanellus	decrease	1990	2018	agriculture	NA	TRIM	NA	96,31%	0,635
5320	Limosa limosa	decrease	2007	2018	agriculture	NA	TRIM	72	90,32%	1,956
5460	Tringa totanus	decrease	2007	2018	agriculture	cold	TRIM	37	88,64%	4,553
6680	Columba oenas	decrease	1990	2018	eurytopic	NA	TRIM	NA	98,91%	0,455
6700	Columba palumbus	increase	1990	2018	eurytopic	NA	TRIM	NA	100,65%	0,120
6840	Streptopelia decaocto	stable	1990	2018	eurytopic	hot	TRIM	NA	99,98%	0,275
6870	Streptopelia turtur	decrease	1990	2018	agriculture	hot	TRIM	NA	90,15%	0,749
7240	Cuculus canorus	decrease	1990	2018	eurytopic	NA	TRIM	NA	95,81%	0,269
7950	Apus apus	decrease	1990	2018	urban	NA	TRIM	NA	97,54%	0,454
8560	Picus viridis	increase	1990	2018	eurytopic	hot	TRIM	NA	100,82%	0,327
8630	Dryocopus martius	stable	1990	2018	woodlands	cold	TRIM	NA	99,09%	0,731
8760	Dendrocopos major	decrease	1990	2018	eurytopic	NA	TRIM	NA	99,37%	0,168
8830	Dendrocopos medius	increase	1990	2018	woodlands	hot	TRIM	NA	103,37%	0,684
8870	Dendrocopos minor	stable	1990	2018	woodlands	NA	TRIM	NA	100,92%	1,060
9740	Lullula arborea	uncertain	1990	2018	open nature land	hot	TRIM	NA	98,13%	2,346
9760	Alauda arvensis	decrease	1990	2018	agriculture	NA	TRIM	NA	96,20%	0,176
9920	Hirundo rustica	decrease	1990	2018	agriculture	NA	TRIM	NA	97,06%	0,305
10090	Anthus trivialis	decrease	1990	2018	open nature land	cold	TRIM	NA	98,99%	0,291

10110	Anthus pratensis	decrease	1990	2018	agriculture	cold	TRIM	NA	93,93%	0,510
10170	Motacilla flava	decrease	1990	2018	agriculture	NA	TRIM	NA	99,08%	0,439
10190	Motacilla cinerea	stable	1990	2018	wetlands	hot	TRIM	NA	99,93%	0,950
10200	Motacilla alba	decrease	1990	2018	eurytopic	NA	TRIM	NA	98,80%	0,309
10660	Troglodytes troglodytes	decrease	1990	2018	eurytopic	NA	TRIM	NA	99,31%	0,096
10840	Prunella modularis	decrease	1990	2018	eurytopic	cold	TRIM	NA	99,06%	0,200
10990	Erithacus rubecula	decrease	1990	2018	eurytopic	NA	TRIM	NA	98,62%	0,115
11040	Luscinia megarhynchos	stable	1990	2018	eurytopic	hot	TRIM	NA	99,67%	0,624
11060	Luscinia svecica	increase	1990	2018	wetlands	cold	TRIM	NA	116,50%	3,861
11210	Phoenicurus ochruros	stable	1990	2018	urban	hot	TRIM	NA	99,46%	0,408
11220	Phoenicurus phoenicurus	stable	1990	2018	eurytopic	cold	TRIM	NA	99,39%	0,656
11390	Saxicola torquatus	increase	1990	2018	agriculture	hot	TRIM	NA	107,08%	0,756
11870	Turdus merula	decrease	1990	2018	eurytopic	NA	TRIM	NA	99,67%	0,084
11980	Turdus pilaris	decrease	1990	2018	woodlands	cold	TRIM	737	91,83%	0,917
12000	Turdus philomelos	increase	1990	2018	eurytopic	NA	TRIM	NA	100,39%	0,147
12020	Turdus viscivorus	decrease	1990	2018	woodlands	NA	TRIM	NA	98,93%	0,312
12200	Cettia cetti	stable	1990	2018	wetlands	hot	TRIM	NA	101,41%	1,623
12360	Locustella naevia	increase	1990	2018	eurytopic	NA	TRIM	NA	102,65%	0,943
12430	Acrocephalus schoenobaenus	increase	1990	2018	wetlands	cold	TRIM	NA	109,39%	2,730
12500	Acrocephalus palustris	decrease	1990	2018	wetlands	NA	TRIM	NA	98,53%	0,645
12510	Acrocephalus scirpaceus	uncertain	1990	2018	wetlands	hot	TRIM	NA	98,39%	2,331
12590	Hippolais icterina	decrease	1990	2018	eurytopic	cold	TRIM	NA	93,46%	1,894
12600	Hippolais polyglotta	increase	1990	2018	eurytopic	hot	TRIM	161	106,24%	1,519
12740	Sylvia curruca	stable	1990	2018	eurytopic	NA	TRIM	NA	100,94%	0,471
12750	Sylvia communis	increase	1990	2018	agriculture	NA	TRIM	NA	100,78%	0,239
12760	Sylvia borin	decrease	1990	2018	woodlands	cold	TRIM	NA	97,03%	0,212
12770	Sylvia atricapilla	increase	1990	2018	eurytopic	NA	TRIM	NA	100,47%	0,092
13080	Phylloscopus sibilatrix	decrease	1990	2018	woodlands	cold	TRIM	NA	98,16%	0,299
13110	Phylloscopus collybita	decrease	1990	2018	eurytopic	NA	TRIM	NA	98,64%	0,091
13120	Phylloscopus trochilus	decrease	1990	2018	eurytopic	cold	TRIM	NA	96,83%	0,225
13140	Regulus regulus	decrease	1990	2018	woodlands	cold	TRIM	NA	96,98%	0,349
13150	Regulus ignicapilla	increase	1990	2018	woodlands	NA	TRIM	NA	101,22%	0,392
13350	Muscicapa striata	stable	1990	2018	woodlands	NA	TRIM	NA	98,30%	1,062
13490	Ficedula hypoleuca	uncertain	1990	2018	eurytopic	NA	TRIM	NA	103,59%	3,365
14370	Aegithalos caudatus	decrease	1990	2018	woodlands	NA	TRIM	NA	97,96%	0,569
14400	Poecile palustris	decrease	1990	2018	woodlands	NA	TRIM	NA	97,58%	0,316
14420	Poecile montanus	decrease	1990	2018	woodlands	NA	TRIM	NA	96,56%	0,600
14540	Lophophanes cristatus	decrease	1990	2018	woodlands	NA	TRIM	NA	96,94%	0,515
14610	Periparus ater	decrease	1990	2018	woodlands	NA	TRIM	NA	97,34%	0,325
14620	Cyanistes caeruleus	increase	1990	2018	eurytopic	NA	TRIM	NA	100,39%	0,157
14640	Parus major	decrease	1990	2018	eurytopic	NA	TRIM	NA	99,47%	0,108
14790	Sitta europaea	stable	1990	2018	woodlands	NA	TRIM	NA	99,77%	0,154
14860	Certhia familiaris	increase	1990	2018	woodlands	cold	TRIM	246	102,72%	0,995
14870	Certhia brachydactyla	decrease	1990	2018	woodlands	hot	TRIM	NA	99,31%	0,228
15080	Oriolus oriolus	decrease	1990	2018	woodlands	hot	TRIM	NA	95,20%	0,998
15150	Lanius collurio	increase	1990	2018	agriculture	NA	TRIM	319	103,10%	0,774
15390	Garrulus glandarius	decrease	1990	2018	woodlands	NA	TRIM	NA	98,45%	0,202
15490	Pica pica	stable	1990	2018	eurytopic	NA	TRIM	NA	99,85%	0,235
15600	Corvus monedula	stable	1990	2018	eurytopic	hot	TRIM	NA	100,40%	0,465
15670	Corvus corone	decrease	1990	2018	eurytopic	NA	TRIM	NA	98,42%	0,141
15820	Sturnus vulgaris	decrease	1990	2018	agriculture	NA	TRIM	NA	96,83%	0,266
15910	Passer domesticus	stable	1990	2018	urban	NA	TRIM	NA	99,61%	0,284
15980	Passer montanus	decrease	1990	2018	agriculture	hot	TRIM	NA	94,63%	0,643
16360	Fringilla coelebs	decrease	1990	2018	eurytopic	NA	TRIM	NA	99,48%	0,082
16400	Serinus serinus	decrease	1990	2018	eurytopic	hot	TRIM	47	92,16%	2,912
16490	Carduelis chloris	stable	1990	2018	eurytopic	NA	TRIM	NA	100,09%	0,388

16530	Carduelis carduelis	stable	1990	2018	eurytopic	hot	TRIM	NA	101,10%	0,859
16540	Carduelis spinus	decrease	1990	2018	woodlands	cold	TRIM	285	93,61%	1,532
16600	Carduelis cannabina	decrease	1990	2018	agriculture	hot	TRIM	NA	97,84%	0,296
16660	Loxia curvirostra	decrease	1990	2018	woodlands	cold	TRIM	NA	97,47%	1,096
17100	Pyrrhula pyrrhula	stable	1990	2018	woodlands	cold	TRIM	NA	99,71%	0,677
17170	Coccothraustes coccothraustes	increase	1990	2018	woodlands	hot	TRIM	NA	100,85%	0,355
18570	Emberiza citrinella	decrease	1990	2018	agriculture	NA	TRIM	NA	98,22%	0,201
18770	Emberiza schoeniclus	decrease	1990	2018	wetlands	cold	TRIM	NA	95,04%	1,043
18820	Miliaria calandra	decrease	1990	2018	agriculture	NA	TRIM	NA	86,88%	1,053

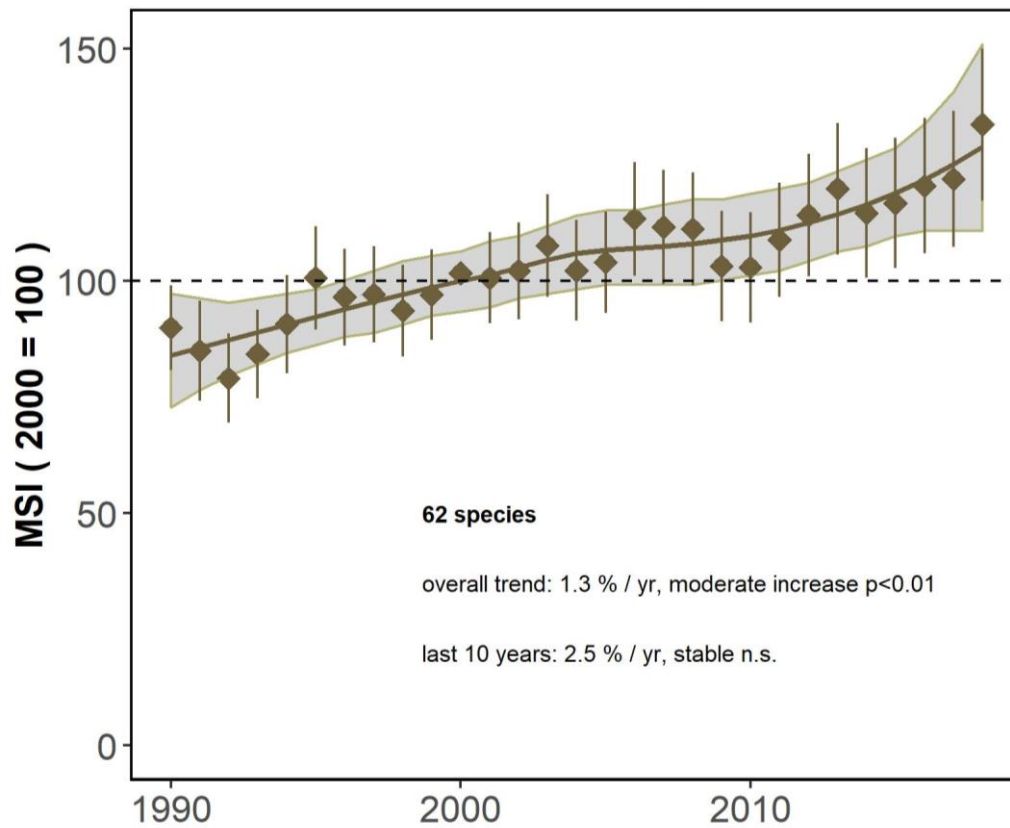
Butterflies



code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
1894840	Aglais urticae	decrease	1990	2018	eurytopic	cold	SOM	12538	99,63%	0,077
1896841	Aphantopus hyperantus	increase	1990	2018	eurytopic	cold	SOM	6419	100,30%	0,072
1898286	Vanessa atalanta	increase	1990	2018	eurytopic	NA	SOM	14314	100,29%	0,062
1898544	Polygonia c-album	increase	1990	2018	eurytopic	NA	SOM	8540	100,59%	0,124
1899433	Melitaea athalia	stable	1990	2018	eurytopic	cold	SOM	305	100,27%	0,360
1902533	Araschnia levana	decrease	1990	2018	eurytopic	cold	SOM	7655	99,83%	0,060
1902749	Brenthis ino	increase	1990	2018	open nature land	cold	SOM	1495	100,36%	0,128
1902791	Brenthis daphne	increase	1990	2018	eurytopic	hot	SOM	906	129,61%	6,096
1905383	Issoria lathonia	increase	1990	2018	eurytopic	NA	SOM	1662	103,41%	0,586
1909398	Argynnis paphia	increase	1990	2018	woodlands	NA	SOM	3221	100,86%	0,318
1911461	Coenonympha pamphilus	increase	1990	2018	eurytopic	NA	SOM	3666	100,31%	0,120
1912325	Boloria selene	stable	1990	2018	eurytopic	cold	SOM	1273	99,84%	0,131
1912372	Boloria aquilonaris	stable	1990	2018	open nature land	cold	SOM	150	99,84%	0,726
1919712	Anthocharis cardamines	increase	1990	2018	eurytopic	cold	SOM	9005	100,51%	0,084
1920218	Aporia crataegi	increase	1990	2018	eurytopic	NA	SOM	1713	100,41%	0,188
1920494	Pieris napi	stable	1990	2018	eurytopic	cold	SOM	8821	99,92%	0,063
1920496	Pieris rapae	increase	1990	2018	eurytopic	hot	SOM	13568	100,40%	0,075
1920506	Pieris brassicae	increase	1990	2018	eurytopic	NA	SOM	10466	100,48%	0,113
1920712	Gonepteryx rhamni	stable	1990	2018	eurytopic	NA	SOM	10333	99,87%	0,084
1924097	Glaucopsyche alexis	stable	1990	2018	open nature land	hot	SOM	47	100,40%	1,106
1925918	Celastrina argiolus	increase	1990	2018	eurytopic	NA	SOM	6059	101,06%	0,168
1926260	Cupido minimus	decrease	1990	2018	open nature land	NA	SOM	314	98,32%	0,284
1929270	Lycaena dispar	increase	1990	2018	eurytopic	NA	SOM	140	107,58%	1,593
1929443	Lycaena hippothoe	decrease	1990	2018	open nature land	cold	SOM	509	99,34%	0,154
1929659	Lycaena virgaureae	decrease	1990	2018	woodlands	cold	SOM	46	95,76%	1,082
1929697	Lycaena phlaeas	stable	1990	2018	eurytopic	NA	SOM	6330	99,99%	0,094
1930110	Thecla betulae	stable	1990	2018	eurytopic	NA	SOM	847	100,36%	0,354

1932411	Callophrys rubi	decrease	1990	2018	eurytopic	NA	SOM	1433	99,67%	0,160
1933095	Aricia agestis	increase	1990	2018	open nature land	hot	SOM	3550	102,67%	0,325
1934693	Hamearis lucina	decrease	1990	2018	open nature land	NA	SOM	194	97,73%	0,398
1938214	Iphiclidides podalirius	decrease	1990	2018	open nature land	hot	SOM	125	98,96%	0,402
1945569	Spialia sertorius	stable	1990	2018	open nature land	hot	SOM	203	100,61%	0,556
1946844	Ochlodes sylvanus	increase	1990	2018	eurytopic	NA	SOM	7471	100,57%	0,083
1947335	Carterocephalus palaemon	increase	1990	2018	eurytopic	cold	SOM	1204	100,45%	0,214
4299535	Boloria eunomia	decrease	1990	2018	open nature land	cold	SOM	643	99,32%	0,108
4535140	Cupido argiades	increase	1990	2018	open nature land	NA	SOM	313	116,78%	5,465
4535180	Favonius quercus	increase	1990	2018	woodlands	hot	SOM	2536	101,21%	0,253
4535632	Lasiommata megera	decrease	1990	2018	eurytopic	hot	SOM	2699	98,73%	0,109
4535636	Lasiommata maera	stable	1990	2018	open nature land	NA	SOM	157	99,98%	0,578
4535809	Euphydryas aurinia	decrease	1990	2018	eurytopic	hot	SOM	94	96,09%	0,364
4535827	Aglais io	stable	1990	2018	eurytopic	NA	SOM	9798	100,09%	0,060
5131910	Apatura iris	increase	1990	2018	woodlands	NA	SOM	1702	100,79%	0,212
5134680	Erebia medusa	decrease	1990	2018	open nature land	cold	SOM	275	98,63%	0,193
5135513	Maniola jurtina	increase	1990	2018	eurytopic	hot	SOM	11579	100,54%	0,058
5137903	Leptidea sinapis	stable	1990	2018	eurytopic	NA	SOM	925	100,27%	0,178
5138561	Plebejus argus	decrease	1990	2018	open nature land	NA	SOM	405	98,99%	0,257
5139156	Cyaniris semiargus	increase	1990	2018	open nature land	NA	SOM	882	101,70%	0,355
5140214	Polyommatus icarus	increase	1990	2018	eurytopic	NA	SOM	7699	100,34%	0,093
5142282	Hesperia comma	decrease	1990	2018	open nature land	cold	SOM	160	97,22%	0,495
5772890	Boloria dia	stable	1990	2018	open nature land	NA	SOM	121	99,58%	0,731
5772893	Boloria euphrosyne	stable	1990	2018	woodlands	cold	SOM	199	100,00%	0,513
5882898	Lycaena tityrus	stable	1990	2018	open nature land	NA	SOM	810	99,91%	0,327
5882965	Satyrium w-album	increase	1990	2018	woodlands	NA	SOM	478	106,79%	2,267
5882969	Satyrium ilicis	decrease	1990	2018	eurytopic	hot	SOM	289	98,90%	0,483
5882980	Satyrium pruni	increase	1990	2018	eurytopic	cold	SOM	501	105,14%	1,563
6221746	Speyeria aglaia	stable	1990	2018	eurytopic	NA	SOM	484	99,88%	0,245
7417698	Lycaena helle	decrease	1990	2018	open nature land	cold	SOM	737	98,81%	0,093
7459402	Phengaris alcon	decrease	1990	2018	open nature land	NA	SOM	44	97,30%	0,749
7622059	Pyronia tithonus	increase	1990	2018	eurytopic	hot	SOM	8098	100,81%	0,083
7728366	Coenonympha arcania	decrease	1990	2018	open nature land	NA	SOM	549	98,62%	0,139
7762841	Nymphalis polychloros	increase	1990	2018	eurytopic	hot	SOM	1188	102,27%	0,602
7768674	Melitaea diamina	increase	1990	2018	eurytopic	cold	SOM	750	101,93%	0,260
7854318	Melanargia galathea	stable	1990	2018	open nature land	hot	SOM	1866	100,11%	0,143
8049830	Pararge aegeria	increase	1990	2018	eurytopic	hot	SOM	10024	100,32%	0,084
8073674	Thymelicus acteon	decrease	1990	2018	open nature land	hot	SOM	68	94,08%	0,744
8109173	Pyrgus malvae	stable	1990	2018	eurytopic	NA	SOM	1230	99,83%	0,168
8133678	Thymelicus lineola	decrease	1990	2018	eurytopic	NA	SOM	4816	99,33%	0,066
8138711	Apatura ilia	increase	1990	2018	woodlands	NA	SOM	529	102,39%	0,955
8168644	Melitaea cinxia	increase	1990	2018	open nature land	hot	SOM	238	102,40%	0,642
8176911	Hipparchia semele	decrease	1990	2018	open nature land	NA	SOM	448	98,03%	0,214
8225376	Papilio machaon	stable	1990	2018	eurytopic	NA	SOM	5144	100,10%	0,176
8273661	Thymelicus sylvestris	stable	1990	2018	eurytopic	hot	SOM	2394	99,89%	0,089
8277078	Carcharodus alceae	increase	1990	2018	eurytopic	hot	SOM	1510	101,81%	0,781
8429428	Limenitis camilla	increase	1990	2018	woodlands	NA	SOM	2056	101,35%	0,215

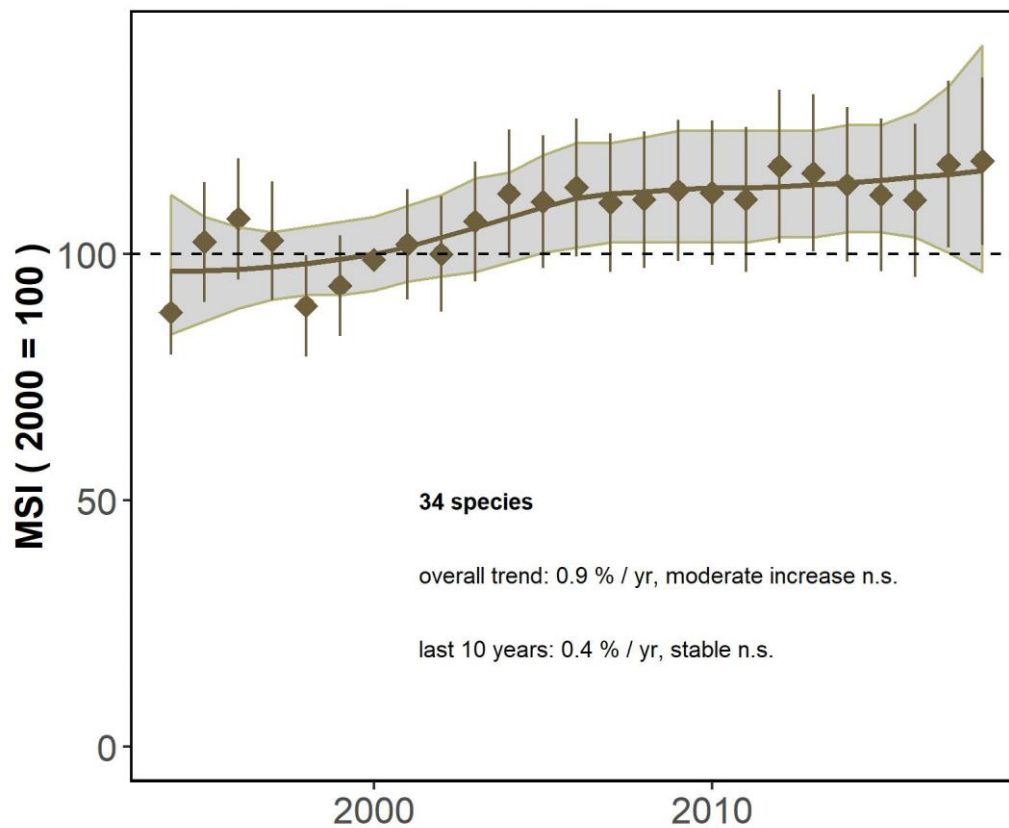
Dragonflies



code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
578	Calopteryx splendens Harris, 1780	increase	1990	2018	wetlands	NA	SOM	3481	101,35%	0,191
579	Calopteryx virgo Linnaeus, 1758	increase	1990	2018	wetlands	NA	SOM	3293	100,94%	0,137
580	Sympecma fusca Vander Linden, 1820	increase	1990	2018	wetlands	hot	SOM	1262	102,61%	0,563
581	Lestes barbarus Fabricius, 1798	increase	1990	2018	wetlands	NA	SOM	534	106,07%	1,764
582	Lestes dryas Kirby, 1890	increase	1990	2018	wetlands	NA	SOM	418	103,65%	0,934
583	Lestes sponsa Hanseemann, 1823	stable	1990	2018	wetlands	cold	SOM	1567	99,83%	0,138
584	Lestes virens Charpentier, 1825	increase	1990	2018	wetlands	NA	SOM	546	108,01%	1,576
585	Chalcolestes viridis Vander Linden, 1825	increase	1990	2018	wetlands	NA	SOM	3010	100,36%	0,128
587	Ischnura elegans Vander Linden, 1820	stable	1990	2018	wetlands	NA	SOM	5589	99,92%	0,058
588	Ischnura pumilio Charpentier, 1825	increase	1990	2018	wetlands	NA	SOM	948	105,02%	0,971
589	Pyrrhosoma nymphula Sulzer, 1776	increase	1990	2018	wetlands	NA	SOM	4660	100,97%	0,152
590	Enallagma cyathigerum Charpentier, 1840	stable	1990	2018	wetlands	NA	SOM	3518	99,90%	0,083
591	Coenagrion hastulatum Charpentier, 1825	stable	1990	2018	wetlands	cold	SOM	81	100,03%	0,875
592	Coenagrion lunulatum Charpentier, 1840	stable	1990	2018	wetlands	cold	SOM	45	98,43%	0,938
593	Coenagrion mercuriale Charpentier, 1840	increase	1990	2018	wetlands	hot	SOM	62	102,88%	1,407
594	Coenagrion puella Linnaeus, 1758	increase	1990	2018	wetlands	NA	SOM	5473	100,46%	0,085
595	Coenagrion pulchellum Vander Linden, 1825	stable	1990	2018	wetlands	NA	SOM	399	100,24%	0,723
596	Coenagrion scitulum Rambur, 1842	increase	1990	2018	wetlands	hot	SOM	749	114,24%	2,792
597	Erythromma lindenii Selys, 1840	increase	1990	2018	wetlands	hot	SOM	759	102,30%	0,694
598	Erythromma najas Hanseemann, 1823	increase	1990	2018	wetlands	NA	SOM	1574	101,31%	0,250
599	Erythromma viridulum Charpentier, 1840	stable	1990	2018	wetlands	NA	SOM	1752	100,16%	0,139
600	Ceriagrion tenellum De Villers, 1789	increase	1990	2018	wetlands	hot	SOM	537	105,97%	1,334
604	Gomphus pulchellus Selys, 1840	stable	1990	2018	wetlands	hot	SOM	1207	99,86%	0,234
606	Onychogomphus forcipatus Linnaeus, 1758	stable	1990	2018	wetlands	NA	SOM	412	100,94%	0,580
608	Brachytron pratense Müller, 1764	increase	1990	2018	wetlands	NA	SOM	539	103,65%	1,008
609	Aeshna affinis Vander Linden, 1820	uncertain	1990	2018	wetlands	hot	SOM	177	103,13%	2,242
610	Aeshna cyanea Müller, 1764	increase	1990	2018	wetlands	NA	SOM	4814	100,33%	0,098

611	Aeshna grandis Linnaeus, 1758	increase	1990	2018	wetlands	cold	SOM	1685	100,52%	0,170
612	Aeshna juncea Linnaeus, 1758	stable	1990	2018	wetlands	cold	SOM	427	100,08%	0,265
613	Aeshna mixta Latreille, 1805	increase	1990	2018	wetlands	NA	SOM	3598	100,68%	0,155
614	Aeshna subarctica Walker, 1908	stable	1990	2018	wetlands	cold	SOM	22	100,23%	0,970
615	Aeshna isoceles Müller, 1767	increase	1990	2018	wetlands	NA	SOM	448	109,23%	2,330
616	Anax imperator Leach, 1815	increase	1990	2018	wetlands	hot	SOM	5297	100,47%	0,086
617	Anax parthenope Selys, 1839	increase	1990	2018	wetlands	hot	SOM	507	108,57%	2,347
619	Cordulegaster boltonii Donovan, 1807	stable	1990	2018	wetlands	NA	SOM	974	99,87%	0,163
620	Cordulegaster bidentata Selys, 1843	increase	1990	2018	wetlands	NA	SOM	70	103,48%	1,619
621	Cordulia aenea Linnaeus, 1758	increase	1990	2018	wetlands	cold	SOM	1894	101,47%	0,230
622	Somatochlora arctica Zetterstedt, 1840	stable	1990	2018	wetlands	cold	SOM	110	100,52%	0,939
623	Somatochlora flavomaculata Vander Linden, 1825	increase	1990	2018	wetlands	NA	SOM	123	103,65%	1,028
624	Somatochlora metallica Vander Linden, 1825	stable	1990	2018	wetlands	cold	SOM	955	99,98%	0,230
625	Oxygastra curtisii Dale, 1834	stable	1990	2018	wetlands	hot	SOM	53	102,21%	1,355
626	Epiptera bimaculata Charpentier, 1825	uncertain	1990	2018	wetlands	cold	SOM	35	101,98%	1,616
627	Libellula depressa Linnaeus, 1758	increase	1990	2018	wetlands	NA	SOM	4945	100,54%	0,126
628	Libellula fulva Müller, 1764	increase	1990	2018	wetlands	NA	SOM	544	106,21%	1,242
629	Libellula quadrimaculata Linnaeus, 1758	increase	1990	2018	wetlands	NA	SOM	2422	100,99%	0,156
630	Orthetrum brunneum Fonscolombe, 1837	increase	1990	2018	wetlands	hot	SOM	369	102,62%	0,999
631	Orthetrum cancellatum Linnaeus, 1758	increase	1990	2018	wetlands	NA	SOM	4788	100,26%	0,096
632	Orthetrum coerulescens Fabricius, 1798	increase	1990	2018	wetlands	hot	SOM	712	105,68%	0,707
633	Crocothemis erythraea Brullé, 1832	increase	1990	2018	wetlands	hot	SOM	1316	104,80%	0,800
634	Sympetrum danae Sulzer, 1776	decrease	1990	2018	wetlands	cold	SOM	1341	98,56%	0,140
635	Sympetrum depressiusculum Selys, 1841	decrease	1990	2018	wetlands	NA	SOM	61	95,78%	0,586
637	Sympetrum fonscolombii Selys, 1840	increase	1990	2018	wetlands	hot	SOM	828	104,51%	1,720
638	Sympetrum meridionale Selys, 1841	increase	1990	2018	wetlands	hot	SOM	126	108,85%	3,640
639	Sympetrum pedemontanum O.F.Müller, 1766	stable	1990	2018	wetlands	NA	SOM	219	99,60%	0,711
640	Sympetrum sanguineum Müller, 1764	increase	1990	2018	wetlands	NA	SOM	3514	100,63%	0,158
641	Sympetrum striolatum Charpentier, 1840	increase	1990	2018	wetlands	NA	SOM	4265	100,89%	0,140
642	Sympetrum vulgatum Linnaeus, 1758	decrease	1990	2018	wetlands	NA	SOM	1004	98,52%	0,162
643	Leucorrhinia caudalis Charpentier, 1840	uncertain	1990	2018	wetlands	cold	SOM	16	102,98%	1,878
644	Leucorrhinia dubia Vander Linden, 1825	decrease	1990	2018	wetlands	cold	SOM	462	99,40%	0,304
645	Leucorrhinia pectoralis Charpentier, 1825	uncertain	1990	2018	wetlands	cold	SOM	282	102,79%	2,028
646	Leucorrhinia rubicunda Linnaeus, 1758	increase	1990	2018	wetlands	cold	SOM	225	102,19%	1,065
1524	Platycnemis pennipes Pallas, 1771	increase	1990	2018	wetlands	NA	SOM	2789	100,44%	0,115

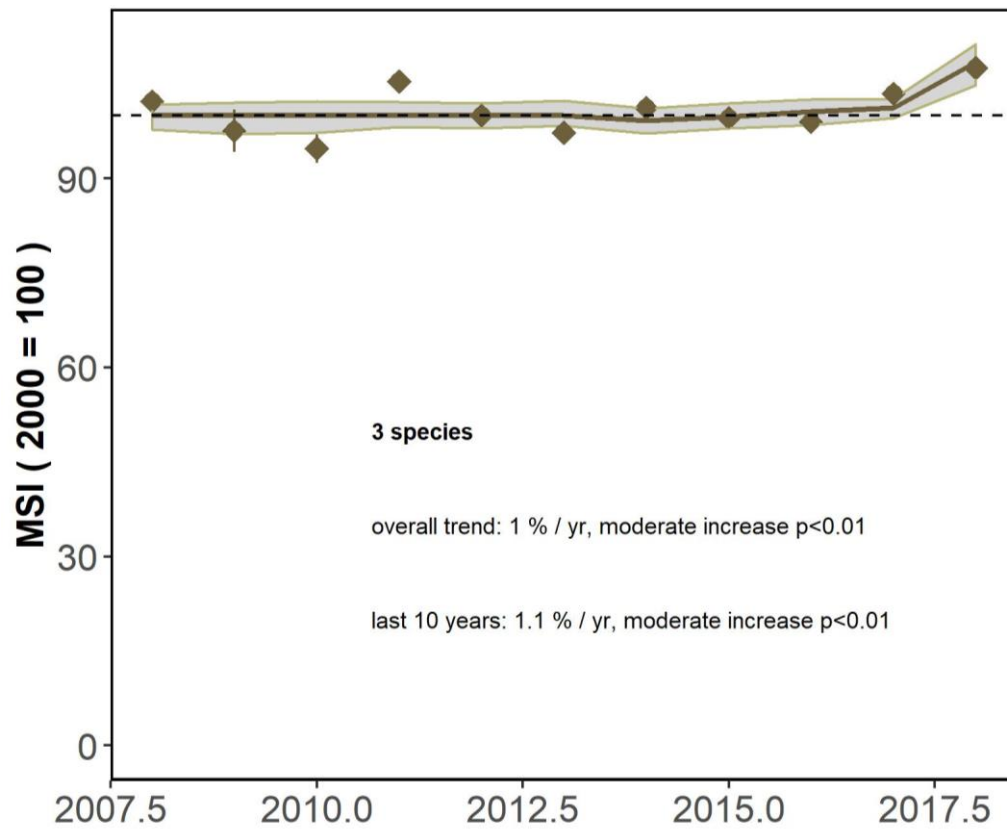
Grasshoppers



code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
1681054	Tetrix ceperoi	increase	1994	2018	wetlands	NA	SOM	215	107,61%	2,893
1681124	Tetrix subulata	stable	1994	2018	eurytopic	NA	SOM	868	100,86%	0,656
1681181	Tetrix tenuicornis	stable	1994	2018	open nature land	NA	SOM	185	100,06%	1,076
1681247	Tetrix undulata	stable	1994	2018	eurytopic	NA	SOM	1026	99,84%	0,225
1683067	Conocephalus fuscus	increase	1994	2018	open nature land	NA	SOM	3188	104,16%	0,495
1683331	Conocephalus dorsalis	decrease	1994	2018	wetlands	NA	SOM	1361	99,57%	0,209
1685298	Platycleis albopunctata	stable	1994	2018	open nature land	NA	SOM	146	99,98%	0,430
1685536	Metrioptera brachyptera	stable	1994	2018	open nature land	NA	SOM	388	100,22%	0,369
1686243	Phaneroptera falcata	increase	1994	2018	open nature land	NA	SOM	1571	106,40%	1,244
1688020	Leptophyes punctatissima	increase	1994	2018	open nature land	NA	SOM	2020	102,11%	0,557
1688979	Bicolorana bicolor	stable	1994	2018	open nature land	NA	SOM	328	99,74%	0,388
1690429	Meconema meridionale	increase	1994	2018	open nature land	NA	SOM	542	116,06%	4,158
1690432	Meconema thalassinum	increase	1994	2018	woodlands	NA	SOM	1464	100,63%	0,311
1692898	Tettigonia viridissima	increase	1994	2018	eurytopic	NA	SOM	5902	100,58%	0,131
1695297	Pholidoptera griseoptera	stable	1994	2018	open nature land	NA	SOM	3334	100,25%	0,129
1700023	Gomphocerippus rufus	stable	1994	2018	open nature land	NA	SOM	402	100,29%	0,533
1700310	Oedipoda caerulea	increase	1994	2018	open nature land	NA	SOM	1041	101,54%	0,439
1700841	Chrysochraon dispar	increase	1994	2018	open nature land	NA	SOM	2027	100,87%	0,222
1701365	Myrmeleotettix maculatus	stable	1994	2018	open nature land	NA	SOM	785	99,99%	0,288
1708251	Chorthippus biguttulus	increase	1994	2018	open nature land	NA	SOM	3194	100,28%	0,132
1708459	Chorthippus brunneus	stable	1994	2018	eurytopic	NA	SOM	3136	99,83%	0,134
1708567	Chorthippus albomarginatus	stable	1994	2018	open nature land	NA	SOM	474	100,51%	0,727
1708667	Chorthippus mollis	stable	1994	2018	open nature land	NA	SOM	497	100,19%	0,659
1710755	Omocestus viridulus	stable	1994	2018	open nature land	NA	SOM	742	100,15%	0,215
1710802	Omocestus rufipes	stable	1994	2018	open nature land	NA	SOM	451	99,83%	0,331
1710962	Stenobothrus lineatus	stable	1994	2018	open nature land	NA	SOM	133	99,40%	0,630
1711091	Stethophyma grossum	increase	1994	2018	wetlands	NA	SOM	1168	102,03%	0,592

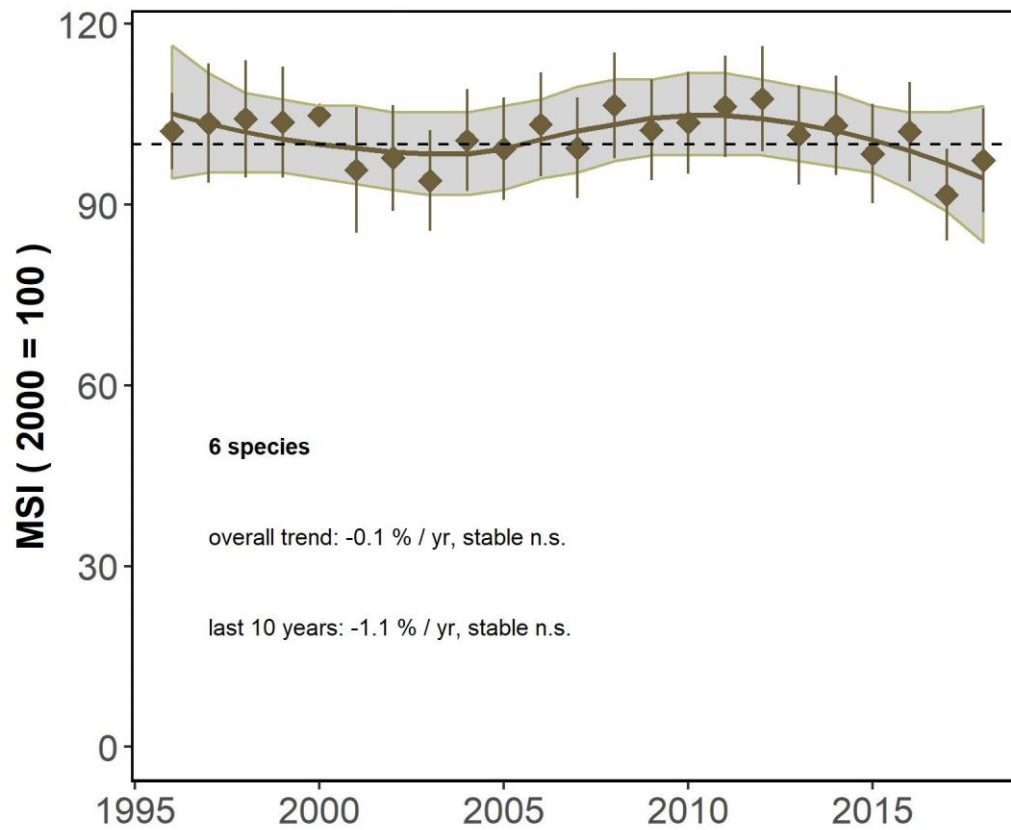
1716462	Gryllus campestris	increase	1994	2018	open nature land	NA	SOM	652	101,36%	0,486
1720967	Oecanthus pellucens	increase	1994	2018	open nature land	NA	SOM	168	105,00%	2,248
1722903	Nemobius sylvestris	increase	1994	2018	woodlands	NA	SOM	1032	101,26%	0,333
4402879	Roeseliana roeselii	increase	1994	2018	open nature land	NA	SOM	1034	102,43%	0,558
7792296	Pseudochorthippus parallelus	stable	1994	2018	eurytopic	NA	SOM	5009	100,14%	0,099
8347376	Tettigonia cantans	stable	1994	2018	eurytopic	NA	SOM	283	101,50%	1,067
8423289	Pseudochorthippus montanus	stable	1994	2018	wetlands	NA	SOM	147	100,42%	0,947

Mammals



code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
389	Sciurus vulgaris Linnaeus 1758	increase	2008	2018	woodlands	NA	SOM	7062	101,04%	0,306
409	Oryctolagus cuniculus (Linnaeus 1758)	decrease	2008	2018	eurypotic	NA	SOM	5033	99,17%	0,276
418	Capreolus capreolus (Linnaeus 1758)	increase	2008	2018	eurypotic	NA	SOM	9841	102,92%	0,278

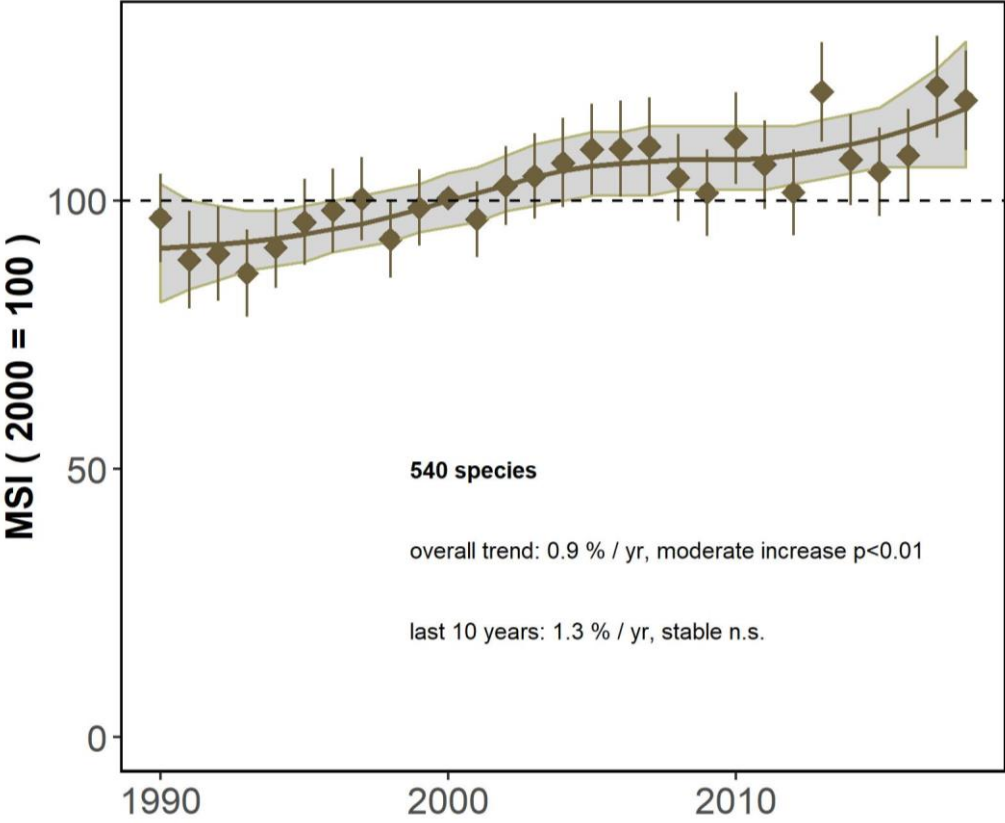
Reptiles



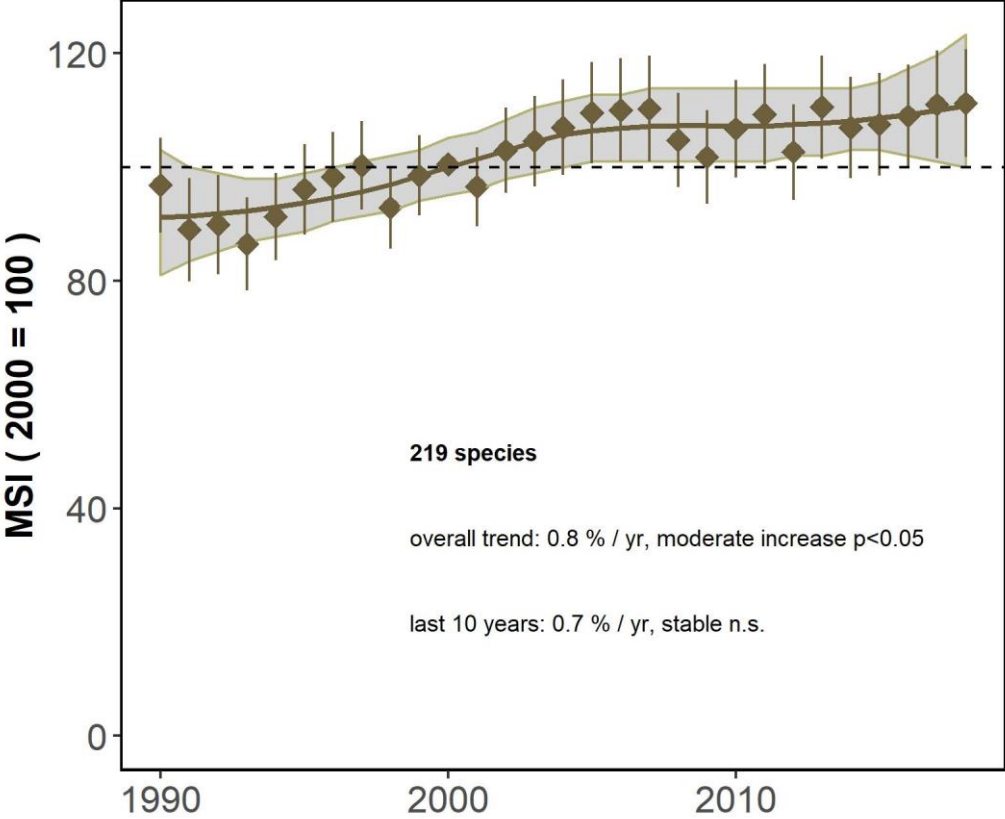
code	tax	trend	from	to	habitat	category	methodo	n_square	slope	se_slope
14	Coronella austriaca	increase	1996	2018	open nature land	NA	SOM	624	100,64%	0,299
27	Lacerta agilis	stable	1996	2018	open nature land	NA	SOM	106	99,32%	0,692
38	Natrix helvetica	increase	1996	2018	eurytopic	NA	SOM	1187	100,51%	0,235
49	Podarcis muralis	increase	1996	2018	eurytopic	NA	SOM	898	100,36%	0,166
75	Vipera berus	decrease	1996	2018	eurytopic	NA	SOM	172	98,42%	0,305
79	Zootoca vivipara	increase	1996	2018	eurytopic	NA	SOM	3813	100,50%	0,109

Results for Flanders

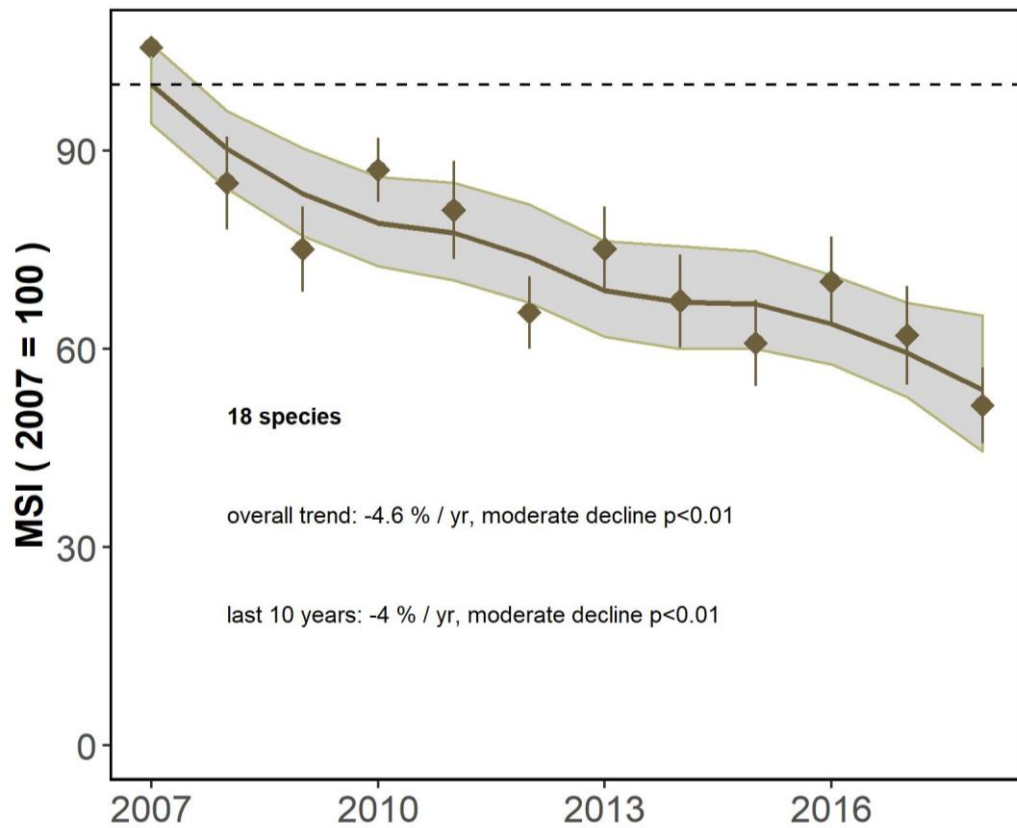
Global LPI with moths



Global LPI without moths

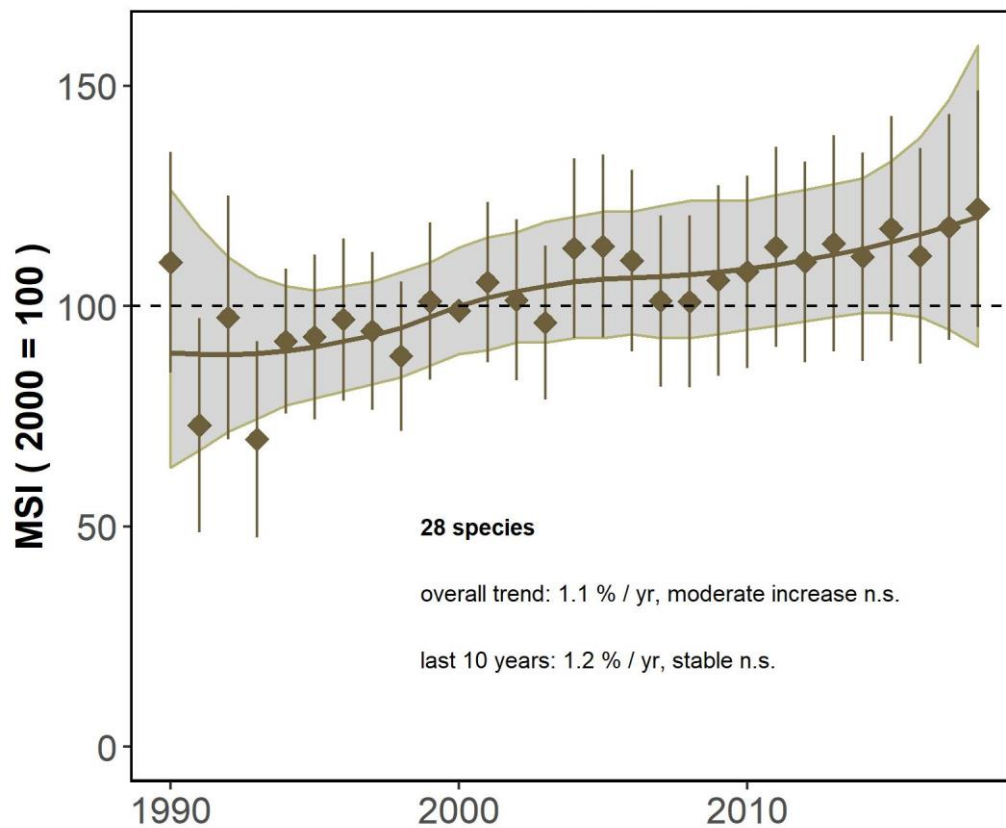


Species of agricultural lands in Flanders



code	tax	group_tax	Trend	From	To	category	n_square	slope	se_slope
3040	Falco tinnunculus	BIR	stable	2007	2018	NA	355	98,58	1,30
3670	Perdix perdix	BIR	decrease	2007	2018	NA	269	92,15	1,27
3700	Coturnix coturnix	BIR	decrease	2007	2018	hot	71	85,27	4,25
3940	Phasianus colchicus	BIR	decrease	2007	2018	NA	622	98,36	0,57
4930	Vanellus vanellus	BIR	decrease	2007	2018	NA	540	93,17	0,72
5320	Limosa limosa	BIR	decrease	2007	2018	NA	72	90,32	1,96
5460	Tringa totanus	BIR	decrease	2007	2018	cold	37	88,64	4,55
6870	Streptopelia turtur	BIR	decrease	2007	2018	hot	94	84,74	3,23
9760	Alauda arvensis	BIR	stable	2007	2018	NA	346	98,34	0,78
9920	Hirundo rustica	BIR	stable	2007	2018	NA	567	99,97	0,76
10110	Anthus pratensis	BIR	decrease	2007	2018	cold	325	95,36	1,28
10170	Motacilla flava	BIR	decrease	2007	2018	NA	301	96,15	0,98
11390	Saxicola torquatus	BIR	increase	2007	2018	hot	163	105,21	1,38
12750	Sylvia communis	BIR	stable	2007	2018	NA	484	99,89	0,83
15820	Sturnus vulgaris	BIR	stable	2007	2018	NA	735	99,00	0,77
15980	Passer montanus	BIR	decrease	2007	2018	hot	238	93,88	1,68
16600	Carduelis cannabina	BIR	stable	2007	2018	hot	357	97,81	1,19
18570	Emberiza citrinella	BIR	stable	2007	2018	NA	129	100,31	1,49

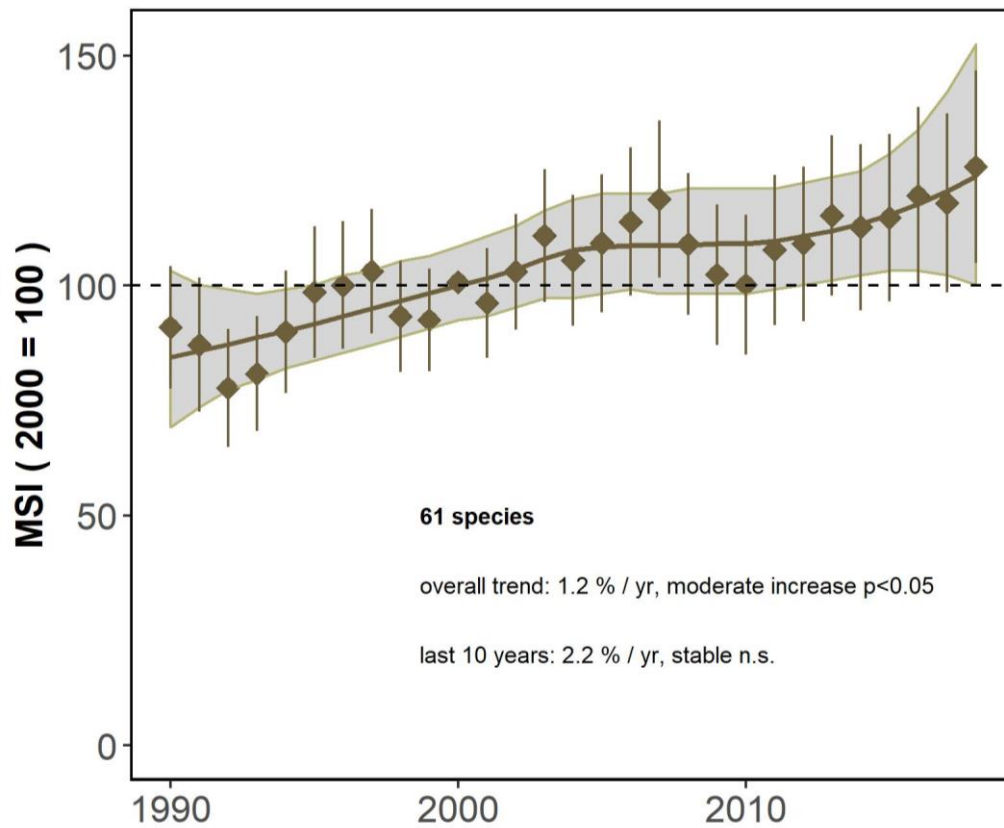
Species of natural open habitats in Flanders



code	tax	group_tax	Trend	from	to	category	n_square	slope	se_slope
14	Coronella austriaca	REP	stable	1996	2018	NA	122	100,40	1,30
58	Rana arvalis	AMF	increase	1990	2018	NA	217	104,62	1,80
9740	Lullula arborea	BIR	increase	2007	2018	hot	120	106,97	1,68
10090	Anthus trivialis	BIR	stable	2007	2018	cold	188	100,17	1,00
15200	Lanius excubitor	BIR	uncertain	2007	2018	cold	3	53,70	30,69
1683067	Conocephalus fuscus	SPR	increase	1994	2018	NA	2011	106,04	0,86
1686243	Phaneroptera falcata	SPR	increase	1994	2018	NA	965	113,80	2,94
1688020	Leptophyes punctatissima	SPR	increase	1994	2018	NA	1247	103,14	1,38
1690429	Meconema meridionale	SPR	increase	1994	2018	NA	376	117,38	5,35
1695297	Pholidoptera griseoptera	SPR	stable	1994	2018	NA	1703	100,21	0,17
1700310	Oedipoda caerulescens	SPR	increase	1994	2018	NA	470	103,30	1,09
1700841	Chrysochraon dispar	SPR	increase	1994	2018	NA	545	107,33	2,03
1701365	Myrmeleotettix maculatus	SPR	stable	1994	2018	NA	528	100,61	0,46
1708251	Chorthippus biguttulus	SPR	increase	1994	2018	NA	2011	100,55	0,19
1708567	Chorthippus albomarginatus	SPR	stable	1994	2018	NA	364	101,15	1,04
1708667	Chorthippus mollis	SPR	stable	1994	2018	NA	488	100,36	0,82
1710755	Omocestus viridulus	SPR	stable	1994	2018	NA	203	100,18	0,96
1710802	Omocestus rufipes	SPR	stable	1994	2018	NA	215	100,80	0,96
1716462	Gryllus campestris	SPR	stable	1994	2018	NA	472	101,55	1,01
1933095	Aricia agestis	VLI	increase	1990	2018	hot	2524	104,25	0,75
4402879	Roeseliana roeselii	SPR	increase	1994	2018	NA	498	102,60	0,92
5138561	Plebejus argus	VLI	decrease	1990	2018	NA	230	98,98	0,39
5139156	Cyaniris semiargus	VLI	uncertain	1990	2018	NA	48	103,29	1,87
5882898	Lycaena tityrus	VLI	stable	1990	2018	NA	40	101,66	1,59
7459402	Phengaris alcon	VLI	decrease	1990	2018	NA	44	97,30	0,75
8168644	Melitaea cinxia	VLI	uncertain	1990	2018	hot	110	103,27	1,67
8176911	Hipparchia semele	VLI	decrease	1990	2018	NA	448	98,03	0,21

8270406	Erynnis tages	VLI	stable	1990	2018	NA	33	101,28	1,36
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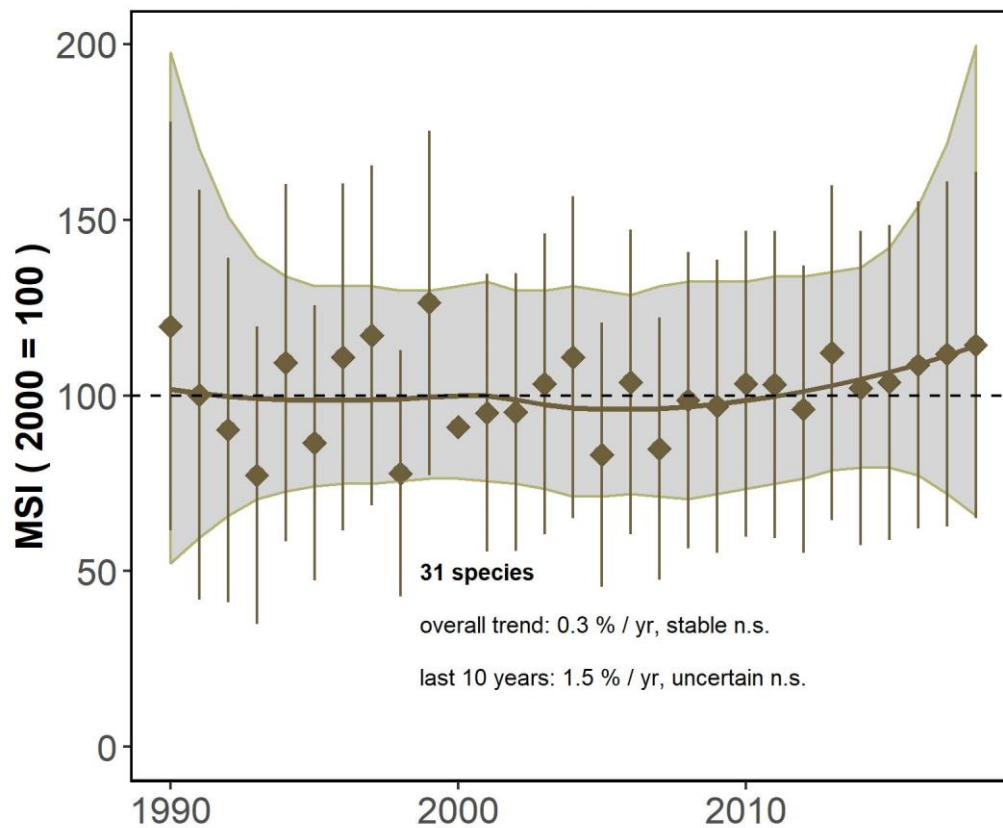
Species of wetlands in Flanders



code	tax	group_tax	Trend	From	To	category	n_square	slope	se_slope
32	Lissotriton helveticus	AMF	uncertain	1990	2018	NA	706	102,69	1,51
34	Lissotriton vulgaris	AMF	increase	1990	2018	NA	2285	101,14	0,39
72	Triturus cristatus	AMF	stable	1990	2018	NA	380	99,89	0,44
578	Calopteryx splendens Harris, 1780	LIB	increase	1990	2018	NA	1881	102,48	0,46
579	Calopteryx virgo Linnaeus, 1758	LIB	increase	1990	2018	NA	715	102,55	0,57
580	Sympecma fusca Vander Linden, 1820	LIB	increase	1990	2018	hot	978	102,38	0,69
581	Lestes barbarus Fabricius, 1798	LIB	increase	1990	2018	NA	437	108,32	2,11
582	Lestes dryas Kirby, 1890	LIB	increase	1990	2018	NA	309	107,46	1,91
583	Lestes sponsa Hansemann, 1823	LIB	stable	1990	2018	cold	918	99,75	0,22
584	Lestes virens Charpentier, 1825	LIB	increase	1990	2018	NA	497	110,31	1,91
585	Chalcolestes viridis Vander Linden, 1825	LIB	stable	1990	2018	NA	2121	100,20	0,16
587	Ischnura elegans Vander Linden, 1820	LIB	decrease	1990	2018	NA	3598	99,81	0,06
588	Ischnura pumilio Charpentier, 1825	LIB	increase	1990	2018	NA	584	109,25	2,40
589	Pyrrhosoma nymphula Sulzer, 1776	LIB	increase	1990	2018	NA	2641	101,37	0,25
590	Enallagma cyathigerum Charpentier, 1840	LIB	decrease	1990	2018	NA	1744	99,53	0,11
594	Coenagrion puella Linnaeus, 1758	LIB	increase	1990	2018	NA	3237	100,73	0,14
595	Coenagrion pulchellum Vander Linden, 1825	LIB	stable	1990	2018	NA	343	101,03	1,19
596	Coenagrion scitulum Rambur, 1842	LIB	increase	1990	2018	hot	467	117,20	3,17
597	Erythromma lindenii Selys, 1840	LIB	stable	1990	2018	hot	511	101,54	0,90
598	Erythromma najas Hansemann, 1823	LIB	increase	1990	2018	NA	1073	101,28	0,34
599	Erythromma viridulum Charpentier, 1840	LIB	stable	1990	2018	NA	1265	99,90	0,20
604	Gomphus pulchellus Selys, 1840	LIB	decrease	1990	2018	hot	577	98,73	0,29
608	Brachytron pratense Müller, 1764	LIB	increase	1990	2018	NA	478	104,42	1,35
610	Aeshna cyanea Müller, 1764	LIB	stable	1990	2018	NA	2508	100,25	0,14
611	Aeshna grandis Linnaeus, 1758	LIB	stable	1990	2018	cold	689	99,79	0,39
612	Aeshna juncea Linnaeus, 1758	LIB	stable	1990	2018	cold	182	99,63	0,44
613	Aeshna mixta Latreille, 1805	LIB	increase	1990	2018	NA	2726	100,72	0,16

616	Anax imperator Leach, 1815	LIB	increase	1990	2018	hot	3297	100,36	0,12
617	Anax parthenope Selys, 1839	LIB	increase	1990	2018	hot	360	117,50	2,93
619	Cordulegaster boltonii Donovan, 1807	LIB	stable	1990	2018	NA	153	100,47	0,96
621	Cordulia aenea Linnaeus, 1758	LIB	increase	1990	2018	cold	1086	101,76	0,34
624	Somatochlora metallica Vander Linden, 1825	LIB	stable	1990	2018	cold	352	100,15	0,99
627	Libellula depressa Linnaeus, 1758	LIB	increase	1990	2018	NA	2571	100,72	0,22
628	Libellula fulva Müller, 1764	LIB	increase	1990	2018	NA	404	105,87	1,65
629	Libellula quadrimaculata Linnaeus, 1758	LIB	increase	1990	2018	NA	1563	100,73	0,19
630	Orthetrum brunneum Fonscolombe, 1837	LIB	increase	1990	2018	hot	107	106,06	2,78
631	Orthetrum cancellatum Linnaeus, 1758	LIB	increase	1990	2018	NA	3219	100,27	0,13
632	Orthetrum coerulescens Fabricius, 1798	LIB	increase	1990	2018	hot	352	104,79	0,93
633	Crocothemis erythraea Brullé, 1832	LIB	increase	1990	2018	hot	934	105,32	0,84
634	Sympetrum danae Sulzer, 1776	LIB	decrease	1990	2018	cold	781	97,91	0,22
637	Sympetrum fonscolombii Selys, 1840	LIB	increase	1990	2018	hot	548	107,48	2,13
640	Sympetrum sanguineum Müller, 1764	LIB	increase	1990	2018	NA	2468	100,62	0,19
641	Sympetrum striolatum Charpentier, 1840	LIB	increase	1990	2018	NA	2984	100,69	0,17
642	Sympetrum vulgatum Linnaeus, 1758	LIB	decrease	1990	2018	NA	740	98,33	0,19
644	Leucorrhinia dubia Vander Linden, 1825	LIB	stable	1990	2018	cold	240	100,02	0,81
645	Leucorrhinia pectoralis Charpentier, 1825	LIB	uncertain	1990	2018	cold	167	106,52	3,63
646	Leucorrhinia rubicunda Linnaeus, 1758	LIB	increase	1990	2018	cold	167	103,41	1,60
1524	Platycnemis pennipes Pallas, 1771	LIB	stable	1990	2018	NA	1247	100,13	0,15
1860	Anas platyrhynchos	BIR	stable	2007	2018	NA	643	99,65	0,55
4240	Gallinula chloropus	BIR	decrease	2007	2018	hot	373	96,35	0,87
4290	Fulica atra	BIR	increase	2007	2018	hot	260	104,23	1,06
10190	Motacilla cinerea	BIR	uncertain	2007	2018	hot	52	99,75	3,88
11060	Luscinia svecica	BIR	uncertain	2007	2018	cold	143	102,12	1,61
12200	Cettia cetti	BIR	uncertain	2007	2018	hot	29	98,90	3,68
12430	Acrocephalus schoenobaenus	BIR	stable	2007	2018	cold	81	100,62	1,52
12500	Acrocephalus palustris	BIR	uncertain	2007	2018	NA	166	97,17	1,82
12510	Acrocephalus scirpaceus	BIR	stable	2007	2018	hot	171	99,06	1,18
18770	Emberiza schoeniclus	BIR	stable	2007	2018	cold	148	100,73	1,44
1681054	Tetrix ceperoi	SPR	increase	1994	2018	NA	195	108,07	3,06
1683331	Conocephalus dorsalis	SPR	stable	1994	2018	NA	1085	99,71	0,23
1711091	Stethophyma grossum	SPR	increase	1994	2018	NA	526	104,51	1,59

Species of woodlands in Flanders



code	tax	group_tax	Trend	From	to	category	n_square	slope	se_slope
389	Sciuus vulgaris Linnaeus 1758	ZOG	increase	2008	2018	NA	4258	102,30	0,56
2690	Accipiter nisus	BIR	uncertain	2007	2018	NA	274	98,67	1,95
8630	Dryocopus martius	BIR	uncertain	2007	2018	cold	195	101,80	1,59
8830	Dendrocopos medius	BIR	increase	2007	2018	hot	32	110,41	3,88
8870	Dendrocopos minor	BIR	uncertain	2007	2018	NA	92	103,07	3,76
12020	Turdus viscivorus	BIR	decrease	2007	2018	NA	398	95,07	1,20
12760	Sylvia borin	BIR	decrease	2007	2018	cold	398	94,94	1,05
13080	Phylloscopus sibilatrix	BIR	uncertain	2007	2018	cold	39	97,72	4,90
13140	Regulus regulus	BIR	stable	2007	2018	cold	371	99,07	0,94
13150	Regulus ignicapilla	BIR	increase	2007	2018	NA	49	120,51	6,92
13350	Muscicapa striata	BIR	uncertain	2007	2018	NA	101	97,86	3,39
14370	Aegithalos caudatus	BIR	decrease	2007	2018	NA	394	97,02	1,30
14400	Poecile palustris	BIR	uncertain	2007	2018	NA	62	96,52	2,10
14420	Poecile montanus	BIR	uncertain	2007	2018	NA	145	94,77	2,37
14540	Lophophanes cristatus	BIR	stable	2007	2018	NA	254	98,10	1,02
14610	Periparus ater	BIR	decrease	2007	2018	NA	209	93,33	1,37
14790	Sitta europaea	BIR	increase	2007	2018	NA	363	102,40	0,76
14870	Certhia brachydactyla	BIR	stable	2007	2018	hot	519	100,11	0,70
15080	Oriolus oriolus	BIR	uncertain	2007	2018	hot	86	95,39	2,92
15390	Garrulus glandarius	BIR	stable	2007	2018	NA	698	99,00	0,67
16540	Carduelis spinus	BIR	uncertain	2007	2018	cold	54	101,59	5,86
16660	Loxia curvirostra	BIR	uncertain	2007	2018	cold	61	103,54	5,36
17100	Pyrrhula pyrrhula	BIR	uncertain	2007	2018	cold	56	106,96	3,72
17170	Coccothraustes coccothraustes	BIR	increase	2007	2018	hot	59	119,57	7,67
1690432	Meconema thalassinum	SPR	stable	1994	2018	NA	849	100,66	0,41
1722903	Nemobius sylvestris	SPR	increase	1994	2018	NA	389	105,24	1,61
1909398	Argynnis paphia	VLI	stable	1990	2018	NA	792	100,10	0,85

4535180	Favonius quercus	VLI	increase	1990	2018	hot	1595	101,79	0,34
5131910	Apatura iris	VLI	uncertain	1990	2018	NA	340	102,89	1,95
5882965	Satyrium w-album	VLI	increase	1990	2018	NA	218	113,75	3,06
8429428	Limnitis camilla	VLI	stable	1990	2018	NA	537	100,64	0,46

Eurytopic species in Flanders

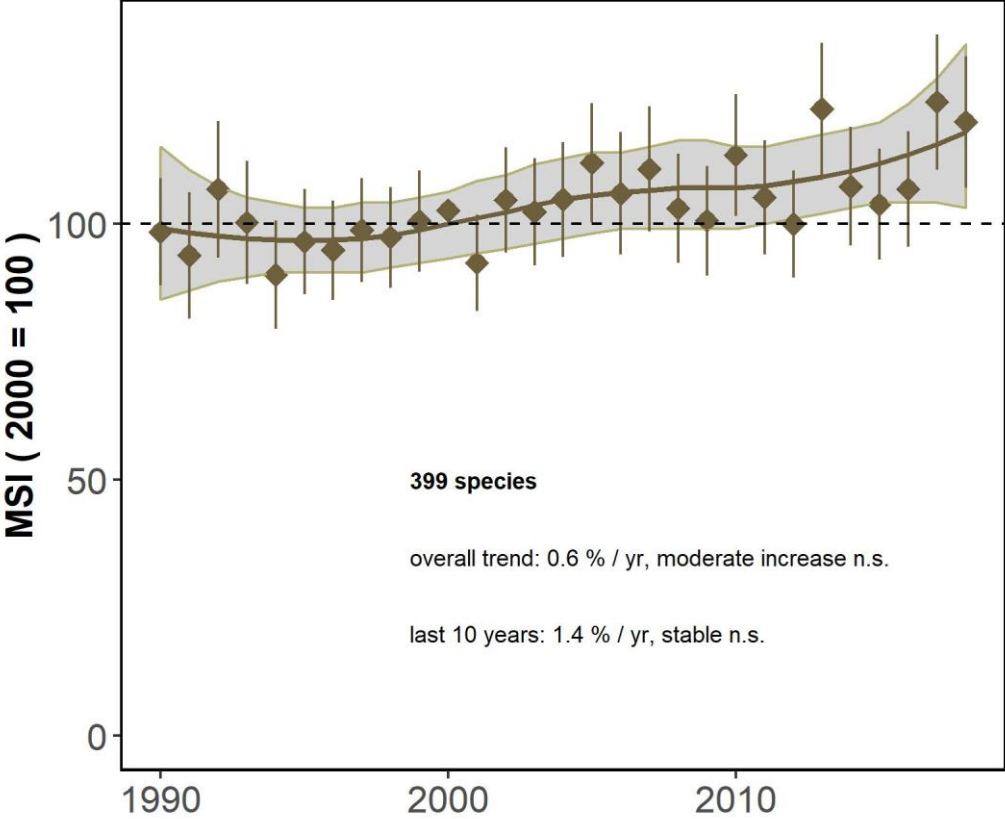
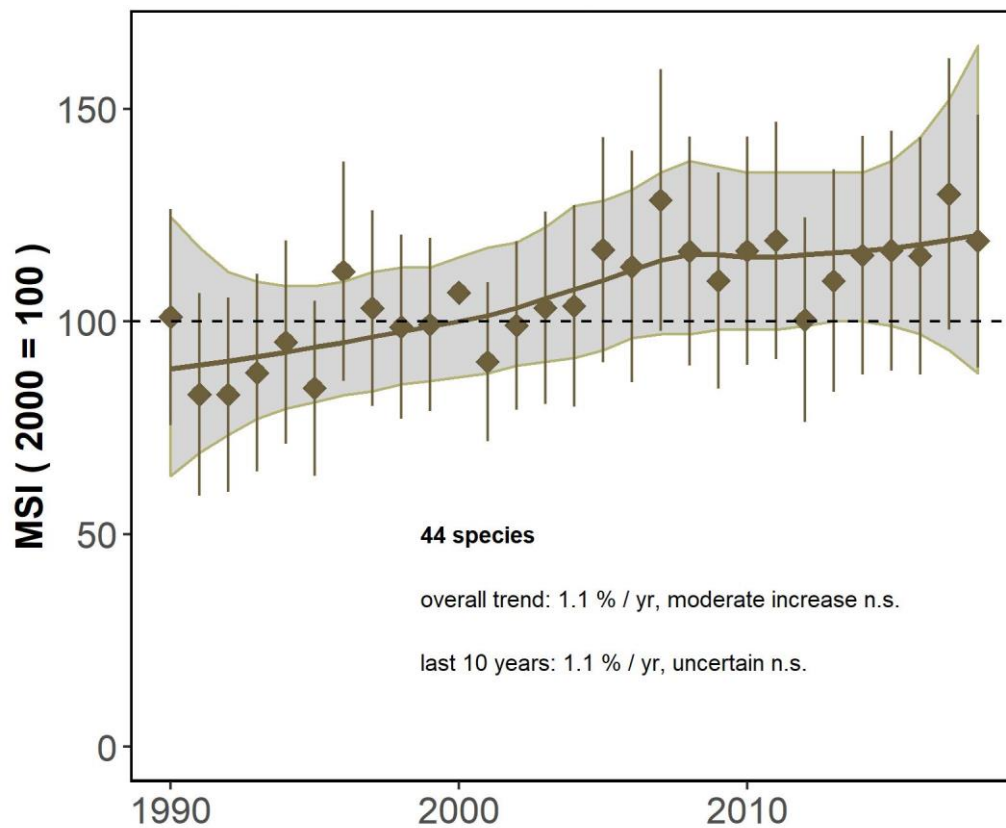


Figure 1 : All the moths species have been considered as eurytopic species

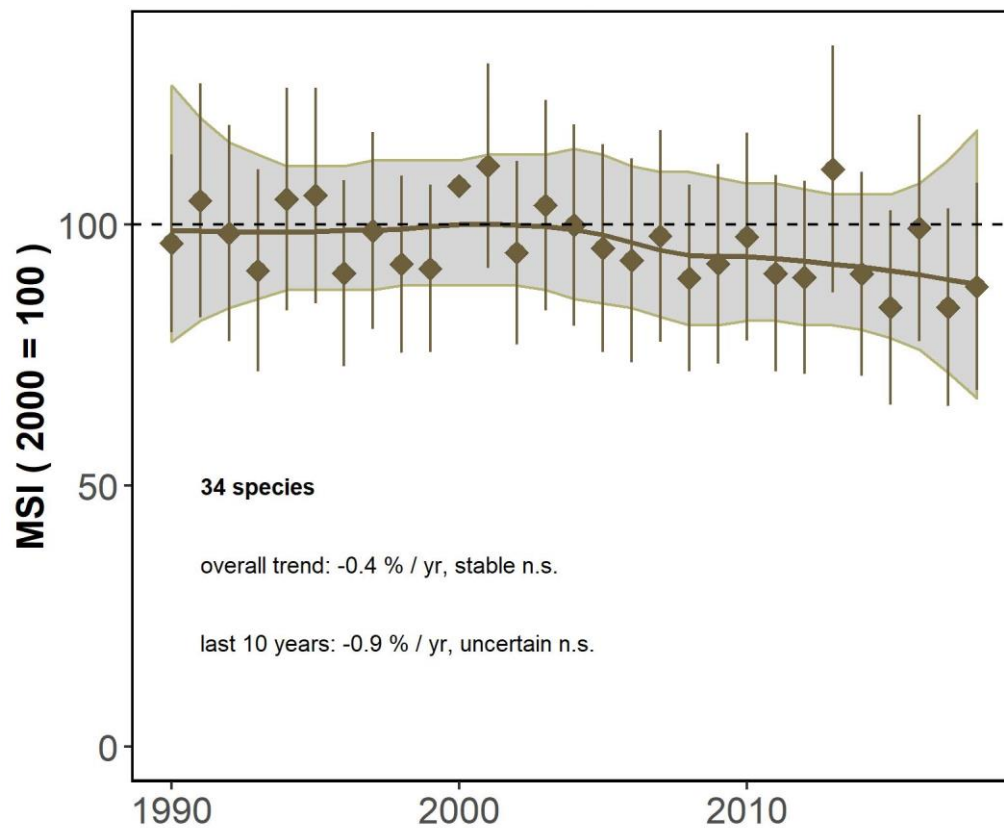
Species with STI « Hot » in Flanders



code	tax	group_tax	Trend	From	To	Habitat	n_square	slope	se_slope
580	Sympecma fusca Vander Linden, 1820	LIB	increase	1990	2018	wetlands	978	102,38	0,69
596	Coenagrion scitulum Rambur, 1842	LIB	increase	1990	2018	wetlands	467	117,20	3,17
597	Erythromma lindenii Selys, 1840	LIB	stable	1990	2018	wetlands	511	101,54	0,90
604	Gomphus pulchellus Selys, 1840	LIB	decrease	1990	2018	wetlands	577	98,73	0,29
616	Anax imperator Leach, 1815	LIB	increase	1990	2018	wetlands	3297	100,36	0,12
617	Anax parthenope Selys, 1839	LIB	increase	1990	2018	wetlands	360	117,50	2,93
630	Orthetrum brunneum Fonscolombe, 1837	LIB	increase	1990	2018	wetlands	107	106,06	2,78
632	Orthetrum coerulescens Fabricius, 1798	LIB	increase	1990	2018	wetlands	352	104,79	0,93
633	Crocothemis erythraea Brullé, 1832	LIB	increase	1990	2018	wetlands	934	105,32	0,84
637	Sympetrum fonscolombii Selys, 1840	LIB	increase	1990	2018	wetlands	548	107,48	2,13
3700	Coturnix coturnix	BIR	decrease	2007	2018	agriculture	71	85,27	4,25
4240	Gallinula chloropus	BIR	decrease	2007	2018	wetlands	373	96,35	0,87
4290	Fulica atra	BIR	increase	2007	2018	wetlands	260	104,23	1,06
6840	Streptopelia decaocto	BIR	decrease	2007	2018	eurytopic	715	97,61	0,42
6870	Streptopelia turtur	BIR	decrease	2007	2018	agriculture	94	84,74	3,23
8560	Picus viridis	BIR	stable	2007	2018	eurytopic	671	99,39	0,63
8830	Dendrocopos medius	BIR	increase	2007	2018	woodlands	32	110,41	3,88
9740	Lullula arborea	BIR	increase	2007	2018	open nature land	120	106,97	1,68
10190	Motacilla cinerea	BIR	uncertain	2007	2018	wetlands	52	99,75	3,88
11040	Luscinia megarhynchos	BIR	uncertain	2007	2018	eurytopic	34	98,01	4,06
11210	Phoenicurus ochruros	BIR	stable	2007	2018	urban	411	100,56	0,92
11390	Saxicola torquatus	BIR	increase	2007	2018	agriculture	163	105,21	1,38
12200	Cettia cetti	BIR	uncertain	2007	2018	wetlands	29	98,90	3,68
12510	Acrocephalus scirpaceus	BIR	stable	2007	2018	wetlands	171	99,06	1,18
14870	Certhia brachyactyla	BIR	stable	2007	2018	woodlands	519	100,11	0,70
15080	Oriolus oriolus	BIR	uncertain	2007	2018	woodlands	86	95,39	2,92
15600	Corvus monedula	BIR	increase	2007	2018	eurytopic	749	103,71	0,58

15980	Passer montanus	BIR	decrease	2007	2018	agriculture	238	93,88	1,68
16400	Serinus serinus	BIR	uncertain	2007	2018	eurytopic	2	54,40	31,45
16530	Carduelis carduelis	BIR	increase	2007	2018	eurytopic	174	108,50	2,49
16600	Carduelis cannabina	BIR	stable	2007	2018	agriculture	357	97,81	1,19
17170	Coccothraustes coccothraustes	BIR	increase	2007	2018	woodlands	59	119,57	7,67
1920496	Pieris rapae	VLI	increase	1990	2018	eurytopic	8865	100,31	0,09
1933095	Aricia agestis	VLI	increase	1990	2018	open nature land	2524	104,25	0,75
4535180	Favonius quercus	VLI	increase	1990	2018	woodlands	1595	101,79	0,34
4535632	Lasiommata megera	VLI	decrease	1990	2018	eurytopic	917	95,04	0,24
5135513	Maniola jurtina	VLI	increase	1990	2018	eurytopic	6622	100,84	0,10
5882969	Satyrium ilicis	VLI	decrease	1990	2018	eurytopic	117	97,42	0,64
7622059	Pyronia tithonus	VLI	increase	1990	2018	eurytopic	5513	100,80	0,11
7762841	Nymphalis polychloros	VLI	uncertain	1990	2018	eurytopic	287	105,53	2,92
8049830	Pararge aegeria	VLI	increase	1990	2018	eurytopic	6703	100,17	0,08
8168644	Melitaea cinxia	VLI	uncertain	1990	2018	open nature land	110	103,27	1,67
8273661	Thymelicus sylvestris	VLI	decrease	1990	2018	eurytopic	513	98,24	0,23
8277078	Carcharodus alceae	VLI	uncertain	1990	2018	eurytopic	603	106,72	3,48

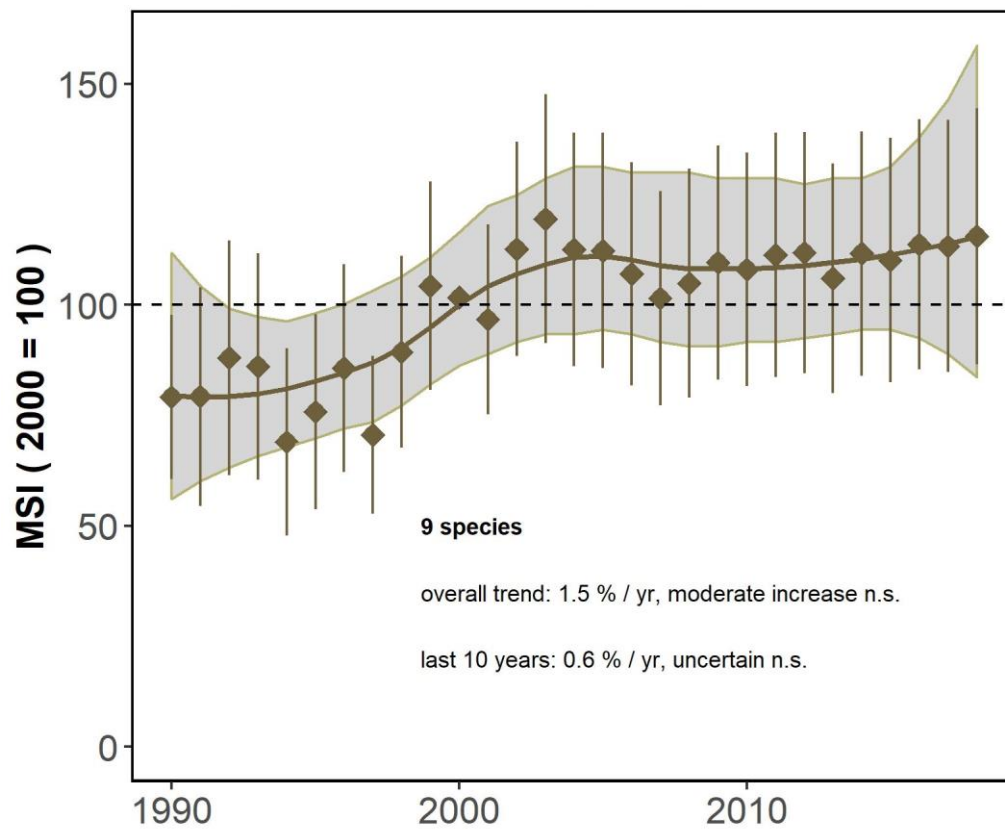
Species with STI « Cold » in Flanders



code	tax	group_tax	trend	from	to	Habitat	n_square	slope (%)	se_slope
583	Lestes sponsa Hansemann, 1823	LIB	stable	1990	2018	wetlands	918	99,75	0,22
611	Aeshna grandis Linnaeus, 1758	LIB	stable	1990	2018	wetlands	689	99,79	0,39
612	Aeshna juncea Linnaeus, 1758	LIB	stable	1990	2018	wetlands	182	99,63	0,44
621	Cordulia aenea Linnaeus, 1758	LIB	increase	1990	2018	wetlands	1086	101,76	0,34
624	Somatochlora metallica Vander Linden, 1825	LIB	stable	1990	2018	wetlands	352	100,15	0,99
634	Sympetrum danae Sulzer, 1776	LIB	decline	1990	2018	wetlands	781	97,91	0,22
644	Leucorrhinia dubia Vander Linden, 1825	LIB	stable	1990	2018	wetlands	240	100,02	0,81
645	Leucorrhinia pectoralis Charpentier, 1825	LIB	uncertain	1990	2018	wetlands	167	106,52	3,63
646	Leucorrhinia rubicunda Linnaeus, 1758	LIB	increase	1990	2018	wetlands	167	103,41	1,60
4500	Haematopus ostralegus	BIR	Stable	2007	2018	eurytopic	302	99,96	1,01
5460	Tringa totanus	BIR	decrease	2007	2018	agriculture	37	88,64	4,55
8630	Dryocopus martius	BIR	Uncertain	2007	2018	woodlands	195	101,80	1,59
10090	Anthus trivialis	BIR	Stable	2007	2018	open nature land	188	100,17	1,00
10110	Anthus pratensis	BIR	decrease	2007	2018	agriculture	325	95,36	1,28
10840	Prunella modularis	BIR	decrease	2007	2018	eurytopic	763	98,28	0,47
11060	Luscinia svecica	BIR	Uncertain	2007	2018	wetlands	143	102,12	1,61
11220	Phoenicurus phoenicurus	BIR	Uncertain	2007	2018	eurytopic	156	101,75	1,59
12430	Acrocephalus schoenobaenus	BIR	Stable	2007	2018	wetlands	81	100,62	1,52
12590	Hippolais icterina	BIR	Uncertain	2007	2018	eurytopic	160	94,84	2,40
12760	Sylvia borin	BIR	decrease	2007	2018	woodlands	398	94,94	1,05
13080	Phylloscopus sibilatrix	BIR	Uncertain	2007	2018	woodlands	39	97,72	4,90
13120	Phylloscopus trochilus	BIR	decrease	2007	2018	eurytopic	380	95,78	0,75
13140	Regulus regulus	BIR	Stable	2007	2018	woodlands	371	99,07	0,94
15200	Lanius excubitor	BIR	Uncertain	2007	2018	open nature land	3	53,70	30,69
16540	Carduelis spinus	BIR	Uncertain	2007	2018	woodlands	54	101,59	5,86
16660	Loxia curvirostra	BIR	Uncertain	2007	2018	woodlands	61	103,54	5,36
17100	Pyrrhula pyrrhula	BIR	Uncertain	2007	2018	woodlands	56	106,96	3,72

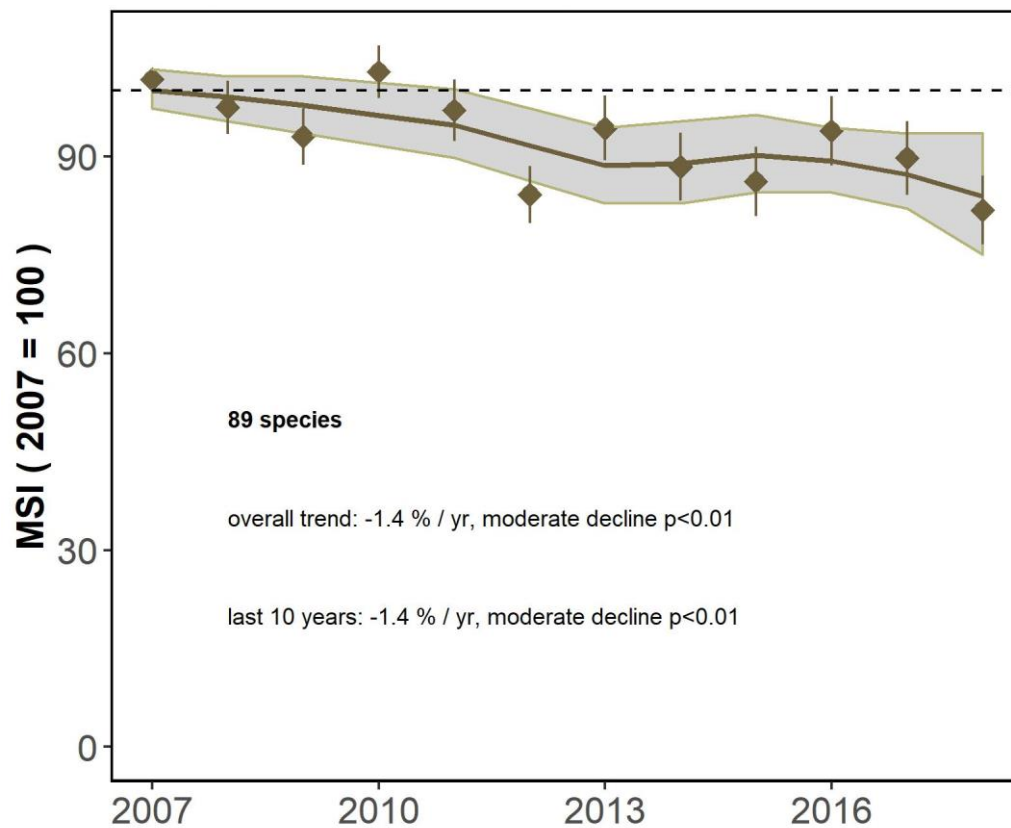
18770	Emberiza schoeniclus	BIR	Stable	2007	2018	wetlands	148	100,73	1,44
1894840	Aglais urticae	VLI	decline	1990	2018	eurytopic	6486	98,87	0,12
1896841	Aphantopus hyperantus	VLI	increase	1990	2018	eurytopic	2276	100,50	0,14
1919712	Anthocharis cardamines	VLI	increase	1990	2018	eurytopic	4994	100,86	0,13
1920494	Pieris napi	VLI	stable	1990	2018	eurytopic	5157	100,00	0,11
1947335	Carterocephalus palaemon	VLI	increase	1990	2018	eurytopic	510	100,84	0,40
5139156	Cyaniris semiargus	VLI	uncertain	1990	2018	open nature land	48	103,29	1,87

Amphibians in Flanders



code	tax	Trend	From	To	Habitat	category	n_square	slope	se_slope
8	Bufo bufo	increase	1990	2018	eurytopic	NA	3685	101,82	0,40
20	Epidalea calamita	increase	1990	2018	eurytopic	NA	341	103,23	1,45
25	Ichthyosaura alpestris	increase	1990	2018	eurytopic	NA	2245	101,47	0,48
32	Lissotriton helveticus	uncertain	1990	2018	wetlands	NA	706	102,69	1,51
34	Lissotriton vulgaris	increase	1990	2018	wetlands	NA	2285	101,14	0,39
58	Rana arvalis	increase	1990	2018	open nature land	NA	217	104,62	1,80
60	Rana esculenta	increase	1990	2018	eurytopic	NA	1330	109,14	2,77
62	Rana temporaria	increase	1990	2018	eurytopic	NA	3529	101,76	0,36
72	Triturus cristatus	stable	1990	2018	wetlands	NA	380	99,89	0,44

Birds in Flanders

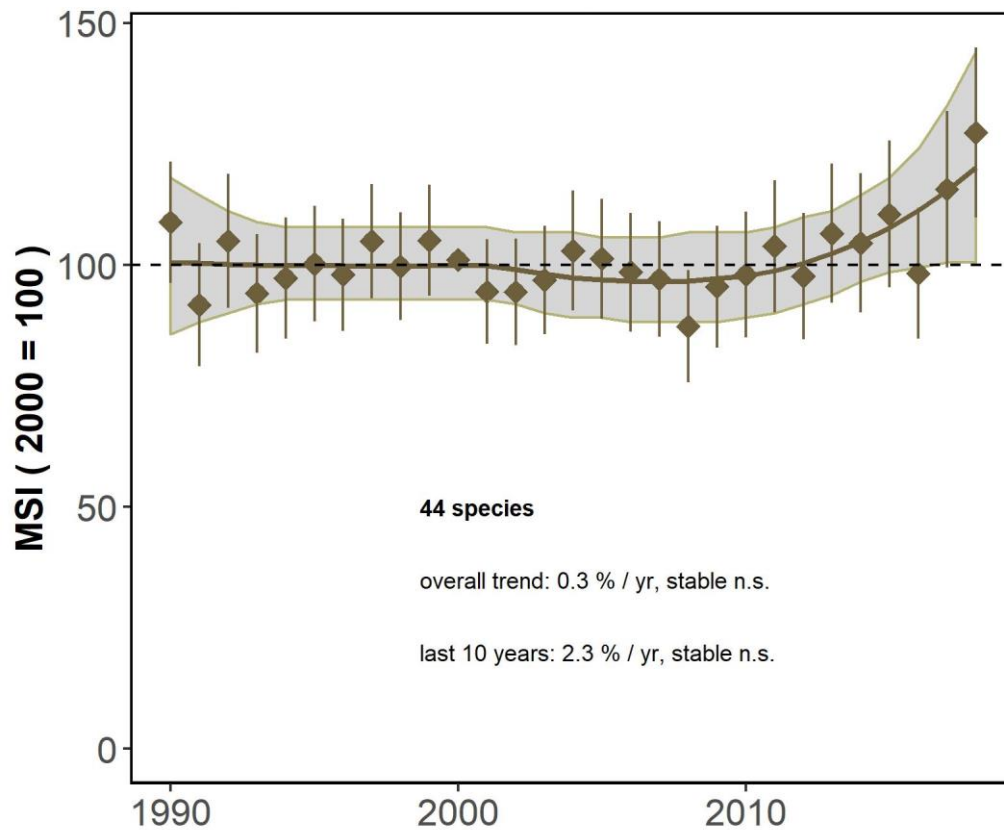


code	tax	Trend	From	To	Habitat	category	n_square	slope	se_slope
1860	Anas platyrhynchos	stable	2007	2018	wetlands	NA	643	99,65	0,55
2690	Accipiter nisus	uncertain	2007	2018	woodlands	NA	274	98,67	1,95
2870	Buteo buteo	increase	2007	2018	eurytopic	NA	569	102,55	0,85
3040	Falco tinnunculus	stable	2007	2018	agriculture	NA	355	98,58	1,30
3670	Perdix perdix	decrease	2007	2018	agriculture	NA	269	92,15	1,27
3700	Coturnix coturnix	decrease	2007	2018	agriculture	hot	71	85,27	4,25
3940	Phasianus colchicus	decrease	2007	2018	agriculture	NA	622	98,36	0,57
4240	Gallinula chloropus	decrease	2007	2018	wetlands	hot	373	96,35	0,87
4290	Fulica atra	increase	2007	2018	wetlands	hot	260	104,23	1,06
4500	Haematopus ostralegus	stable	2007	2018	eurytopic	cold	302	99,96	1,01
4930	Vanellus vanellus	decrease	2007	2018	agriculture	NA	540	93,17	0,72
5320	Limosa limosa	decrease	2007	2018	agriculture	NA	72	90,32	1,96
5460	Tringa totanus	decrease	2007	2018	agriculture	cold	37	88,64	4,55
6680	Columba oenas	decrease	2007	2018	eurytopic	NA	640	97,90	0,71
6700	Columba palumbus	stable	2007	2018	eurytopic	NA	925	100,14	0,39
6840	Streptopelia decaocto	decrease	2007	2018	eurytopic	hot	715	97,61	0,42
6870	Streptopelia turtur	decrease	2007	2018	agriculture	hot	94	84,74	3,23
7240	Cuculus canorus	decrease	2007	2018	eurytopic	NA	412	95,79	1,09
7950	Apus apus	stable	2007	2018	urban	NA	320	98,03	1,17
8560	Picus viridis	stable	2007	2018	eurytopic	hot	671	99,39	0,63
8630	Dryocopus martius	uncertain	2007	2018	woodlands	cold	195	101,80	1,59
8760	Dendrocopos major	increase	2007	2018	eurytopic	NA	692	102,53	0,53
8830	Dendrocopos medius	increase	2007	2018	woodlands	hot	32	110,41	3,88
8870	Dendrocopos minor	uncertain	2007	2018	woodlands	NA	92	103,07	3,76
9740	Lullula arborea	increase	2007	2018	open nature land	hot	120	106,97	1,68
9760	Alauda arvensis	stable	2007	2018	agriculture	NA	346	98,34	0,78
9920	Hirundo rustica	stable	2007	2018	agriculture	NA	567	99,97	0,76

10090	Anthus trivialis	stable	2007	2018	open nature land	cold	188	100,17	1,00
10110	Anthus pratensis	decrease	2007	2018	agriculture	cold	325	95,36	1,28
10170	Motacilla flava	decrease	2007	2018	agriculture	NA	301	96,15	0,98
10190	Motacilla cinerea	uncertain	2007	2018	wetlands	hot	52	99,75	3,88
10200	Motacilla alba	stable	2007	2018	eurytopic	NA	590	100,91	0,71
10660	Troglodytes troglodytes	stable	2007	2018	eurytopic	NA	895	100,12	0,30
10840	Prunella modularis	decrease	2007	2018	eurytopic	cold	763	98,28	0,47
10990	Erithacus rubecula	increase	2007	2018	eurytopic	NA	748	101,29	0,38
11040	Luscinia megarhynchos	uncertain	2007	2018	eurytopic	hot	34	98,01	4,06
11060	Luscinia svecica	uncertain	2007	2018	wetlands	cold	143	102,12	1,61
11210	Phoenicurus ochruros	stable	2007	2018	urban	hot	411	100,56	0,92
11220	Phoenicurus phoenicurus	uncertain	2007	2018	eurytopic	cold	156	101,75	1,59
11390	Saxicola torquatus	increase	2007	2018	agriculture	hot	163	105,21	1,38
11870	Turdus merula	decrease	2007	2018	eurytopic	NA	915	98,69	0,27
12000	Turdus philomelos	decrease	2007	2018	eurytopic	NA	821	98,72	0,52
12020	Turdus viscivorus	decrease	2007	2018	woodlands	NA	398	95,07	1,20
12200	Cettia cetti	uncertain	2007	2018	wetlands	hot	29	98,90	3,68
12360	Locustella naevia	decrease	2007	2018	eurytopic	NA	57	88,40	3,87
12430	Acrocephalus schoenobaenus	stable	2007	2018	wetlands	cold	81	100,62	1,52
12500	Acrocephalus palustris	uncertain	2007	2018	wetlands	NA	166	97,17	1,82
12510	Acrocephalus scirpaceus	stable	2007	2018	wetlands	hot	171	99,06	1,18
12590	Hippolais icterina	uncertain	2007	2018	eurytopic	cold	160	94,84	2,40
12740	Sylvia curruca	uncertain	2007	2018	eurytopic	NA	54	98,19	3,84
12750	Sylvia communis	stable	2007	2018	agriculture	NA	484	99,89	0,83
12760	Sylvia borin	decrease	2007	2018	woodlands	cold	398	94,94	1,05
12770	Sylvia atricapilla	increase	2007	2018	eurytopic	NA	832	102,54	0,39
13080	Phylloscopus sibilatrix	uncertain	2007	2018	woodlands	cold	39	97,72	4,90
13110	Phylloscopus collybita	increase	2007	2018	eurytopic	NA	869	101,61	0,34
13120	Phylloscopus trochilus	decrease	2007	2018	eurytopic	cold	380	95,78	0,75
13140	Regulus regulus	stable	2007	2018	woodlands	cold	371	99,07	0,94
13150	Regulus ignicapilla	increase	2007	2018	woodlands	NA	49	120,51	6,92
13350	Muscicapa striata	uncertain	2007	2018	woodlands	NA	101	97,86	3,39
13490	Ficedula hypoleuca	uncertain	2007	2018	eurytopic	NA	75	102,77	2,69
14370	Aegithalos caudatus	decrease	2007	2018	woodlands	NA	394	97,02	1,30
14400	Poecile palustris	uncertain	2007	2018	woodlands	NA	62	96,52	2,10
14420	Poecile montanus	uncertain	2007	2018	woodlands	NA	145	94,77	2,37
14540	Lophophanes cristatus	stable	2007	2018	woodlands	NA	254	98,10	1,02
14610	Periparus ater	decrease	2007	2018	woodlands	NA	209	93,33	1,37
14620	Cyanistes caeruleus	increase	2007	2018	eurytopic	NA	809	101,10	0,48
14640	Parus major	stable	2007	2018	eurytopic	NA	898	99,56	0,34
14790	Sitta europaea	increase	2007	2018	woodlands	NA	363	102,40	0,76
14870	Certhia brachydactyla	stable	2007	2018	woodlands	hot	519	100,11	0,70
15080	Oriolus oriolus	uncertain	2007	2018	woodlands	hot	86	95,39	2,92
15200	Lanius excubitor	uncertain	2007	2018	open nature land	cold	3	53,70	30,69
15390	Garrulus glandarius	stable	2007	2018	woodlands	NA	698	99,00	0,67
15490	Pica pica	stable	2007	2018	eurytopic	NA	726	100,58	0,45
15600	Corvus monedula	increase	2007	2018	eurytopic	hot	749	103,71	0,58
15670	Corvus corone	increase	2007	2018	eurytopic	NA	894	102,43	0,48
15820	Sturnus vulgaris	stable	2007	2018	agriculture	NA	735	99,00	0,77
15910	Passer domesticus	decrease	2007	2018	urban	NA	616	95,93	0,48
15980	Passer montanus	decrease	2007	2018	agriculture	hot	238	93,88	1,68
16360	Fringilla coelebs	increase	2007	2018	eurytopic	NA	865	100,91	0,32
16400	Serinus serinus	uncertain	2007	2018	eurytopic	hot	2	54,40	31,45
16490	Carduelis chloris	stable	2007	2018	eurytopic	NA	613	100,72	0,77
16530	Carduelis carduelis	increase	2007	2018	eurytopic	hot	174	108,50	2,49
16540	Carduelis spinus	uncertain	2007	2018	woodlands	cold	54	101,59	5,86

16600	Carduelis cannabina	stable	2007	2018	agriculture	hot	357	97,81	1,19
16660	Loxia curvirostra	uncertain	2007	2018	woodlands	cold	61	103,54	5,36
17100	Pyrrhula pyrrhula	uncertain	2007	2018	woodlands	cold	56	106,96	3,72
17170	Coccothraustes coccothraustes	increase	2007	2018	woodlands	hot	59	119,57	7,67
18570	Emberiza citrinella	stable	2007	2018	agriculture	NA	129	100,31	1,49
18770	Emberiza schoeniclus	stable	2007	2018	wetlands	cold	148	100,73	1,44

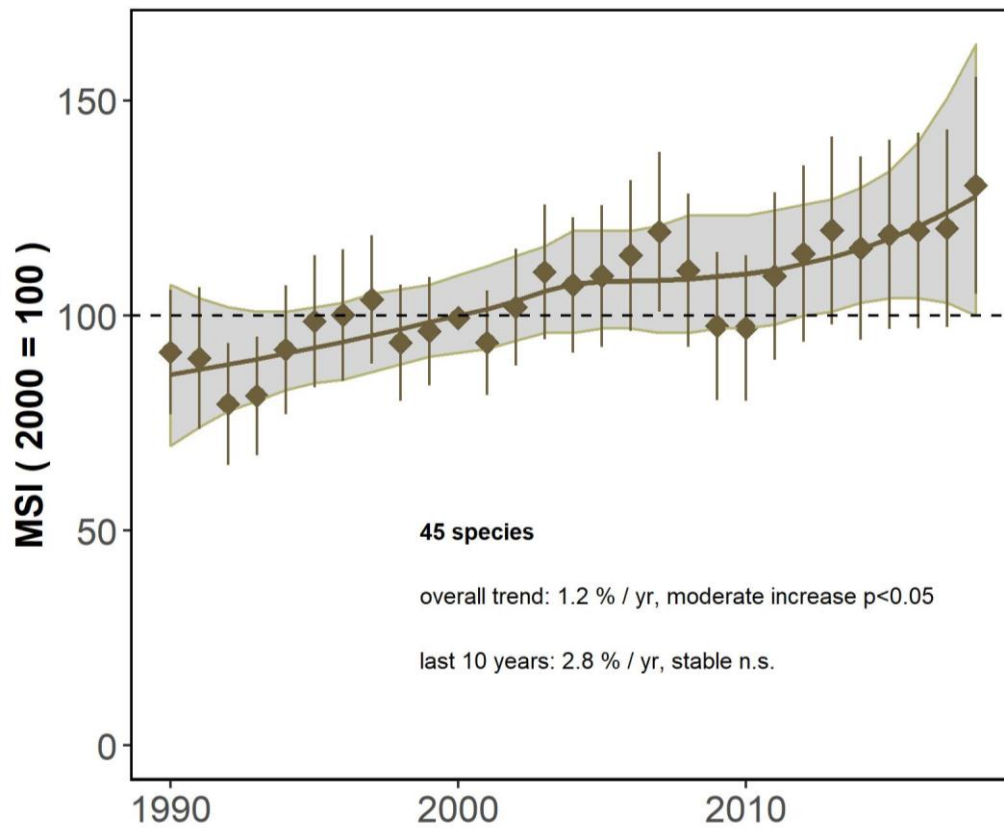
Butterflies in Flanders



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
1894840	Aglais urticae	decrease	1990	2018	eurypotic	cold	6486	98,87	0,12
1896841	Aphantopus hyperantus	increase	1990	2018	eurypotic	cold	2276	100,50	0,14
1898286	Vanessa atalanta	increase	1990	2018	eurypotic	NA	8659	100,15	0,06
1898544	Polygonia c-album	increase	1990	2018	eurypotic	NA	5472	100,63	0,14
1902533	Araschnia levana	decrease	1990	2018	eurypotic	NA	4447	99,71	0,10
1905383	Issoria lathonia	increase	1990	2018	eurypotic	NA	895	112,08	1,89
1909398	Argynnis paphia	stable	1990	2018	woodlands	NA	792	100,10	0,85
1911461	Coenonympha pamphilus	stable	1990	2018	eurypotic	NA	1924	100,05	0,21
1919712	Anthocharis cardamines	increase	1990	2018	eurypotic	cold	4994	100,86	0,13
1920494	Pieris napi	stable	1990	2018	eurypotic	cold	5157	100,00	0,11
1920496	Pieris rapae	increase	1990	2018	eurypotic	hot	8865	100,31	0,09
1920506	Pieris brassicae	stable	1990	2018	eurypotic	NA	6249	100,21	0,12
1920712	Gonepteryx rhamni	decrease	1990	2018	eurypotic	NA	6237	99,54	0,13
1925918	Celastrina argiolus	increase	1990	2018	eurypotic	NA	4422	100,94	0,17
1929697	Lycaena phlaeas	decrease	1990	2018	eurypotic	NA	4399	99,81	0,08
1930110	Thecla betulae	stable	1990	2018	eurypotic	NA	265	101,54	1,08
1932411	Callophrys rubi	stable	1990	2018	eurypotic	NA	316	99,39	0,32
1933095	Aricia agestis	increase	1990	2018	open nature land	hot	2524	104,25	0,75
1946844	Ochlodes sylvanus	increase	1990	2018	eurypotic	NA	4503	100,91	0,12
1947335	Carterocephalus palaemon	increase	1990	2018	eurypotic	cold	510	100,84	0,40
4535180	Favonius quercus	increase	1990	2018	woodlands	hot	1595	101,79	0,34
4535632	Lasiommata megera	decrease	1990	2018	eurypotic	hot	917	95,04	0,24
4535827	Aglais io	stable	1990	2018	eurypotic	NA	6645	100,10	0,07
5131910	Apatura iris	uncertain	1990	2018	woodlands	NA	340	102,89	1,95
5135513	Maniola jurtina	increase	1990	2018	eurypotic	hot	6622	100,84	0,10
5137903	Leptidea sinapis	increase	1990	2018	eurypotic	NA	106	110,35	2,33
5138561	Plebejus argus	decrease	1990	2018	open nature land	NA	230	98,98	0,39

5139156	Cyaniris semiargus	uncertain	1990	2018	open nature land	NA	48	103,29	1,87
5140214	Polyommatus icarus	increase	1990	2018	eurytopic	NA	4807	100,58	0,12
5882898	Lycaena tityrus	stable	1990	2018	open nature land	NA	40	101,66	1,59
5882965	Satyrium w-album	increase	1990	2018	woodlands	NA	218	113,75	3,06
5882969	Satyrium ilicis	decrease	1990	2018	eurytopic	hot	117	97,42	0,64
7459402	Phengaris alcon	decrease	1990	2018	open nature land	NA	44	97,30	0,75
7622059	Pyronia tithonus	increase	1990	2018	eurytopic	hot	5513	100,80	0,11
7762841	Nymphalis polychloros	uncertain	1990	2018	eurytopic	hot	287	105,53	2,92
8049830	Pararge aegeria	increase	1990	2018	eurytopic	hot	6703	100,17	0,08
8133678	Thymelicus lineola	decrease	1990	2018	eurytopic	NA	2917	98,82	0,11
8168644	Melitaea cinxia	uncertain	1990	2018	open nature land	hot	110	103,27	1,67
8176911	Hipparchia semele	decrease	1990	2018	open nature land	NA	448	98,03	0,21
8225376	Papilio machaon	increase	1990	2018	eurytopic	NA	3359	100,86	0,32
8270406	Erynnis tages	stable	1990	2018	open nature land	NA	33	101,28	1,36
8273661	Thymelicus sylvestris	decrease	1990	2018	eurytopic	hot	513	98,24	0,23
8277078	Carcharodus alceae	uncertain	1990	2018	eurytopic	hot	603	106,72	3,48
8429428	Limenitis camilla	stable	1990	2018	woodlands	NA	537	100,64	0,46

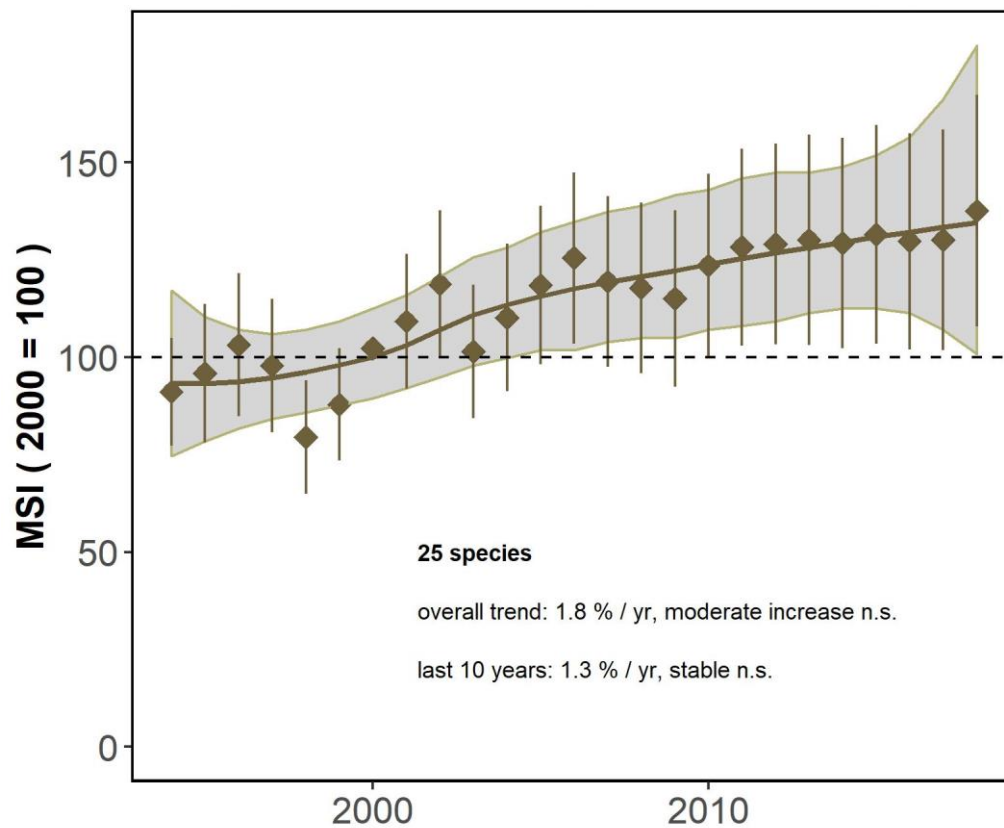
Dragonflies in Flanders



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
578	Calopteryx splendens Harris, 1780	increase	1990	2018	wetlands	NA	1881	102,48	0,46
579	Calopteryx virgo Linnaeus, 1758	increase	1990	2018	wetlands	NA	715	102,55	0,57
580	Sympecma fusca Vander Linden, 1820	increase	1990	2018	wetlands	hot	978	102,38	0,69
581	Lestes barbarus Fabricius, 1798	increase	1990	2018	wetlands	NA	437	108,32	2,11
582	Lestes dryas Kirby, 1890	increase	1990	2018	wetlands	NA	309	107,46	1,91
583	Lestes sponsa Hansemann, 1823	stable	1990	2018	wetlands	cold	918	99,75	0,22
584	Lestes virens Charpentier, 1825	increase	1990	2018	wetlands	NA	497	110,31	1,91
585	Chalcolestes viridis Vander Linden, 1825	stable	1990	2018	wetlands	NA	2121	100,20	0,16
587	Ischnura elegans Vander Linden, 1820	decrease	1990	2018	wetlands	NA	3598	99,81	0,06
588	Ischnura pumilio Charpentier, 1825	increase	1990	2018	wetlands	NA	584	109,25	2,40
589	Pyrrhosoma nymphula Sulzer, 1776	increase	1990	2018	wetlands	NA	2641	101,37	0,25
590	Enallagma cyathigerum Charpentier, 1840	decrease	1990	2018	wetlands	NA	1744	99,53	0,11
594	Coenagrion puella Linnaeus, 1758	increase	1990	2018	wetlands	NA	3237	100,73	0,14
595	Coenagrion pulchellum Vander Linden, 1825	stable	1990	2018	wetlands	NA	343	101,03	1,19
596	Coenagrion scitulum Rambur, 1842	increase	1990	2018	wetlands	hot	467	117,20	3,17
597	Erythromma lindenii Selys, 1840	stable	1990	2018	wetlands	hot	511	101,54	0,90
598	Erythromma najas Hansemann, 1823	increase	1990	2018	wetlands	NA	1073	101,28	0,34
599	Erythromma viridulum Charpentier, 1840	stable	1990	2018	wetlands	NA	1265	99,90	0,20
604	Gomphus pulchellus Selys, 1840	decrease	1990	2018	wetlands	hot	577	98,73	0,29
608	Brachytron pratense Müller, 1764	increase	1990	2018	wetlands	NA	478	104,42	1,35
610	Aeshna cyanea Müller, 1764	stable	1990	2018	wetlands	NA	2508	100,25	0,14
611	Aeshna grandis Linnaeus, 1758	stable	1990	2018	wetlands	cold	689	99,79	0,39
612	Aeshna juncea Linnaeus, 1758	stable	1990	2018	wetlands	cold	182	99,63	0,44
613	Aeshna mixta Latreille, 1805	increase	1990	2018	wetlands	NA	2726	100,72	0,16
616	Anax imperator Leach, 1815	increase	1990	2018	wetlands	hot	3297	100,36	0,12
617	Anax parthenope Selys, 1839	increase	1990	2018	wetlands	hot	360	117,50	2,93
619	Cordulegaster boltonii Donovan, 1807	stable	1990	2018	wetlands	NA	153	100,47	0,96

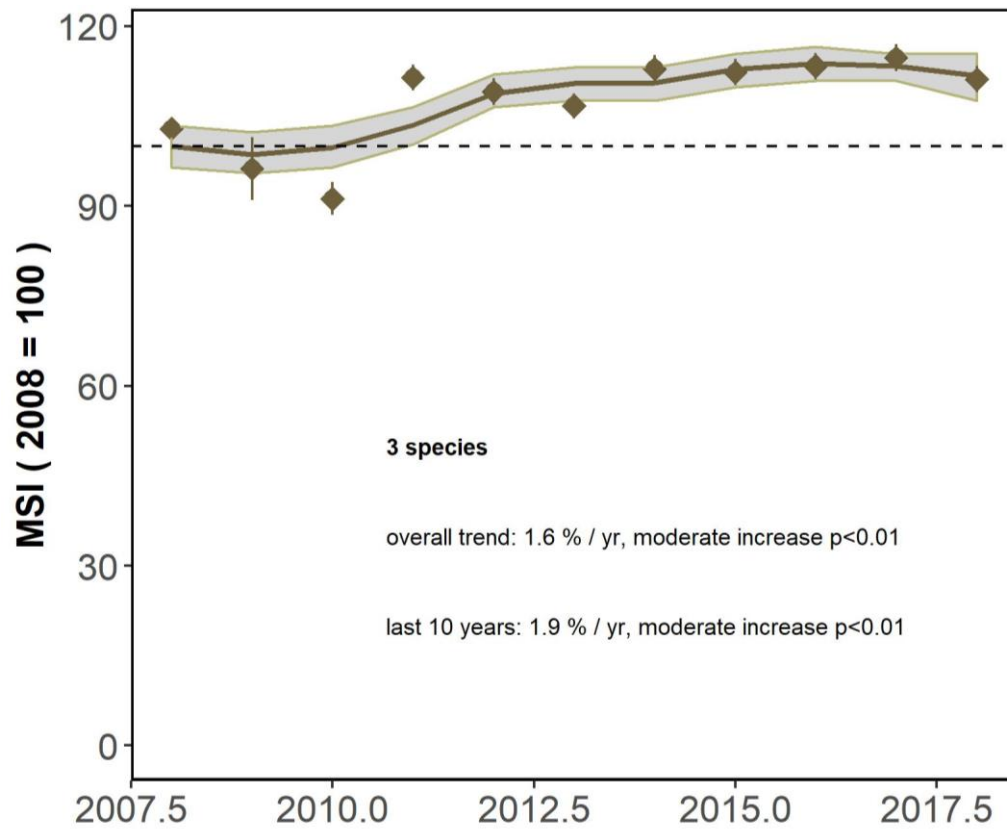
621	Cordulia aenea Linnaeus, 1758	increase	1990	2018	wetlands	cold	1086	101,76	0,34
624	Somatochlora metallica Vander Linden, 1825	stable	1990	2018	wetlands	cold	352	100,15	0,99
627	Libellula depressa Linnaeus, 1758	increase	1990	2018	wetlands	NA	2571	100,72	0,22
628	Libellula fulva Müller, 1764	increase	1990	2018	wetlands	NA	404	105,87	1,65
629	Libellula quadrimaculata Linnaeus, 1758	increase	1990	2018	wetlands	NA	1563	100,73	0,19
630	Orthetrum brunneum Fonscolombe, 1837	increase	1990	2018	wetlands	hot	107	106,06	2,78
631	Orthetrum cancellatum Linnaeus, 1758	increase	1990	2018	wetlands	NA	3219	100,27	0,13
632	Orthetrum coerulescens Fabricius, 1798	increase	1990	2018	wetlands	hot	352	104,79	0,93
633	Crocothemis erythraea Brullé, 1832	increase	1990	2018	wetlands	hot	934	105,32	0,84
634	Sympetrum danae Sulzer, 1776	decrease	1990	2018	wetlands	cold	781	97,91	0,22
637	Sympetrum fonscolombii Selys, 1840	increase	1990	2018	wetlands	hot	548	107,48	2,13
640	Sympetrum sanguineum Müller, 1764	increase	1990	2018	wetlands	NA	2468	100,62	0,19
641	Sympetrum striolatum Charpentier, 1840	increase	1990	2018	wetlands	NA	2984	100,69	0,17
642	Sympetrum vulgatum Linnaeus, 1758	decrease	1990	2018	wetlands	NA	740	98,33	0,19
644	Leucorrhinia dubia Vander Linden, 1825	stable	1990	2018	wetlands	cold	240	100,02	0,81
645	Leucorrhinia pectoralis Charpentier, 1825	uncertain	1990	2018	wetlands	cold	167	106,52	3,63
646	Leucorrhinia rubicunda Linnaeus, 1758	increase	1990	2018	wetlands	cold	167	103,41	1,60
1524	Platycnemis pennipes Pallas, 1771	stable	1990	2018	wetlands	NA	1247	100,13	0,15

Grasshoppers in Flanders



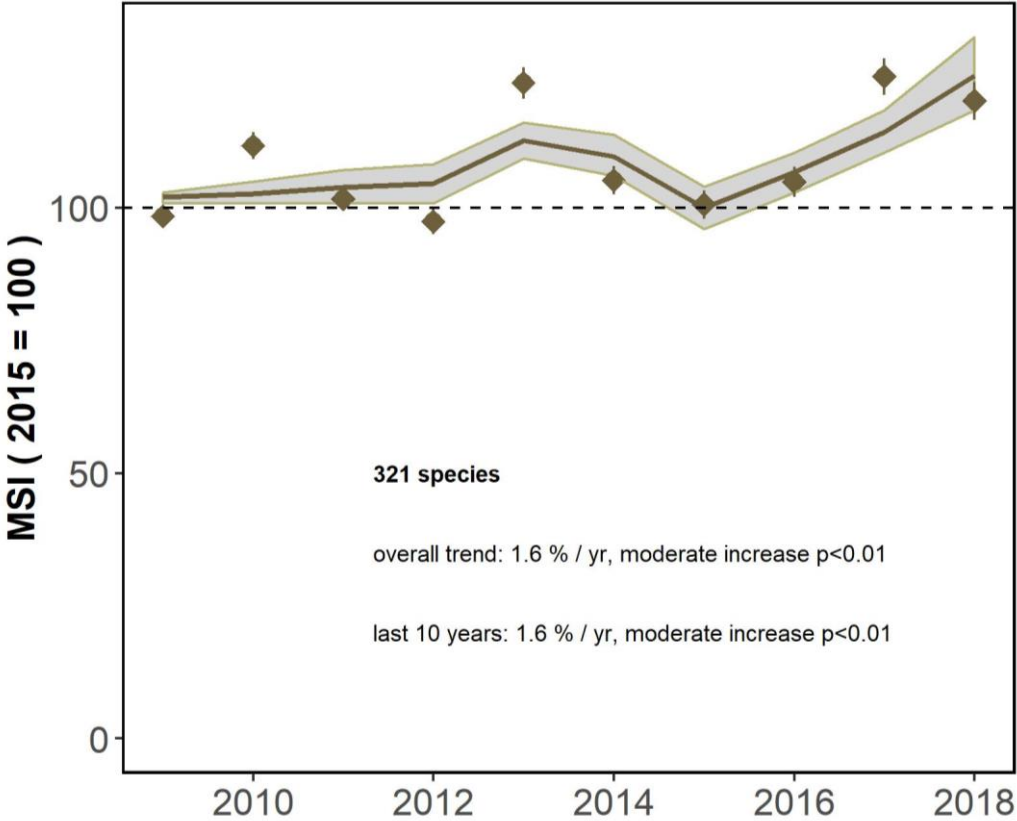
code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
1681054	Tetrix ceperoi	increase	1994	2018	wetlands	NA	195	108,07	3,06
1681124	Tetrix subulata	stable	1994	2018	eurypotic	NA	556	101,21	1,21
1681247	Tetrix undulata	stable	1994	2018	eurypotic	NA	600	100,11	0,52
1683067	Conocephalus fuscus	increase	1994	2018	open nature land	NA	2011	106,04	0,86
1683331	Conocephalus dorsalis	stable	1994	2018	wetlands	NA	1085	99,71	0,23
1686243	Phaneroptera falcata	increase	1994	2018	open nature land	NA	965	113,80	2,94
1688020	Leptophyes punctatissima	increase	1994	2018	open nature land	NA	1247	103,14	1,38
1690429	Meconema meridionale	increase	1994	2018	open nature land	NA	376	117,38	5,35
1690432	Meconema thalassinum	stable	1994	2018	woodlands	NA	849	100,66	0,41
1692898	Tettigonia viridissima	increase	1994	2018	eurypotic	NA	3729	100,72	0,19
1695297	Pholidoptera griseoptera	stable	1994	2018	open nature land	NA	1703	100,21	0,17
1700310	Oedipoda caerulea	increase	1994	2018	open nature land	NA	470	103,30	1,09
1700841	Chrysochraon dispar	increase	1994	2018	open nature land	NA	545	107,33	2,03
1701365	Myrmeleotettix maculatus	stable	1994	2018	open nature land	NA	528	100,61	0,46
1708251	Chorthippus biguttulus	increase	1994	2018	open nature land	NA	2011	100,55	0,19
1708459	Chorthippus brunneus	stable	1994	2018	eurypotic	NA	1856	100,04	0,20
1708567	Chorthippus albomarginatus	stable	1994	2018	open nature land	NA	364	101,15	1,04
1708667	Chorthippus mollis	stable	1994	2018	open nature land	NA	488	100,36	0,82
1710755	Omocestus viridulus	stable	1994	2018	open nature land	NA	203	100,18	0,96
1710802	Omocestus rufipes	stable	1994	2018	open nature land	NA	215	100,80	0,96
1711091	Stethophyma grossum	increase	1994	2018	wetlands	NA	526	104,51	1,59
1716462	Gryllus campestris	stable	1994	2018	open nature land	NA	472	101,55	1,01
1722903	Nemobius sylvestris	increase	1994	2018	woodlands	NA	389	105,24	1,61
4402879	Roeseiana roeselii	increase	1994	2018	open nature land	NA	498	102,60	0,92
7792296	Pseudochorthippus parallelus	stable	1994	2018	eurypotic	NA	3109	100,25	0,15

Mammals in Flanders

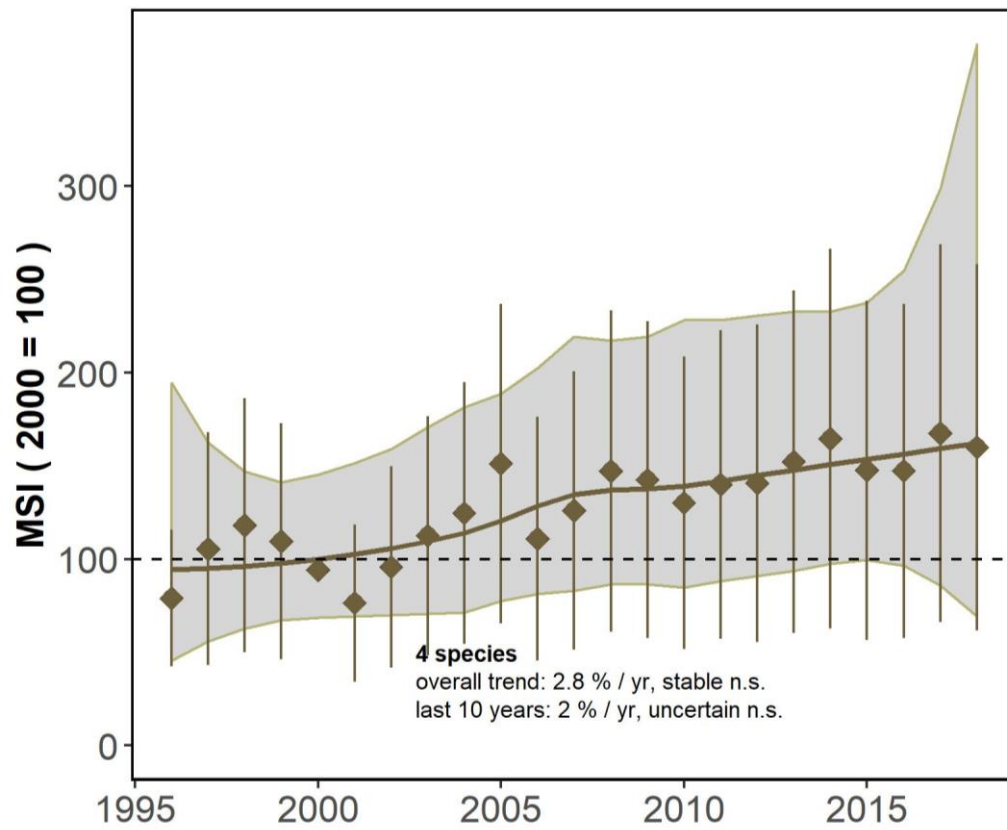


code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
389	Sciurus vulgaris Linnaeus 1758	increase	2008	2018	woodlands	NA	4258	102,30	0,56
409	Oryctolagus cuniculus (Linnaeus 1758)	decrease	2008	2018	eurytopic	NA	3979	99,14	0,30
418	Capreolus capreolus (Linnaeus 1758)	increase	2008	2018	eurytopic	NA	4396	103,54	0,37

Moths in Flanders



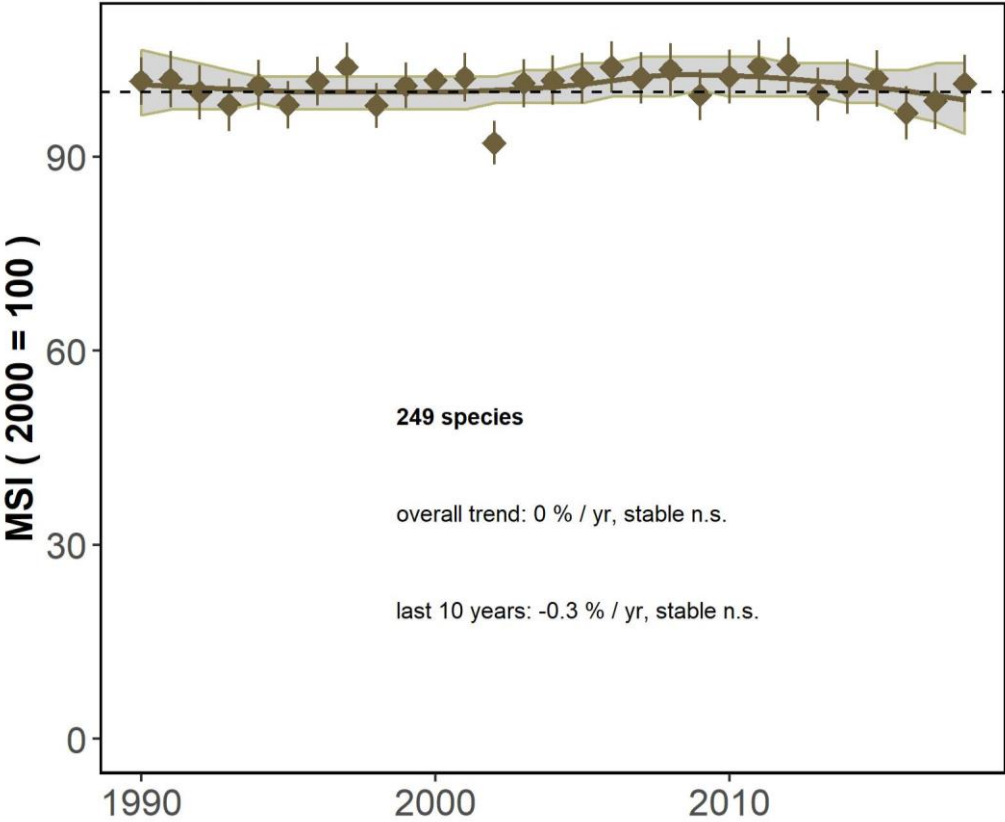
Reptiles in Flanders



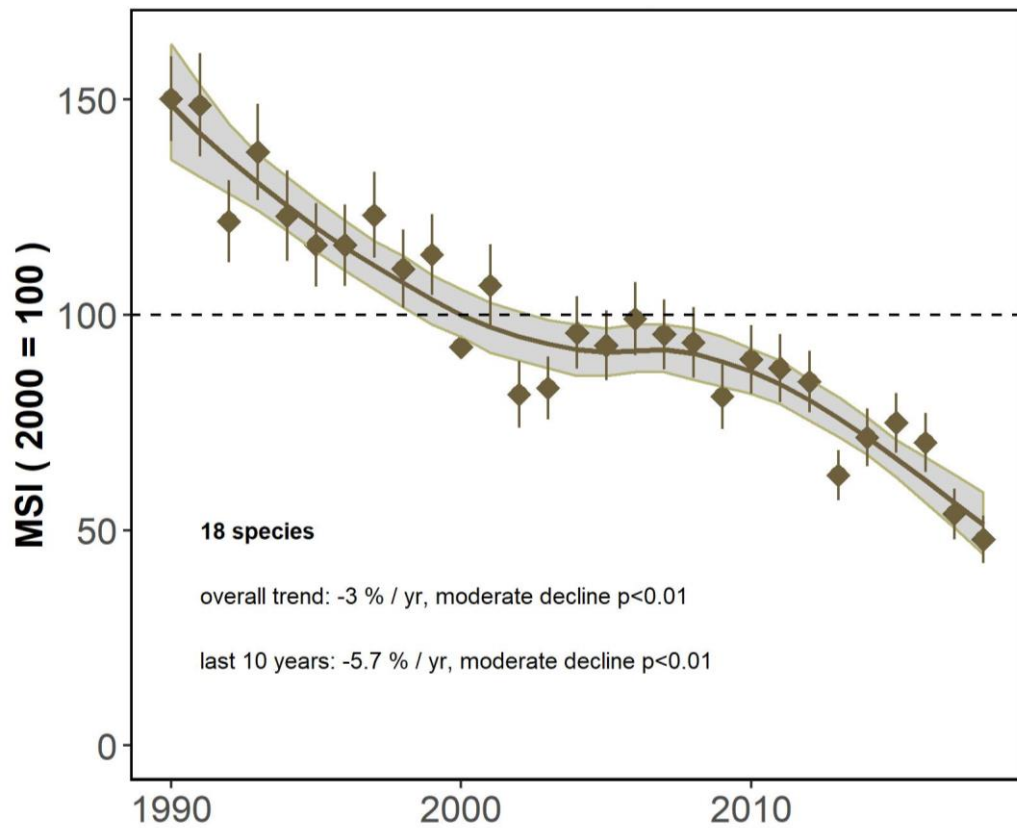
code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
14	Coronella austriaca	stable	1996	2018	open nature land	NA	122	100,40	1,30
38	Natrix helvetica	increase	1996	2018	eurypotic	NA	61	106,43	2,23
49	Podarcis muralis	increase	1996	2018	eurypotic	NA	112	108,69	3,14
79	Zootoca vivipara	increase	1996	2018	eurypotic	NA	1179	102,13	0,61

Results for Wallonia

Global LPI

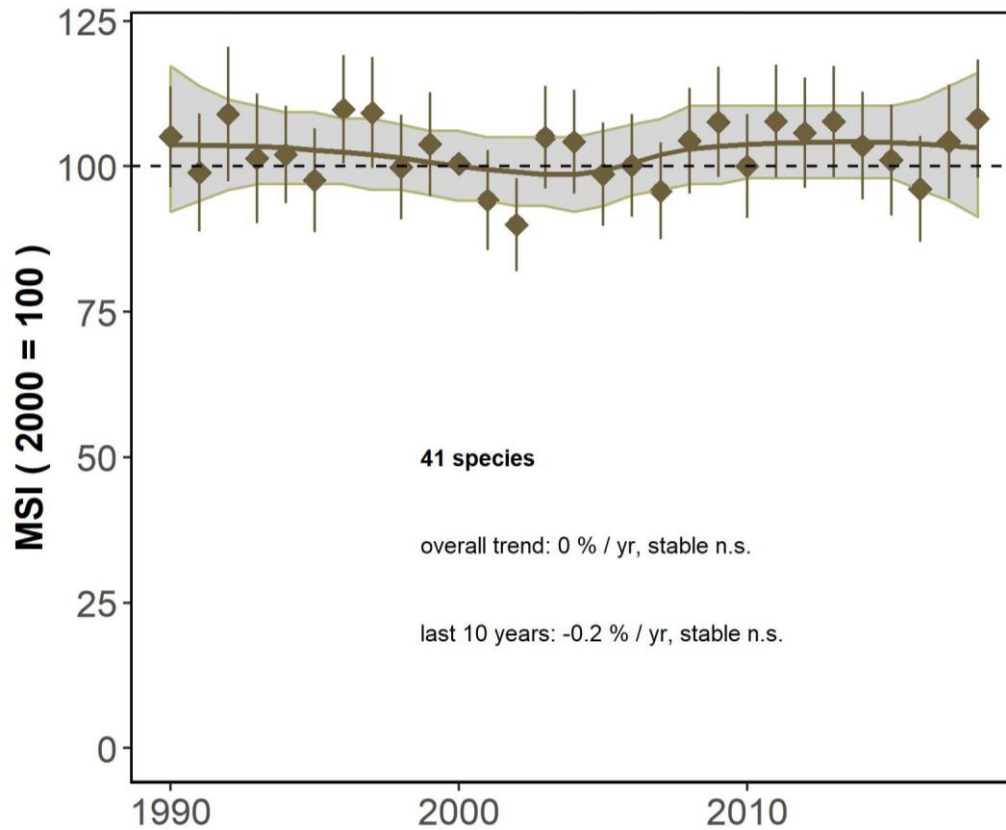


Species of agricultural lands in Wallonia



code	tax	group_tax.x	trend	from	to	category	n_square	slope	se_slope
3040	Falco tinnunculus	BIR	Stable	1990	2018	NA	806	100,91	0,64
3670	Perdix perdix	BIR	Strong decrease ($p < 0.05$)	1990	2018	NA	337	92,33	1,23
3700	Coturnix coturnix	BIR	Uncertain	1990	2018	hot	173	98,05	1,63
3940	Phasianus colchicus	BIR	Increase	1994	2018	NA	1589	101,53	0,26
4930	Vanellus vanellus	BIR	Decrease	1990	2018	NA	416	95,51	0,71
6870	Streptopelia turtur	BIR	Strong decrease ($p < 0.01$)	1990	2018	hot	770	90,22	0,83
9760	Alauda arvensis	BIR	Decrease	1990	2018	NA	1713	96,14	0,18
9920	Hirundo rustica	BIR	Decrease	1990	2018	NA	1561	96,91	0,32
10110	Anthus pratensis	BIR	Strong decrease ($p < 0.05$)	1990	2018	cold	859	94,05	0,51
10170	Motacilla flava	BIR	Decrease	1996	2016	NA	542	98,97	0,45
11390	Saxicola torquatus	BIR	Increase	1990	2018	hot	598	107,02	0,76
12750	Sylvia communis	BIR	Increase	1990	2018	NA	2070	100,82	0,24
15150	Lanius collurio	BIR	Increase	1990	2018	NA	319	103,10	0,77
15820	Sturnus vulgaris	BIR	Decrease	1990	2018	NA	2377	96,58	0,29
15980	Passer montanus	BIR	Decrease	1990	2018	hot	493	94,38	0,71
16600	Carduelis cannabina	BIR	Decrease	1990	2018	hot	1924	97,90	0,30
18570	Emberiza citrinella	BIR	Decrease	1990	2018	NA	2009	98,18	0,20
18820	Miliaria calandra	BIR	Strong decrease ($p < 0.01$)	1990	2018	NA	260	85,09	1,08

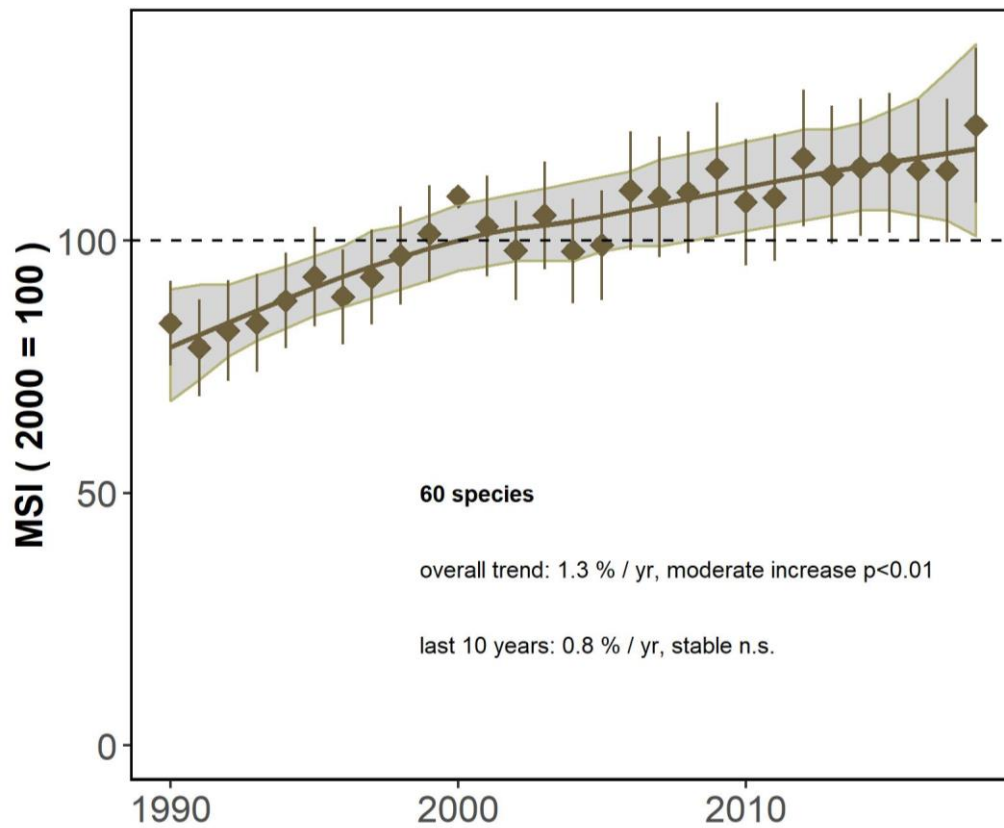
Species of natural open habitats in Wallonia



code	tax	group_tax.x	trend	from	to	category	n_square	slope	se_slope
14	Coronella austriaca	REP	increase	1990	2018	NA	502	100,84	0,32
9740	Lullula arborea	BIR	Uncertain	1990	2018	hot	82	97,17	2,30
10090	Anthus trivialis	BIR	Decrease	1990	2018	cold	1608	98,98	0,29
15200	Lanius excubitor	BIR	Decrease	1990	2018	cold	138	93,08	2,52
1681181	Tetrix tenuicornis	SPR	stable	1990	2018	NA	154	100,18	1,13
1683067	Conocephalus fuscus	SPR	increase	1995	2016	NA	1069	101,90	0,62
1686243	Phaneroptera falcata	SPR	increase	1995	2016	NA	559	104,89	1,44
1688020	Leptophyes punctatissima	SPR	increase	1995	2016	NA	668	101,60	0,75
1688979	Bicolorana bicolor	SPR	stable	1995	2016	NA	312	99,66	0,38
1695297	Pholidoptera griseoaptera	SPR	increase	1996	2018	NA	1569	100,36	0,17
1700023	Gomphocerippus rufus	SPR	stable	1994	2018	NA	392	100,45	0,56
1700310	Oedipoda caerulea	SPR	increase	1990	2018	NA	548	100,82	0,41
1700841	Chrysochraon dispar	SPR	stable	1990	2018	NA	1482	99,97	0,16
1701365	Myrmeleotettix maculatus	SPR	decrease	1990	2018	NA	257	98,85	0,49
1708251	Chorthippus biguttulus	SPR	stable	1994	2018	NA	1099	99,84	0,15
1708567	Chorthippus albomarginatus	SPR	stable	1994	2018	NA	109	100,26	1,76
1710755	Omocestus viridulus	SPR	stable	1990	2018	NA	539	100,35	0,26
1710802	Omocestus rufipes	SPR	stable	1990	2018	NA	236	99,37	0,44
1710962	Stenobothrus lineatus	SPR	stable	1990	2018	NA	133	99,40	0,63
1716462	Gryllus campestris	SPR	increase	2008	2018	NA	180	102,05	0,99
1902749	Brenthis ino	VLI	increase	1994	2018	cold	1495	100,36	0,13
1912372	Boloria aquilonaris	VLI	stable	1990	2018	cold	150	99,84	0,73
1924097	Glaucopsyche alexis	VLI	stable	1995	2016	hot	47	100,40	1,11
1929443	Lycaena hippothoe	VLI	decrease	1990	2018	cold	509	99,34	0,15
1933095	Aricia agestis	VLI	increase	1990	2018	hot	985	100,84	0,27
1934693	Hamearis lucina	VLI	decrease	1990	2018	NA	194	97,73	0,40
1938214	Iphiclides podalirius	VLI	decrease	1990	2018	hot	125	98,96	0,40

1945569	Spialia sertorius	VLI	stable	1994	2018	hot	203	100,61	0,56
4299535	Boloria eunomia	VLI	decrease	1990	2018	cold	643	99,32	0,11
4402879	Roeseliana roeselii	SPR	increase	1990	2018	NA	534	103,11	0,95
4535636	Lasiommata maera	VLI	stable	1990	2018	NA	157	99,98	0,58
5134680	Erebia medusa	VLI	decrease	1994	2018	cold	275	98,63	0,19
5138561	Plebejus argus	VLI	decrease	1990	2018	NA	175	99,16	0,34
5139156	Cyaniris semiargus	VLI	increase	1990	2018	NA	834	101,73	0,38
5772890	Boloria dia	VLI	stable	2008	2018	NA	121	99,58	0,73
5882898	Lycaena tityrus	VLI	stable	1990	2018	NA	770	99,99	0,32
7417698	Lycaena helle	VLI	decrease	1994	2018	cold	737	98,81	0,09
7728366	Coenonympha arcania	VLI	decrease	1990	2018	NA	549	98,62	0,14
7854318	Melanargia galathea	VLI	stable	1990	2018	hot	1838	100,12	0,17
8073674	Thymelicus acteon	VLI	decrease	1990	2018	hot	68	94,08	0,74
8168644	Melitaea cinxia	VLI	increase	1990	2018	hot	128	103,86	0,91

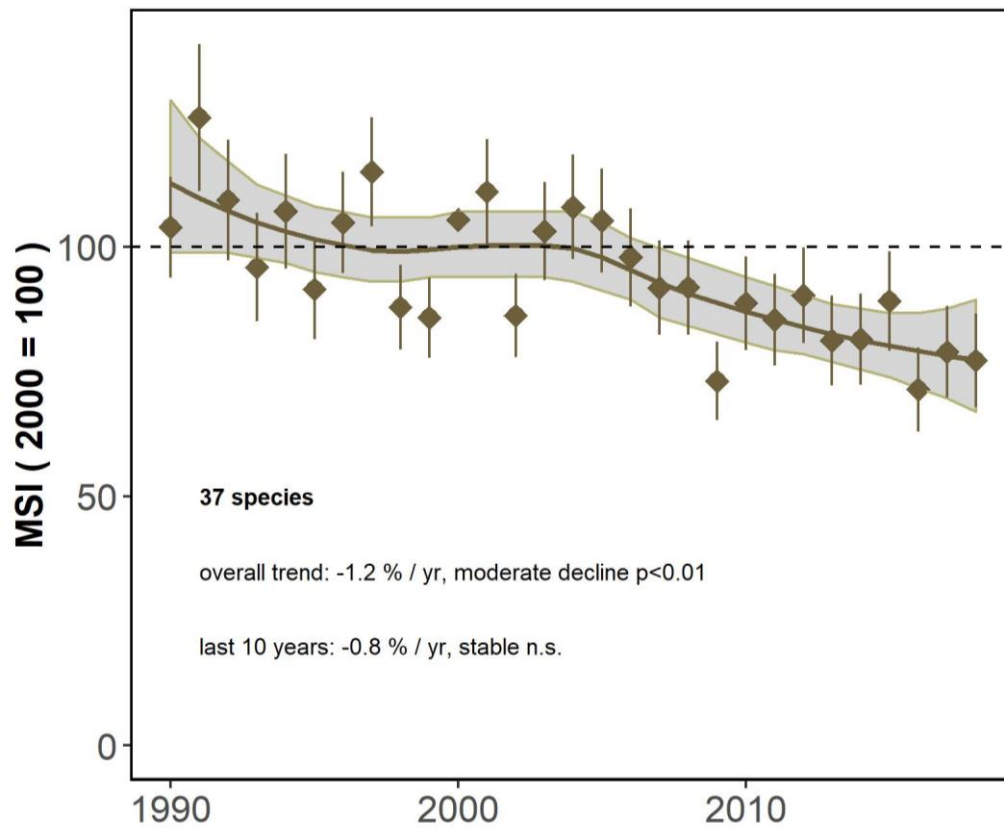
Species of wetlands



code	tax	group_tax.x	trend	from	to	category	n_square	slope	se_slope
32	Lissotriton helveticus	AMF	stable	1990	2018	NA	1536	100,35	0,19
34	Lissotriton vulgaris	AMF	stable	1990	2018	NA	1261	100,06	0,16
72	Triturus cristatus	AMF	stable	1990	2018	NA	277	100,15	0,62
578	Calopteryx splendens Harris, 1780	LIB	increase	1990	2018	NA	1547	100,48	0,14
579	Calopteryx virgo Linnaeus, 1758	LIB	increase	1990	2018	NA	2574	100,72	0,13
580	Sympecma fusca Vander Linden, 1820	LIB	increase	1990	2018	hot	271	105,31	1,82
581	Lestes barbarus Fabricius, 1798	LIB	increase	1990	2018	NA	95	104,81	2,07
582	Lestes dryas Kirby, 1890	LIB	stable	1990	2018	NA	108	101,00	0,84
583	Lestes sponsa Hansemann, 1823	LIB	stable	1990	2018	cold	643	100,01	0,14
584	Lestes virens Charpentier, 1825	LIB	uncertain	1990	2018	NA	46	104,22	2,43
585	Chalcolestes viridis Vander Linden, 1825	LIB	increase	1990	2018	NA	889	100,84	0,25
587	Ischnura elegans Vander Linden, 1820	LIB	stable	1990	2018	NA	1917	100,11	0,14
588	Ischnura pumilio Charpentier, 1825	LIB	increase	1990	2018	NA	355	105,19	1,41
589	Pyrrhosoma nymphula Sulzer, 1776	LIB	increase	1990	2018	NA	2019	100,52	0,15
590	Enallagma cyathigerum Charpentier, 1840	LIB	stable	2000	2016	NA	1731	100,21	0,13
594	Coenagrion puella Linnaeus, 1758	LIB	stable	1994	2018	NA	2165	100,10	0,08
595	Coenagrion pulchellum Vander Linden, 1825	LIB	stable	1990	2018	NA	53	100,17	0,96
596	Coenagrion scitulum Rambur, 1842	LIB	increase	1990	2018	hot	261	115,08	3,00
597	Erythromma lindenii Selys, 1840	LIB	increase	1990	2018	hot	241	106,36	1,29
598	Erythromma najas Hansemann, 1823	LIB	increase	1990	2018	NA	472	101,75	0,41
599	Erythromma viridulum Charpentier, 1840	LIB	increase	1990	2018	NA	448	101,03	0,25
604	Gomphus pulchellus Selys, 1840	LIB	increase	1990	2018	hot	627	101,15	0,47
608	Brachytron pratense Müller, 1764	LIB	increase	1990	2018	NA	60	104,36	1,76
610	Aeshna cyanea Müller, 1764	LIB	increase	1990	2018	NA	2238	100,42	0,11
611	Aeshna grandis Linnaeus, 1758	LIB	increase	1990	2018	cold	986	101,31	0,24
612	Aeshna juncea Linnaeus, 1758	LIB	stable	1990	2018	cold	245	100,41	0,31
613	Aeshna mixta Latreille, 1805	LIB	increase	1990	2018	NA	798	100,65	0,21

616	Anax imperator Leach, 1815	LIB	increase	1990	2018	hot	1917	100,72	0,13
617	Anax parthenope Selys, 1839	LIB	increase	1990	2018	hot	136	105,55	2,15
619	Cordulegaster boltonii Donovan, 1807	LIB	stable	2008	2018	NA	820	99,92	0,17
621	Cordulia aenea Linnaeus, 1758	LIB	increase	1990	2018	cold	786	101,19	0,35
624	Somatochlora metallica Vander Linden, 1825	LIB	stable	1990	2018	cold	603	100,21	0,19
627	Libellula depressa Linnaeus, 1758	LIB	increase	1990	2018	NA	2324	100,37	0,11
628	Libellula fulva Müller, 1764	LIB	increase	1990	2018	NA	127	109,46	1,63
629	Libellula quadrimaculata Linnaeus, 1758	LIB	increase	1990	2018	NA	828	101,54	0,31
630	Orthetrum brunneum Fonscolombe, 1837	LIB	increase	1990	2018	hot	256	102,70	0,98
631	Orthetrum cancellatum Linnaeus, 1758	LIB	increase	1990	2018	NA	1494	100,33	0,14
632	Orthetrum coerulescens Fabricius, 1798	LIB	increase	1990	2018	hot	357	110,01	1,36
633	Crocothemis erythraea Brullé, 1832	LIB	increase	1990	2018	hot	357	106,69	1,63
634	Sympetrum danae Sulzer, 1776	LIB	decrease	1990	2018	cold	551	99,34	0,13
637	Sympetrum fonscolombii Selys, 1840	LIB	increase	1990	2018	hot	251	105,81	2,03
640	Sympetrum sanguineum Müller, 1764	LIB	increase	1994	2018	NA	998	100,74	0,25
641	Sympetrum striolatum Charpentier, 1840	LIB	increase	1994	2018	NA	1204	101,69	0,27
642	Sympetrum vulgatum Linnaeus, 1758	LIB	stable	1994	2018	NA	254	99,25	0,46
644	Leucorrhinia dubia Vander Linden, 1825	LIB	decrease	1994	2018	cold	217	99,31	0,26
645	Leucorrhinia pectoralis Charpentier, 1825	LIB	uncertain	1990	2018	cold	111	104,23	2,71
646	Leucorrhinia rubicunda Linnaeus, 1758	LIB	uncertain	1990	2018	cold	55	103,54	1,90
1524	Platycnemis pennipes Pallas, 1771	LIB	increase	1990	2018	NA	1530	100,77	0,19
1860	Anas platyrhynchos	BIR	Increase	1990	2018	NA	939	101,12	0,43
4240	Gallinula chloropus	BIR	Decrease	1994	2018	hot	286	97,95	0,72
4290	Fulica atra	BIR	Uncertain	1990	2018	hot	146	102,14	2,02
10190	Motacilla cinerea	BIR	Stable	1990	2018	hot	277	99,90	0,95
11060	Luscinia svecica	BIR	Increase	1990	2018	cold	94	115,16	4,55
12200	Cettia cetti	BIR	Stable	1990	2018	hot	84	101,53	1,64
12430	Acrocephalus schoenobaenus	BIR	Increase	1994	2018	cold	64	109,65	2,73
12500	Acrocephalus palustris	BIR	Decrease	1990	2018	NA	557	98,55	0,67
12510	Acrocephalus scirpaceus	BIR	Uncertain	1990	2018	hot	141	97,93	2,36
18770	Emberiza schoeniclus	BIR	Decrease	1990	2018	cold	313	94,64	1,08
1683331	Conocephalus dorsalis	SPR	stable	1995	2016	NA	250	99,42	0,52
1711091	Stethophyma grossum	SPR	stable	1990	2018	NA	637	101,43	0,78

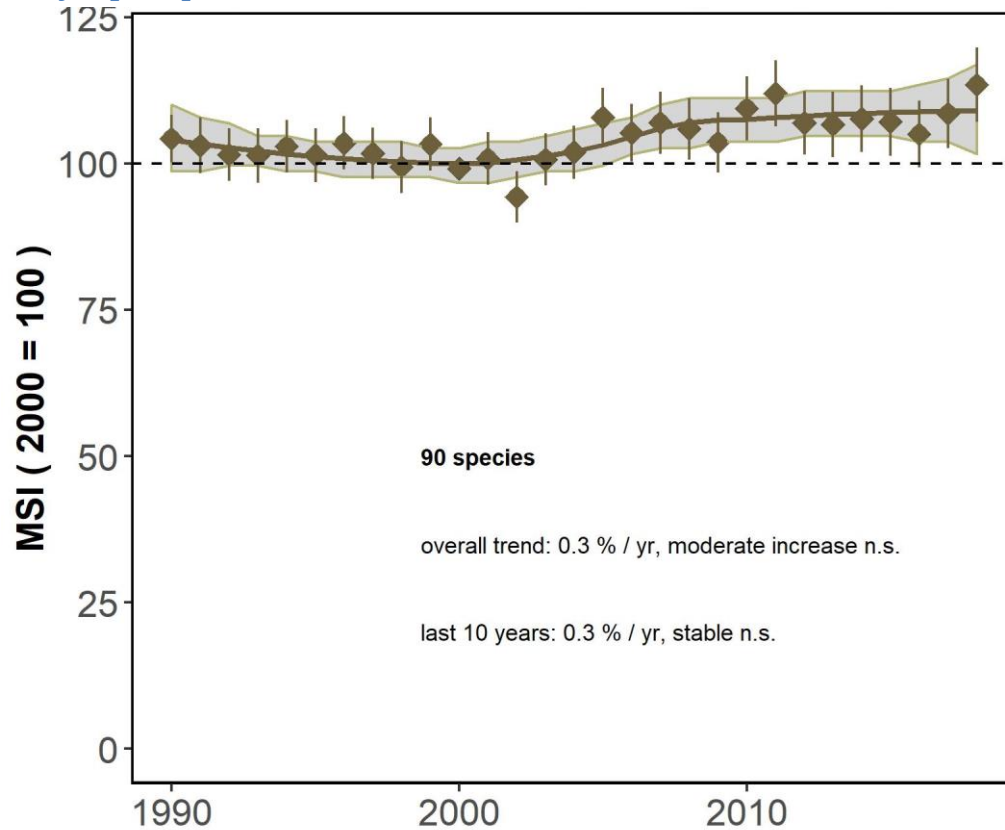
Species of woodlands in Wallonia



code	tax	group_tax.x	trend	from	to	category	n_square	slope	se_slope
64	Salamandra salamandra	AMF	increase	1990	2018	NA	1140	101,13	0,41
389	Sciurus vulgaris Linnaeus 1758	ZOG	decrease	1990	2018	NA	2703	99,31	0,26
2690	Accipiter nisus	BIR	decrease	1990	2018	NA	343	96,76	1,20
8630	Dryocopus martius	BIR	Stable	1990	2018	cold	433	98,81	0,75
8830	Dendrocopos medius	BIR	increase	1990	2018	hot	218	103,13	0,70
8870	Dendrocopos minor	BIR	Stable	1990	2018	NA	207	100,38	1,16
11980	Turdus pilaris	BIR	decrease	1990	2018	cold	737	91,83	0,92
12020	Turdus viscivorus	BIR	decrease	1994	2018	NA	1828	99,07	0,31
12760	Sylvia borin	BIR	decrease	1990	2018	cold	2330	97,11	0,22
13080	Phylloscopus sibilatrix	BIR	decrease	1990	2018	cold	853	98,17	0,30
13140	Regulus regulus	BIR	decrease	1990	2018	cold	1420	96,90	0,36
13150	Regulus ignicapilla	BIR	increase	1990	2018	NA	1273	101,13	0,39
13350	Muscicapa striata	BIR	Stable	1990	2018	NA	245	98,19	1,09
14370	Aegithalos caudatus	BIR	decrease	1990	2018	NA	745	97,39	0,64
14400	Poecile palustris	BIR	decrease	1990	2018	NA	1046	97,51	0,33
14420	Poecile montanus	BIR	decrease	1990	2018	NA	787	96,79	0,62
14540	Lophophanes cristatus	BIR	decrease	1990	2018	NA	606	96,75	0,55
14610	Periparus ater	BIR	decrease	1990	2018	NA	1215	97,51	0,33
14790	Sitta europaea	BIR	decrease	1990	2018	NA	1712	99,56	0,17
14860	Certhia familiaris	BIR	increase	1990	2018	cold	246	102,72	1,00
14870	Certhia brachydactyla	BIR	decrease	1990	2018	hot	1694	99,31	0,25
15080	Oriolus oriolus	BIR	decrease	1990	2018	hot	290	95,50	0,96
15390	Garrulus glandarius	BIR	decrease	1990	2018	NA	2571	98,34	0,21
16540	Carduelis spinus	BIR	decrease	1994	2018	cold	285	93,61	1,53
16660	Loxia curvirostra	BIR	decrease	1990	2018	cold	336	97,11	1,11
17100	Pyrrhula pyrrhula	BIR	Stable	1990	2018	cold	677	99,55	0,70
17170	Coccothraustes coccothraustes	BIR	Stable	1990	2018	hot	1032	100,67	0,36

1690432	Meconema thalassinum	SPR	stable	1995	2016	NA	526	100,87	0,56
1722903	Nemobius sylvestris	SPR	stable	1990	2018	NA	643	100,48	0,36
1909398	Argynnis paphia	VLI	increase	1990	2018	NA	2400	101,08	0,32
1929659	Lycaena virgaureae	VLI	decrease	1995	2016	cold	46	95,76	1,08
4535180	Favonius quercus	VLI	stable	1990	2018	hot	917	101,68	1,00
5131910	Apatura iris	VLI	increase	1995	2016	NA	1337	100,63	0,22
5772893	Boloria euphrosyne	VLI	stable	1990	2018	cold	199	100,00	0,51
5882965	Satyrium w-album	VLI	increase	1990	2018	NA	228	107,61	2,41
8138711	Apatura ilia	VLI	increase	1990	2018	NA	521	102,38	0,95
8429428	Limenitis camilla	VLI	increase	1994	2018	NA	1516	101,65	0,27

Eurytopic species in Wallonia

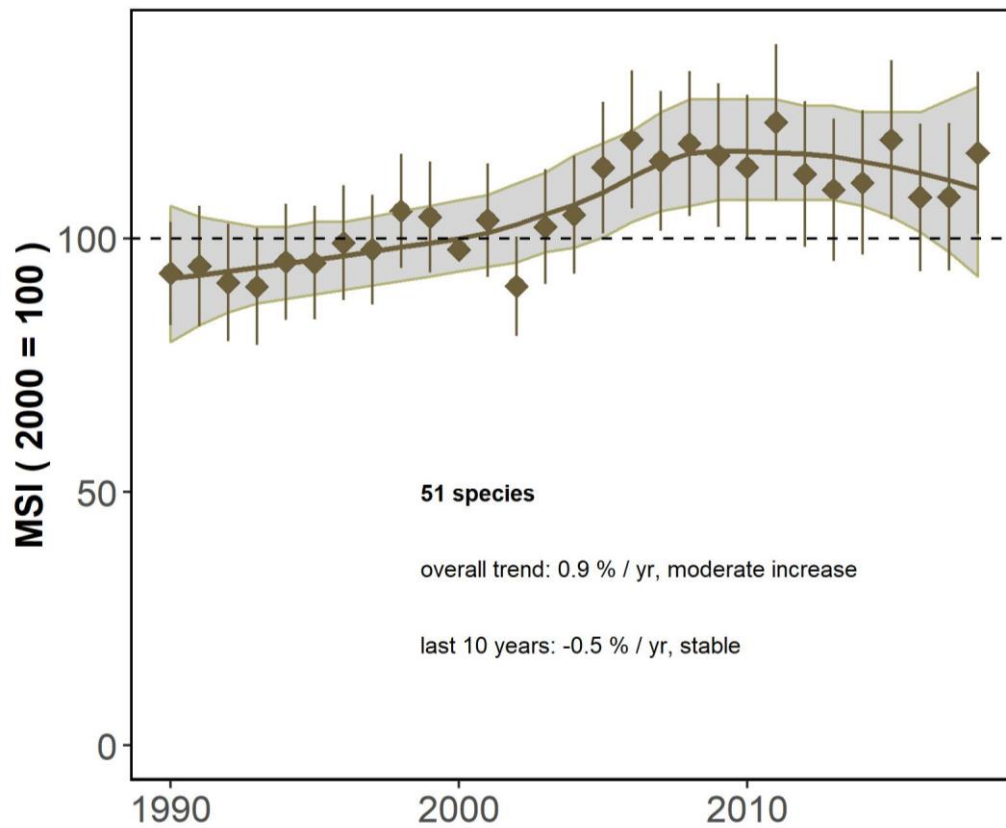


code	tax	group_tax.x	trend	from	to	category	n_square	slope	se_slope
1	Alytes obstetricans	AMF	decrease	1990	2018	NA	881	99,45	0,19
8	Bufo bufo	AMF	stable	1990	2018	NA	2675	99,82	0,12
20	Epidalea calamita	AMF	decrease	1990	2018	NA	320	99,35	0,18
25	Ichthyosaura alpestris	AMF	stable	1990	2018	NA	2513	100,23	0,15
38	Natrix helvetica	REP	stable	1990	2018	NA	1119	100,45	0,24
49	Podarcis muralis	REP	stable	1990	2018	NA	773	99,87	0,15
60	Rana esculenta	AMF	decrease	1990	2018	NA	1432	99,59	0,19
62	Rana temporaria	AMF	stable	1990	2018	NA	3214	100,20	0,16
79	Zootoca vivipara	REP	stable	1990	2018	NA	2620	100,04	0,07
409	Oryctolagus cuniculus (Linnaeus 1758)	ZOG	stable	1990	2018	NA	986	99,20	0,57
418	Capreolus capreolus (Linnaeus 1758)	ZOG	increase	1990	2018	NA	5421	102,46	0,40
2870	Buteo buteo	BIR	Stable	1990	2018	NA	2123	99,86	0,29
6680	Columba oenas	BIR	Stable	1996	2018	NA	602	99,14	0,56
6700	Columba palumbus	BIR	increase	1990	2018	NA	3590	100,75	0,13
6840	Streptopelia decaocto	BIR	Stable	1990	2018	hot	1328	100,26	0,30
7240	Cuculus canorus	BIR	decrease	1990	2018	NA	1914	95,80	0,28
8560	Picus viridis	BIR	increase	1990	2018	hot	1412	100,85	0,35
8760	Dendrocopos major	BIR	decrease	1990	2018	NA	2248	99,15	0,18
10200	Motacilla alba	BIR	decrease	1990	2018	NA	1724	98,67	0,32
10500	Cinclus cinclus	BIR	Uncertain	1990	2018	NA	31	102,97	3,11
10660	Trogodytes troglodytes	BIR	decrease	1990	2018	NA	4102	99,33	0,10
10840	Prunella modularis	BIR	decrease	1990	2018	cold	2854	99,10	0,21
10990	Erithacus rubecula	BIR	decrease	1990	2018	NA	3360	98,51	0,12
11040	Luscinia megarhynchos	BIR	Stable	1990	2018	hot	323	99,76	0,62
11220	Phoenicurus phoenicurus	BIR	Stable	1990	2018	cold	356	99,54	0,65
11870	Turdus merula	BIR	decrease	1990	2018	NA	4802	99,78	0,09
12000	Turdus philomelos	BIR	increase	1990	2018	NA	3647	100,41	0,15

12360	Locustella naevia	BIR	increase	1990	2018	NA	466	102,68	0,95
12590	Hippolais icterina	BIR	decrease	1990	2018	cold	166	92,78	2,00
12600	Hippolais polyglotta	BIR	increase	1990	2018	hot	161	106,24	1,52
12740	Sylvia curruca	BIR	increase	1990	2018	NA	844	101,00	0,47
12770	Sylvia atricapilla	BIR	increase	1990	2018	NA	4474	100,43	0,10
13110	Phylloscopus collybita	BIR	decrease	1990	2018	NA	4462	98,54	0,10
13120	Phylloscopus trochilus	BIR	decrease	1990	2018	cold	1786	96,93	0,23
13490	Ficedula hypoleuca	BIR	Uncertain	1994	2018	NA	26	103,78	3,51
14620	Cyanistes caeruleus	BIR	Stable	1990	2018	NA	3038	100,24	0,17
14640	Parus major	BIR	decrease	1990	2018	NA	3964	99,34	0,12
15490	Pica pica	BIR	Stable	1990	2018	NA	1831	99,81	0,27
15570	Nucifraga caryocatactes	BIR	Uncertain	1990	2018	NA	48	93,91	3,59
15600	Corvus monedula	BIR	Stable	1990	2018	hot	879	100,00	0,49
15670	Corvus corone	BIR	decrease	1990	2018	NA	4203	97,97	0,15
16360	Fringilla coelebs	BIR	decrease	1990	2018	NA	4828	99,35	0,08
16400	Serinus serinus	BIR	decrease	1990	2018	hot	47	92,16	2,91
16490	Carduelis chloris	BIR	Stable	1990	2018	NA	1063	99,96	0,43
16530	Carduelis carduelis	BIR	Stable	1990	2018	hot	403	101,27	0,84
1681124	Tetrix subulata	SPR	uncertain	1990	2018	NA	285	102,76	1,67
1681247	Tetrix undulata	SPR	stable	1995	2016	NA	416	99,61	0,54
1692898	Tettigonia viridissima	SPR	stable	1994	2018	NA	2069	100,54	0,29
1708459	Chorthippus brunneus	SPR	decrease	1994	2018	NA	1174	99,58	0,16
1894840	Aglais urticae	VLI	increase	1990	2018	cold	5961	100,37	0,12
1896841	Aphantopus hyperantus	VLI	increase	1990	2018	cold	4101	100,20	0,09
1898286	Vanessa atalanta	VLI	increase	1990	2018	NA	5510	100,57	0,14
1898544	Polygonia c-album	VLI	increase	1990	2018	NA	2943	100,57	0,17
1899433	Melitaea athalia	VLI	stable	1990	2018	cold	305	100,27	0,36
1902533	Araschnia levana	VLI	stable	1990	2018	NA	3154	99,97	0,10
1902791	Brenthis daphne	VLI	increase	1990	2018	hot	891	129,67	6,10
1905383	Issoria lathonia	VLI	stable	1990	2018	NA	765	100,93	0,59
1911461	Coenonympha pamphilus	VLI	increase	1994	2018	NA	1735	100,63	0,16
1912325	Boloria selene	VLI	stable	1990	2018	cold	1273	99,84	0,13
1919712	Anthocharis cardamines	VLI	stable	1990	2018	cold	3936	100,17	0,10
1920218	Aporia crataegi	VLI	increase	1990	2018	NA	1713	100,41	0,19
1920494	Pieris napi	VLI	decrease	1990	2018	cold	3587	99,85	0,06
1920496	Pieris rapae	VLI	increase	1990	2018	hot	4553	100,59	0,14
1920506	Pieris brassicae	VLI	increase	1990	2018	NA	4096	101,06	0,27
1920712	Gonepteryx rhamni	VLI	increase	1990	2018	NA	4018	100,28	0,13
1925918	Celastrina argiolus	VLI	increase	1990	2018	NA	1508	101,90	0,59
1929697	Lycaena phlaeas	VLI	increase	1996	2018	NA	1887	100,63	0,22
1930110	Thecla betulae	VLI	increase	1990	2018	NA	552	101,28	0,48
1932411	Callophrys rubi	VLI	stable	1990	2018	NA	1117	99,74	0,19
1946844	Ochlodes sylvanus	VLI	stable	1990	2018	NA	2918	100,18	0,11
1947335	Carterocephalus palaemon	VLI	stable	1990	2018	cold	694	100,38	0,27
4535632	Lasiommata megera	VLI	stable	1990	2018	hot	1782	100,01	0,16
4535827	Aglais io	VLI	stable	1995	2016	NA	3042	100,08	0,13
5135513	Maniola jurtina	VLI	increase	1990	2018	hot	4864	100,15	0,06
5137903	Leptidea sinapis	VLI	stable	1990	2018	NA	819	100,02	0,18
5140214	Polyommatus icarus	VLI	stable	1990	2018	NA	2798	100,16	0,12
5882969	Satyrium ilicis	VLI	stable	1990	2018	hot	172	100,34	0,98
5882980	Satyrium pruni	VLI	increase	1990	2018	cold	501	105,14	1,56
6221746	Speyeria aglaia	VLI	stable	1994	2018	NA	479	99,96	0,26
7622059	Pyronia tithonus	VLI	increase	1990	2018	hot	2528	100,77	0,19
7762841	Nymphalis polychloros	VLI	increase	1990	2018	hot	896	102,30	0,75
7768674	Melitaea diamina	VLI	increase	1990	2018	cold	750	101,93	0,26
7792296	Pseudochorthippus parallelus	SPR	stable	1990	2018	NA	1811	100,01	0,10

8049830	Pararge aegeria	VLI	increase	1990	2018	hot	3191	100,72	0,22
8109173	Pyrgus malvae	VLI	stable	1990	2018	NA	1197	99,98	0,19
8133678	Thymelicus lineola	VLI	stable	1990	2018	NA	1880	100,02	0,10
8225376	Papilio machaon	VLI	decrease	1994	2018	NA	1735	99,23	0,17
8273661	Thymelicus sylvestris	VLI	increase	1994	2018	hot	1875	100,24	0,10
8277078	Carcharodus alceae	VLI	increase	1994	2018	hot	882	102,39	0,56
8347376	Tettigonia cantans	SPR	stable	1994	2018	NA	283	101,50	1,07

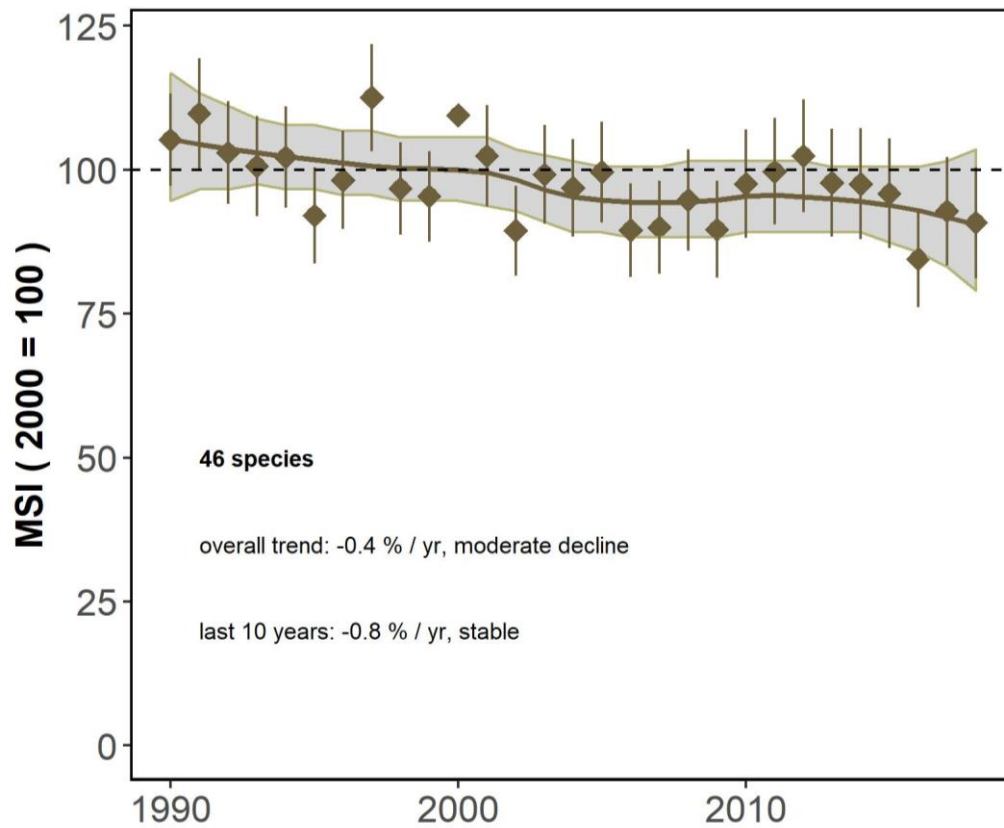
Species with STI « Hot » in Wallonia



code	tax	group_tax.x	trend	from	to	Habitat	n_square	slope	se_slope
580	Sympecma fusca Vander Linden, 1820	LIB	increase	1990	2018	wetlands	271	105,31	1,82
596	Coenagrion scitulum Rambur, 1842	LIB	increase	1990	2018	wetlands	261	115,08	3,00
597	Erythromma lindenii Selys, 1840	LIB	increase	1990	2018	wetlands	241	106,36	1,29
604	Gomphus pulchellus Selys, 1840	LIB	increase	1990	2018	wetlands	627	101,15	0,47
616	Anax imperator Leach, 1815	LIB	increase	1990	2018	wetlands	1917	100,72	0,13
617	Anax parthenope Selys, 1839	LIB	increase	1990	2018	wetlands	136	105,55	2,15
630	Orthetrum brunneum Fonscolombe, 1837	LIB	increase	1990	2018	wetlands	256	102,70	0,98
632	Orthetrum coerulescens Fabricius, 1798	LIB	increase	1990	2018	wetlands	357	110,01	1,36
633	Crocothemis erythraea Brullé, 1832	LIB	increase	1990	2018	wetlands	357	106,69	1,63
637	Sympetrum fonscolombii Selys, 1840	LIB	increase	1990	2018	wetlands	251	105,81	2,03
3700	Coturnix coturnix	BIR	Uncertain	1990	2018	agriculture	173	98,05	1,63
4240	Gallinula chloropus	BIR	decrease	1994	2018	wetlands	286	97,95	0,72
4290	Fulica atra	BIR	Uncertain	1990	2018	wetlands	146	102,14	2,02
6840	Streptopelia decaocto	BIR	Stable	1990	2018	eurytopic	1328	100,26	0,30
6870	Streptopelia turtur	BIR	decrease	1990	2018	agriculture	770	90,22	0,83
8560	Picus viridis	BIR	increase	1990	2018	eurytopic	1412	100,85	0,35
8830	Dendrocopos medius	BIR	increase	1990	2018	woodlands	218	103,13	0,70
9740	Lullula arborea	BIR	Uncertain	1990	2018	open nature land	82	97,17	2,30
10190	Motacilla cinerea	BIR	Stable	1990	2018	wetlands	277	99,90	0,95
11040	Luscinia megarhynchos	BIR	Stable	1990	2018	eurytopic	323	99,76	0,62
11210	Phoenicurus ochruros	BIR	Stable	1990	2018	urban	933	99,47	0,42
11390	Saxicola torquatus	BIR	increase	1990	2018	agriculture	598	107,02	0,76
12200	Cettia cetti	BIR	Stable	1990	2018	wetlands	84	101,53	1,64
12510	Acrocephalus scirpaceus	BIR	Uncertain	1990	2018	wetlands	141	97,93	2,36
12600	Hippolais polyglotta	BIR	increase	1990	2018	eurytopic	161	106,24	1,52
14870	Certhia brachydactyla	BIR	decrease	1990	2018	woodlands	1694	99,31	0,25
15080	Oriolus oriolus	BIR	decrease	1990	2018	woodlands	290	95,50	0,96

15600	Corvus monedula	BIR	Stable	1990	2018	eurytopic	879	100,00	0,49
15980	Passer montanus	BIR	decrease	1990	2018	agriculture	493	94,38	0,71
16400	Serinus serinus	BIR	decrease	1990	2018	eurytopic	47	92,16	2,91
16530	Carduelis carduelis	BIR	Stable	1990	2018	eurytopic	403	101,27	0,84
16600	Carduelis cannabina	BIR	decrease	1990	2018	agriculture	1924	97,90	0,30
17170	Coccothraustes coccothraustes	BIR	Stable	1990	2018	woodlands	1032	100,67	0,36
1902791	Brenthis daphne	VLI	increase	1990	2018	eurytopic	891	129,67	6,10
1920496	Pieris rapae	VLI	increase	1990	2018	eurytopic	4553	100,59	0,14
1924097	Glaucopsyche alexis	VLI	stable	1995	2016	open nature land	47	100,40	1,11
1933095	Aricia agestis	VLI	increase	1990	2018	open nature land	985	100,84	0,27
1938214	Iphiclides podalirius	VLI	decrease	1990	2018	open nature land	125	98,96	0,40
1945569	Spialia sertorius	VLI	stable	1994	2018	open nature land	203	100,61	0,56
4535180	Favonius quercus	VLI	stable	1990	2018	woodlands	917	101,68	1,00
4535632	Lasiommata megera	VLI	stable	1990	2018	eurytopic	1782	100,01	0,16
5135513	Maniola jurtina	VLI	increase	1990	2018	eurytopic	4864	100,15	0,06
5882969	Satyrium ilicis	VLI	stable	1990	2018	eurytopic	172	100,34	0,98
7622059	Pyronia tithonus	VLI	increase	1990	2018	eurytopic	2528	100,77	0,19
7762841	Nymphalis polychloros	VLI	increase	1990	2018	eurytopic	896	102,30	0,75
7854318	Melanargia galathea	VLI	stable	1990	2018	open nature land	1838	100,12	0,17
8049830	Pararge aegeria	VLI	increase	1990	2018	eurytopic	3191	100,72	0,22
8073674	Thymelicus acteon	VLI	decrease	1990	2018	open nature land	68	94,08	0,74
8168644	Melitaea cinxia	VLI	increase	1990	2018	open nature land	128	103,86	0,91
8273661	Thymelicus sylvestris	VLI	increase	1994	2018	eurytopic	1875	100,24	0,10
8277078	Cartharodius alceae	VLI	increase	1994	2018	eurytopic	882	102,39	0,56

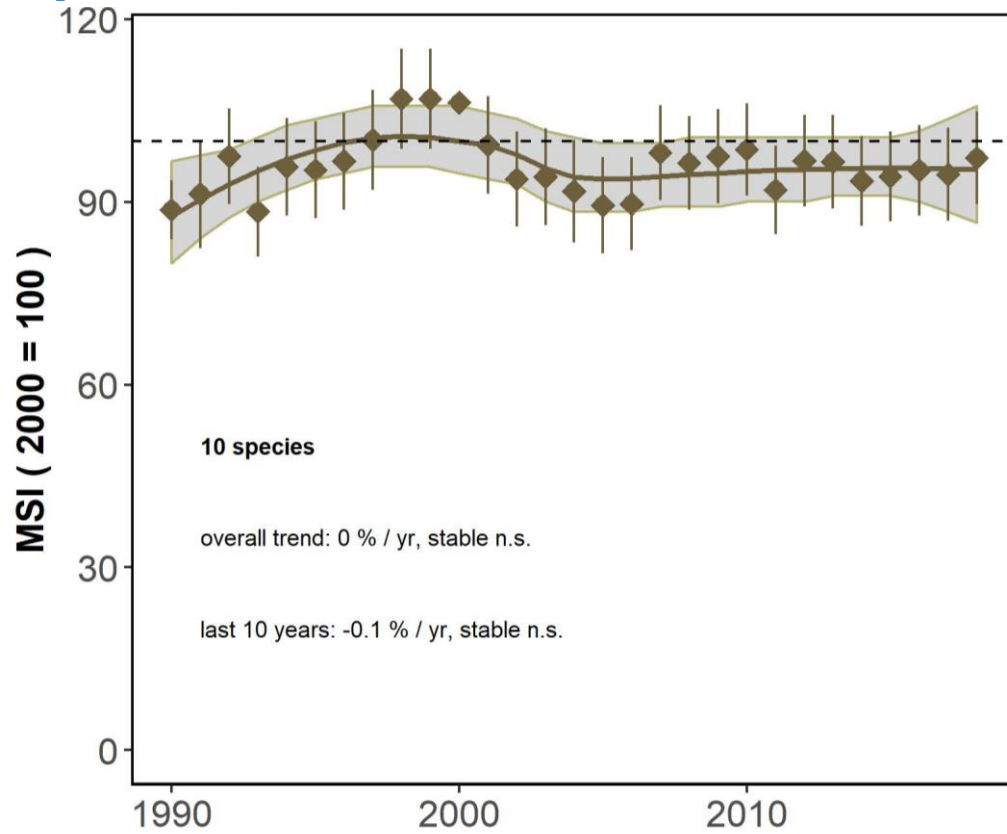
Species with STI « Cold » in Wallonia



code	tax	group_tax.x	trend	from	to	Habitat	n_square	slope	se_slope
583	Lestes sponsa Hansemann, 1823	LIB	stable	1990	2018	wetlands	643	100,01	0,14
611	Aeshna grandis Linnaeus, 1758	LIB	increase	1990	2018	wetlands	986	101,31	0,24
612	Aeshna juncea Linnaeus, 1758	LIB	stable	1990	2018	wetlands	245	100,41	0,31
621	Cordulia aenea Linnaeus, 1758	LIB	increase	1990	2018	wetlands	786	101,19	0,35
624	Somatochlora metallica Vander Linden, 1825	LIB	stable	1990	2018	wetlands	603	100,21	0,19
634	Sympetrum danae Sulzer, 1776	LIB	decrease	1990	2018	wetlands	551	99,34	0,13
644	Leucorrhinia dubia Vander Linden, 1825	LIB	decrease	1994	2018	wetlands	217	99,31	0,26
645	Leucorrhinia pectoralis Charpentier, 1825	LIB	uncertain	1990	2018	wetlands	111	104,23	2,71
646	Leucorrhinia rubicunda Linnaeus, 1758	LIB	uncertain	1990	2018	wetlands	55	103,54	1,90
8630	Dryocopus martius	BIR	Stable	1990	2018	woodlands	433	98,81	0,75
10090	Anthus trivialis	BIR	decrease	1990	2018	open nature land	1608	98,98	0,29
10110	Anthus pratensis	BIR	decrease	1990	2018	agriculture	859	94,05	0,51
10840	Prunella modularis	BIR	decrease	1990	2018	eurytopic	2854	99,10	0,21
11060	Luscinia svecica	BIR	increase	1990	2018	wetlands	94	115,16	4,55
11220	Phoenicurus phoenicurus	BIR	Stable	1990	2018	eurytopic	356	99,54	0,65
11980	Turdus pilaris	BIR	decrease	1990	2018	woodlands	737	91,83	0,92
12430	Acrocephalus schoenobaenus	BIR	increase	1994	2018	wetlands	64	109,65	2,73
12590	Hippolais icterina	BIR	decrease	1990	2018	eurytopic	166	92,78	2,00
12760	Sylvia borin	BIR	decrease	1990	2018	woodlands	2330	97,11	0,22
13080	Phylloscopus sibilatrix	BIR	decrease	1990	2018	woodlands	853	98,17	0,30
13120	Phylloscopus trochilus	BIR	decrease	1990	2018	eurytopic	1786	96,93	0,23
13140	Regulus regulus	BIR	decrease	1990	2018	woodlands	1420	96,90	0,36
14860	Certhia familiaris	BIR	increase	1990	2018	woodlands	246	102,72	1,00
15200	Lanius excubitor	BIR	decrease	1990	2018	open nature land	138	93,08	2,52
16540	Carduelis spinus	BIR	decrease	1994	2018	woodlands	285	93,61	1,53
16660	Loxia curvirostra	BIR	decrease	1990	2018	woodlands	336	97,11	1,11
17100	Pyrrhula pyrrhula	BIR	Stable	1990	2018	woodlands	677	99,55	0,70

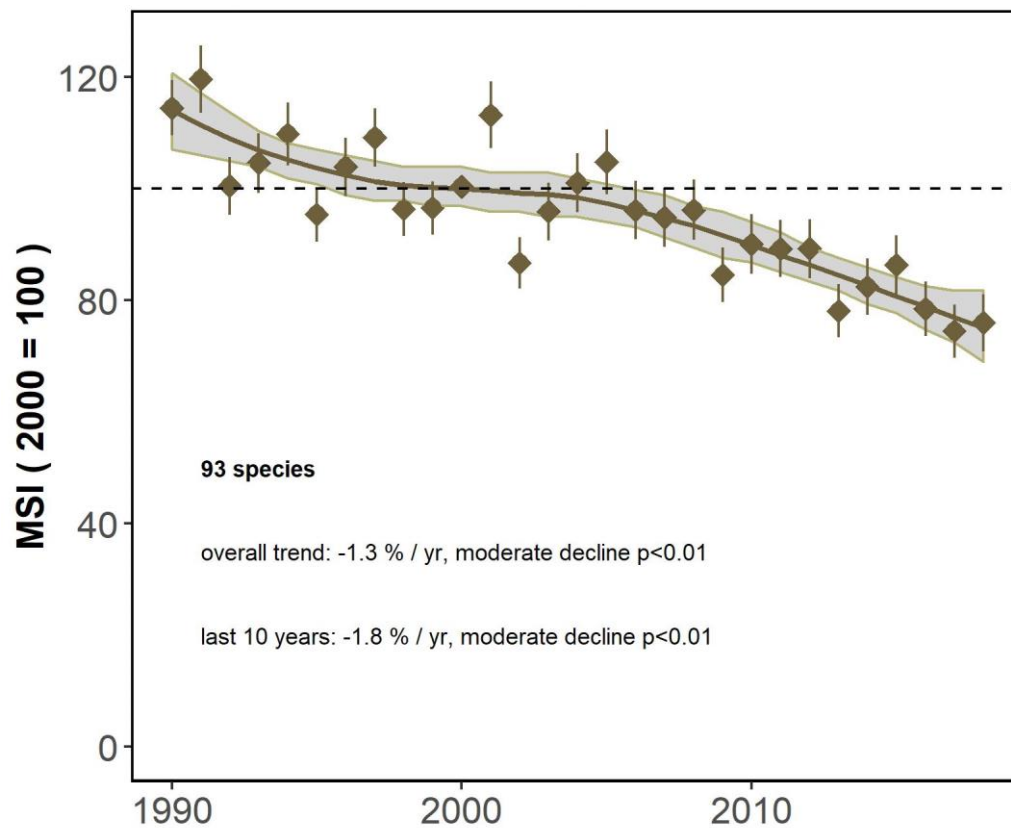
18770	Emberiza schoeniclus	BIR	decrease	1990	2018	wetlands	313	94,64	1,08
1894840	Aglais urticae	VLI	increase	1990	2018	eurytopic	5961	100,37	0,12
1896841	Aphantopus hyperantus	VLI	increase	1990	2018	eurytopic	4101	100,20	0,09
1899433	Melitaea athalia	VLI	stable	1990	2018	eurytopic	305	100,27	0,36
1902749	Brenthis ino	VLI	increase	1994	2018	open nature land	1495	100,36	0,13
1912325	Boloria selene	VLI	stable	1990	2018	eurytopic	1273	99,84	0,13
1912372	Boloria aquilonaris	VLI	stable	1990	2018	open nature land	150	99,84	0,73
1919712	Anthocharis cardamines	VLI	stable	1990	2018	eurytopic	3936	100,17	0,10
1920494	Pieris napi	VLI	decrease	1990	2018	eurytopic	3587	99,85	0,06
1929443	Lycaena hippothoe	VLI	decrease	1990	2018	open nature land	509	99,34	0,15
1929659	Lycaena virgaureae	VLI	decrease	1995	2016	woodlands	46	95,76	1,08
1947335	Carterocephalus palaemon	VLI	stable	1990	2018	eurytopic	694	100,38	0,27
4299535	Boloria eunomia	VLI	decrease	1990	2018	open nature land	643	99,32	0,11
4535434	Argynnis adippe	VLI	decrease	1990	2018	woodlands	189	95,91	0,79
5134680	Erebia medusa	VLI	decrease	1994	2018	open nature land	275	98,63	0,19
5772893	Boloria euphrosyne	VLI	stable	1990	2018	woodlands	199	100,00	0,51
5882980	Satyrium pruni	VLI	increase	1990	2018	eurytopic	501	105,14	1,56
7417698	Lycaena helle	VLI	decrease	1994	2018	open nature land	737	98,81	0,09
7768674	Melitaea diamina	VLI	increase	1990	2018	eurytopic	750	101,93	0,26

Amphibians in Wallonia



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
1	Alytes obstetricans	decrease	1990	2018	eurytopic	NA	881	99,45	0,19
8	Bufo bufo	stable	1990	2018	eurytopic	NA	2675	99,82	0,12
20	Epidalea calamita	decrease	1990	2018	eurytopic	NA	320	99,35	0,18
25	Ichthyosaura alpestris	stable	1990	2018	eurytopic	NA	2513	100,23	0,15
32	Lissotriton helveticus	stable	1990	2018	wetlands	NA	1536	100,35	0,19
34	Lissotriton vulgaris	stable	1990	2018	wetlands	NA	1261	100,06	0,16
60	Rana esculenta	decrease	1990	2018	eurytopic	NA	1432	99,59	0,19
62	Rana temporaria	stable	1990	2018	eurytopic	NA	3214	100,20	0,16
64	Salamandra salamandra	increase	1990	2018	woodlands	NA	1140	101,13	0,41
72	Triturus cristatus	stable	1990	2018	wetlands	NA	277	100,15	0,62

Birds in Wallonia

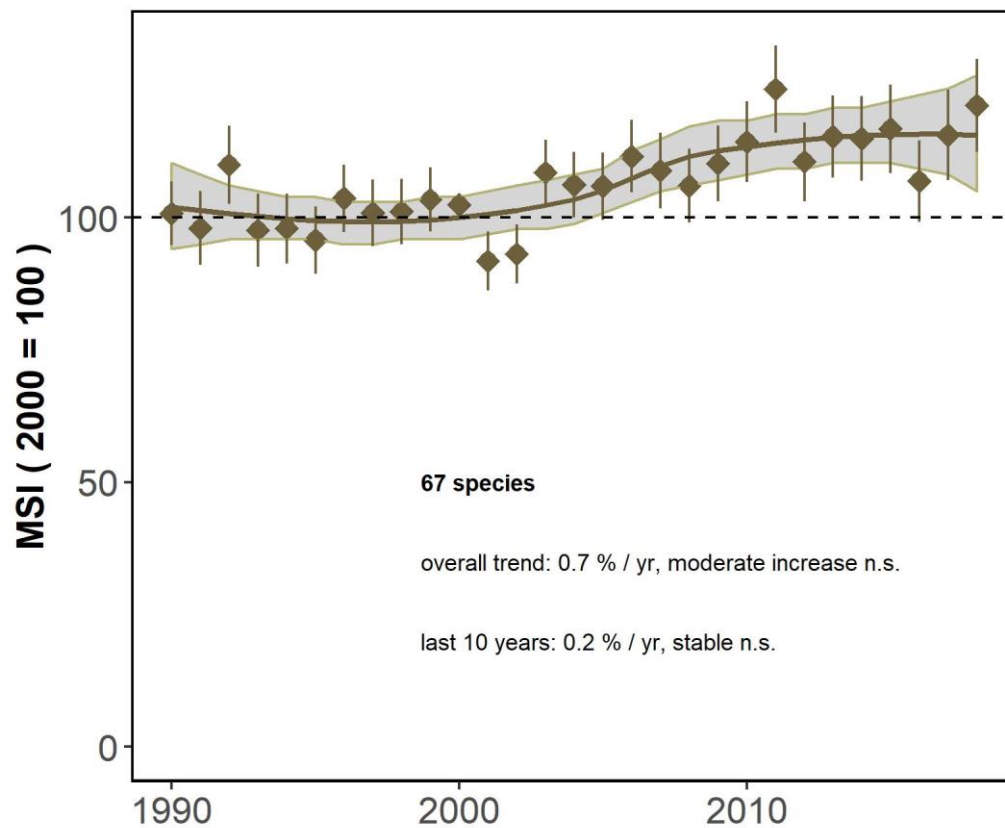


code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
1860	Anas platyrhynchos	increase	1990	2018	wetlands	NA	939	101,12	0,43
2690	Accipiter nisus	decrease	1990	2018	woodlands	NA	343	96,76	1,20
2870	Buteo buteo	Stable	1990	2018	eurytopic	NA	2123	99,86	0,29
3040	Falco tinnunculus	Stable	1990	2018	agriculture	NA	806	100,91	0,64
3670	Perdix perdix	decrease	1990	2018	agriculture	NA	337	92,33	1,23
3700	Coturnix coturnix	Uncertain	1990	2018	agriculture	hot	173	98,05	1,63
3940	Phasianus colchicus	increase	1994	2018	agriculture	NA	1589	101,53	0,26
4240	Gallinula chloropus	decrease	1994	2018	wetlands	hot	286	97,95	0,72
4290	Fulica atra	Uncertain	1990	2018	wetlands	hot	146	102,14	2,02
4930	Vanellus vanellus	decrease	1990	2018	agriculture	NA	416	95,51	0,71
6680	Columba oenas	Stable	1996	2018	eurytopic	NA	602	99,14	0,56
6700	Columba palumbus	increase	1990	2018	eurytopic	NA	3590	100,75	0,13
6840	Streptopelia decaocto	Stable	1990	2018	eurytopic	hot	1328	100,26	0,30
6870	Streptopelia turtur	decrease	1990	2018	agriculture	hot	770	90,22	0,83
7240	Cuculus canorus	decrease	1990	2018	eurytopic	NA	1914	95,80	0,28
7950	Apus apus	decrease	1990	2018	urban	NA	955	97,31	0,53
8560	Picus viridis	increase	1990	2018	eurytopic	hot	1412	100,85	0,35
8630	Dryocopus martius	Stable	1990	2018	woodlands	cold	433	98,81	0,75
8760	Dendrocopos major	decrease	1990	2018	eurytopic	NA	2248	99,15	0,18
8830	Dendrocopos medius	increase	1990	2018	woodlands	hot	218	103,13	0,70
8870	Dendrocopos minor	Stable	1990	2018	woodlands	NA	207	100,38	1,16
9740	Lullula arborea	Uncertain	1990	2018	open nature land	hot	82	97,17	2,30
9760	Alauda arvensis	decrease	1990	2018	agriculture	NA	1713	96,14	0,18
9920	Hirundo rustica	decrease	1990	2018	agriculture	NA	1561	96,91	0,32
10090	Anthus trivialis	decrease	1990	2018	open nature land	cold	1608	98,98	0,29
10110	Anthus pratensis	decrease	1990	2018	agriculture	cold	859	94,05	0,51
10170	Motacilla flava	decrease	1996	2016	agriculture	NA	542	98,97	0,45

10190	Motacilla cinerea	Stable	1990	2018	wetlands	hot	277	99,90	0,95
10200	Motacilla alba	decrease	1990	2018	eurytopic	NA	1724	98,67	0,32
10500	Cinclus cinclus	Uncertain	1990	2018	eurytopic	NA	31	102,97	3,11
10660	Troglodytes troglodytes	decrease	1990	2018	eurytopic	NA	4102	99,33	0,10
10840	Prunella modularis	decrease	1990	2018	eurytopic	cold	2854	99,10	0,21
10990	Erithacus rubecula	decrease	1990	2018	eurytopic	NA	3360	98,51	0,12
11040	Luscinia megarhynchos	Stable	1990	2018	eurytopic	hot	323	99,76	0,62
11060	Luscinia svecica	increase	1990	2018	wetlands	cold	94	115,16	4,55
11210	Phoenicurus ochruros	Stable	1990	2018	urban	hot	933	99,47	0,42
11220	Phoenicurus phoenicurus	Stable	1990	2018	eurytopic	cold	356	99,54	0,65
11390	Saxicola torquatus	increase	1990	2018	agriculture	hot	598	107,02	0,76
11870	Turdus merula	decrease	1990	2018	eurytopic	NA	4802	99,78	0,09
11980	Turdus pilaris	decrease	1990	2018	woodlands	cold	737	91,83	0,92
12000	Turdus philomelos	increase	1990	2018	eurytopic	NA	3647	100,41	0,15
12020	Turdus viscivorus	decrease	1994	2018	woodlands	NA	1828	99,07	0,31
12200	Cettia cetti	Stable	1990	2018	wetlands	hot	84	101,53	1,64
12360	Locustella naevia	increase	1990	2018	eurytopic	NA	466	102,68	0,95
12430	Acrocephalus schoenobaenus	increase	1994	2018	wetlands	cold	64	109,65	2,73
12500	Acrocephalus palustris	decrease	1990	2018	wetlands	NA	557	98,55	0,67
12510	Acrocephalus scirpaceus	Uncertain	1990	2018	wetlands	hot	141	97,93	2,36
12590	Hippolais icterina	decrease	1990	2018	eurytopic	cold	166	92,78	2,00
12600	Hippolais polyglotta	increase	1990	2018	eurytopic	hot	161	106,24	1,52
12740	Sylvia curruca	increase	1990	2018	eurytopic	NA	844	101,00	0,47
12750	Sylvia communis	increase	1990	2018	agriculture	NA	2070	100,82	0,24
12760	Sylvia borin	decrease	1990	2018	woodlands	cold	2330	97,11	0,22
12770	Sylvia atricapilla	increase	1990	2018	eurytopic	NA	4474	100,43	0,10
13080	Phylloscopus sibilatrix	decrease	1990	2018	woodlands	cold	853	98,17	0,30
13110	Phylloscopus collybita	decrease	1990	2018	eurytopic	NA	4462	98,54	0,10
13120	Phylloscopus trochilus	decrease	1990	2018	eurytopic	cold	1786	96,93	0,23
13140	Regulus regulus	decrease	1990	2018	woodlands	cold	1420	96,90	0,36
13150	Regulus ignicapilla	increase	1990	2018	woodlands	NA	1273	101,13	0,39
13350	Muscicapa striata	Stable	1990	2018	woodlands	NA	245	98,19	1,09
13490	Ficedula hypoleuca	Uncertain	1994	2018	eurytopic	NA	26	103,78	3,51
14370	Aegithalos caudatus	decrease	1990	2018	woodlands	NA	745	97,39	0,64
14400	Poecile palustris	decrease	1990	2018	woodlands	NA	1046	97,51	0,33
14420	Poecile montanus	decrease	1990	2018	woodlands	NA	787	96,79	0,62
14540	Lophophanes cristatus	decrease	1990	2018	woodlands	NA	606	96,75	0,55
14610	Periparus ater	decrease	1990	2018	woodlands	NA	1215	97,51	0,33
14620	Cyanistes caeruleus	Stable	1990	2018	eurytopic	NA	3038	100,24	0,17
14640	Parus major	decrease	1990	2018	eurytopic	NA	3964	99,34	0,12
14790	Sitta europaea	decrease	1990	2018	woodlands	NA	1712	99,56	0,17
14860	Certhia familiaris	increase	1990	2018	woodlands	cold	246	102,72	1,00
14870	Certhia brachydactyla	decrease	1990	2018	woodlands	hot	1694	99,31	0,25
15080	Oriolus oriolus	decrease	1990	2018	woodlands	hot	290	95,50	0,96
15150	Lanius collurio	increase	1990	2018	agriculture	NA	319	103,10	0,77
15200	Lanius excubitor	decrease	1990	2018	open nature land	cold	138	93,08	2,52
15390	Garrulus glandarius	decrease	1990	2018	woodlands	NA	2571	98,34	0,21
15490	Pica pica	Stable	1990	2018	eurytopic	NA	1831	99,81	0,27
15570	Nucifraga caryocatactes	Uncertain	1990	2018	eurytopic	NA	48	93,91	3,59
15600	Corvus monedula	Stable	1990	2018	eurytopic	hot	879	100,00	0,49
15670	Corvus corone	decrease	1990	2018	eurytopic	NA	4203	97,97	0,15
15820	Sturnus vulgaris	decrease	1990	2018	agriculture	NA	2377	96,58	0,29
15910	Passer domesticus	Stable	1990	2018	urban	NA	1322	99,90	0,30
15980	Passer montanus	decrease	1990	2018	agriculture	hot	493	94,38	0,71
16360	Fringilla coelebs	decrease	1990	2018	eurytopic	NA	4828	99,35	0,08
16400	Serinus serinus	decrease	1990	2018	eurytopic	hot	47	92,16	2,91

16490	Carduelis chloris	Stable	1990	2018	eurytopic	NA	1063	99,96	0,43
16530	Carduelis carduelis	Stable	1990	2018	eurytopic	hot	403	101,27	0,84
16540	Carduelis spinus	decrease	1994	2018	woodlands	cold	285	93,61	1,53
16600	Carduelis cannabina	decrease	1990	2018	agriculture	hot	1924	97,90	0,30
16660	Loxia curvirostra	decrease	1990	2018	woodlands	cold	336	97,11	1,11
17100	Pyrrhula pyrrhula	Stable	1990	2018	woodlands	cold	677	99,55	0,70
17170	Coccothraustes coccothraustes	Stable	1990	2018	woodlands	hot	1032	100,67	0,36
18570	Emberiza citrinella	decrease	1990	2018	agriculture	NA	2009	98,18	0,20
18770	Emberiza schoeniclus	decrease	1990	2018	wetlands	cold	313	94,64	1,08
18820	Miliaria calandra	decrease	1990	2018	agriculture	NA	260	85,09	1,08

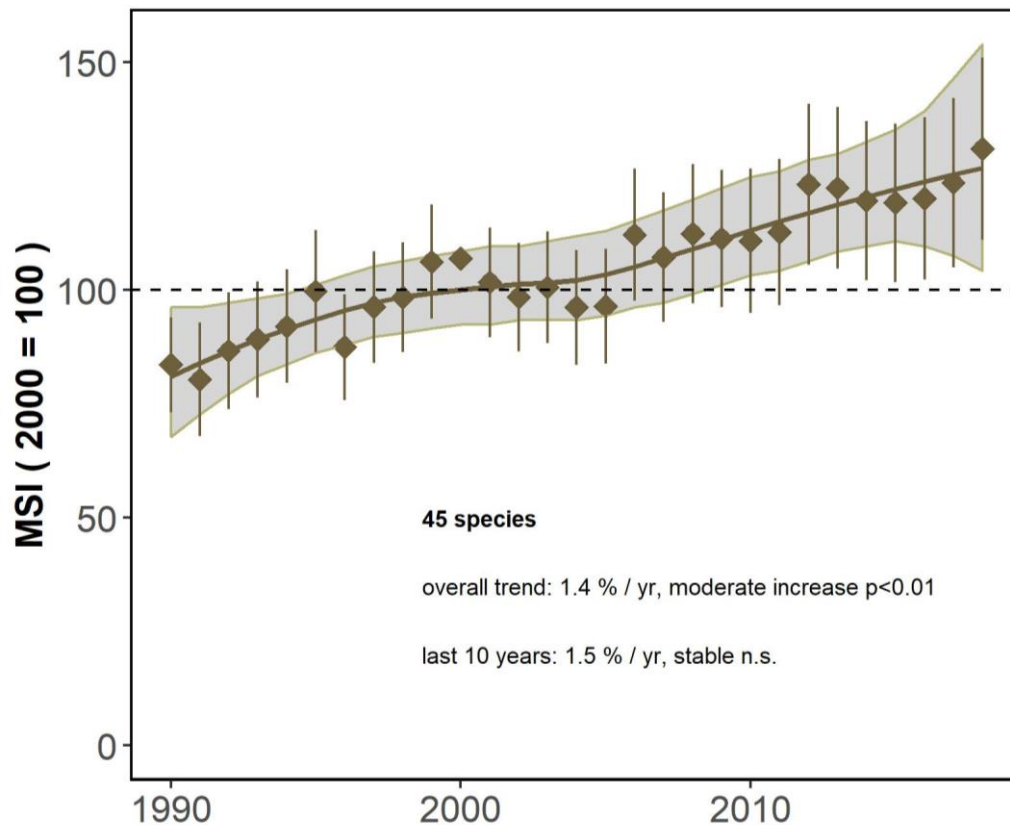
Butterflies in Wallonia



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
1894840	Aglais urticae	increase	1990	2018	eurypotic	cold	5961	100,37	0,12
1896841	Aphantopus hyperantus	increase	1990	2018	eurypotic	cold	4101	100,20	0,09
1898286	Vanessa atalanta	increase	1990	2018	eurypotic	NA	5510	100,57	0,14
1898544	Polygonia c-album	increase	1990	2018	eurypotic	NA	2943	100,57	0,17
1899433	Melitaea athalia	stable	1990	2018	eurypotic	cold	305	100,27	0,36
1902533	Araschnia levana	stable	1990	2018	eurypotic	NA	3154	99,97	0,10
1902749	Brenthis ino	increase	1994	2018	open nature land	cold	1495	100,36	0,13
1902791	Brenthis daphne	increase	1990	2018	eurypotic	hot	891	129,67	6,10
1905383	Issoria lathonia	stable	1990	2018	eurypotic	NA	765	100,93	0,59
1909398	Argynnis paphia	increase	1990	2018	woodlands	NA	2400	101,08	0,32
1911461	Coenonympha pamphilus	increase	1994	2018	eurypotic	NA	1735	100,63	0,16
1912325	Boloria selene	stable	1990	2018	eurypotic	cold	1273	99,84	0,13
1912372	Boloria aquilonaris	stable	1990	2018	open nature land	cold	150	99,84	0,73
1919712	Anthocharis cardamines	stable	1990	2018	eurypotic	cold	3936	100,17	0,10
1920218	Aporia crataegi	increase	1990	2018	eurypotic	NA	1713	100,41	0,19
1920494	Pieris napi	decrease	1990	2018	eurypotic	cold	3587	99,85	0,06
1920496	Pieris rapae	increase	1990	2018	eurypotic	hot	4553	100,59	0,14
1920506	Pieris brassicae	increase	1990	2018	eurypotic	NA	4096	101,06	0,27
1920712	Gonepteryx rhamni	increase	1990	2018	eurypotic	NA	4018	100,28	0,13
1924097	Glaucopsyche alexis	stable	1995	2016	open nature land	hot	47	100,40	1,11
1925918	Celastrina argiolus	increase	1990	2018	eurypotic	NA	1508	101,90	0,59
1929443	Lycaena hippothoe	decrease	1990	2018	open nature land	cold	509	99,34	0,15
1929659	Lycaena virgaureae	decrease	1995	2016	woodlands	cold	46	95,76	1,08
1929697	Lycaena phlaeas	increase	1996	2018	eurypotic	NA	1887	100,63	0,22
1930110	Thecla betulae	increase	1990	2018	eurypotic	NA	552	101,28	0,48
1932411	Callophrys rubi	stable	1990	2018	eurypotic	NA	1117	99,74	0,19
1933095	Aricia agestis	increase	1990	2018	open nature land	hot	985	100,84	0,27

1934693	Hamearis lucina	decrease	1990	2018	open nature land	NA	194	97,73	0,40
1938214	Iphiclides podalirius	decrease	1990	2018	open nature land	hot	125	98,96	0,40
1945569	Spialia sertorius	stable	1994	2018	open nature land	hot	203	100,61	0,56
1946844	Ochlodes sylvanus	stable	1990	2018	eurytopic	NA	2918	100,18	0,11
1947335	Carterocephalus palaemon	stable	1990	2018	eurytopic	cold	694	100,38	0,27
4299535	Boloria eunomia	decrease	1990	2018	open nature land	cold	643	99,32	0,11
4535180	Favonius quercus	stable	1990	2018	woodlands	hot	917	101,68	1,00
4535632	Lasiommata megera	stable	1990	2018	eurytopic	hot	1782	100,01	0,16
4535636	Lasiommata maera	stable	1990	2018	open nature land	NA	157	99,98	0,58
4535827	Aglais io	stable	1995	2016	eurytopic	NA	3042	100,08	0,13
5131910	Apatura iris	increase	1995	2016	woodlands	NA	1337	100,63	0,22
5134680	Erebia medusa	decrease	1994	2018	open nature land	cold	275	98,63	0,19
5135513	Maniola jurtina	increase	1990	2018	eurytopic	hot	4864	100,15	0,06
5137903	Leptidea sinapis	stable	1990	2018	eurytopic	NA	819	100,02	0,18
5138561	Plebeius argus	decrease	1990	2018	open nature land	NA	175	99,16	0,34
5139156	Cyaniris semiargus	increase	1990	2018	open nature land	NA	834	101,73	0,38
5140214	Polyommatus icarus	stable	1990	2018	eurytopic	NA	2798	100,16	0,12
5772890	Boloria dia	stable	2008	2018	open nature land	NA	121	99,58	0,73
5772893	Boloria euphrosyne	stable	1990	2018	woodlands	cold	199	100,00	0,51
5882898	Lycaena tityrus	stable	1990	2018	open nature land	NA	770	99,99	0,32
5882965	Satyrium w-album	increase	1990	2018	woodlands	NA	228	107,61	2,41
5882969	Satyrium ilicis	stable	1990	2018	eurytopic	hot	172	100,34	0,98
5882980	Satyrium pruni	increase	1990	2018	eurytopic	cold	501	105,14	1,56
6221746	Speyeria aglaia	stable	1994	2018	eurytopic	NA	479	99,96	0,26
7417698	Lycaena helle	decrease	1994	2018	open nature land	cold	737	98,81	0,09
7622059	Pyronia tithonus	increase	1990	2018	eurytopic	hot	2528	100,77	0,19
7728366	Coenonympha arcania	decrease	1990	2018	open nature land	NA	549	98,62	0,14
7762841	Nymphalis polychloros	increase	1990	2018	eurytopic	hot	896	102,30	0,75
7768674	Melitaea diamina	increase	1990	2018	eurytopic	cold	750	101,93	0,26
7854318	Melanargia galathea	stable	1990	2018	open nature land	hot	1838	100,12	0,17
8049830	Pararge aegeria	increase	1990	2018	eurytopic	hot	3191	100,72	0,22
8073674	Thymelicus acteon	decrease	1990	2018	open nature land	hot	68	94,08	0,74
8109173	Pyrgus malvae	stable	1990	2018	eurytopic	NA	1197	99,98	0,19
8133678	Thymelicus lineola	stable	1990	2018	eurytopic	NA	1880	100,02	0,10
8138711	Apatura ilia	increase	1990	2018	woodlands	NA	521	102,38	0,95
8168644	Melitaea cinxia	increase	1990	2018	open nature land	hot	128	103,86	0,91
8225376	Papilio machaon	decrease	1994	2018	eurytopic	NA	1735	99,23	0,17
8273661	Thymelicus sylvestris	increase	1994	2018	eurytopic	hot	1875	100,24	0,10
8277078	Carcharodus alceae	increase	1994	2018	eurytopic	hot	882	102,39	0,56
8429428	Limenitis camilla	increase	1994	2018	woodlands	NA	1516	101,65	0,27

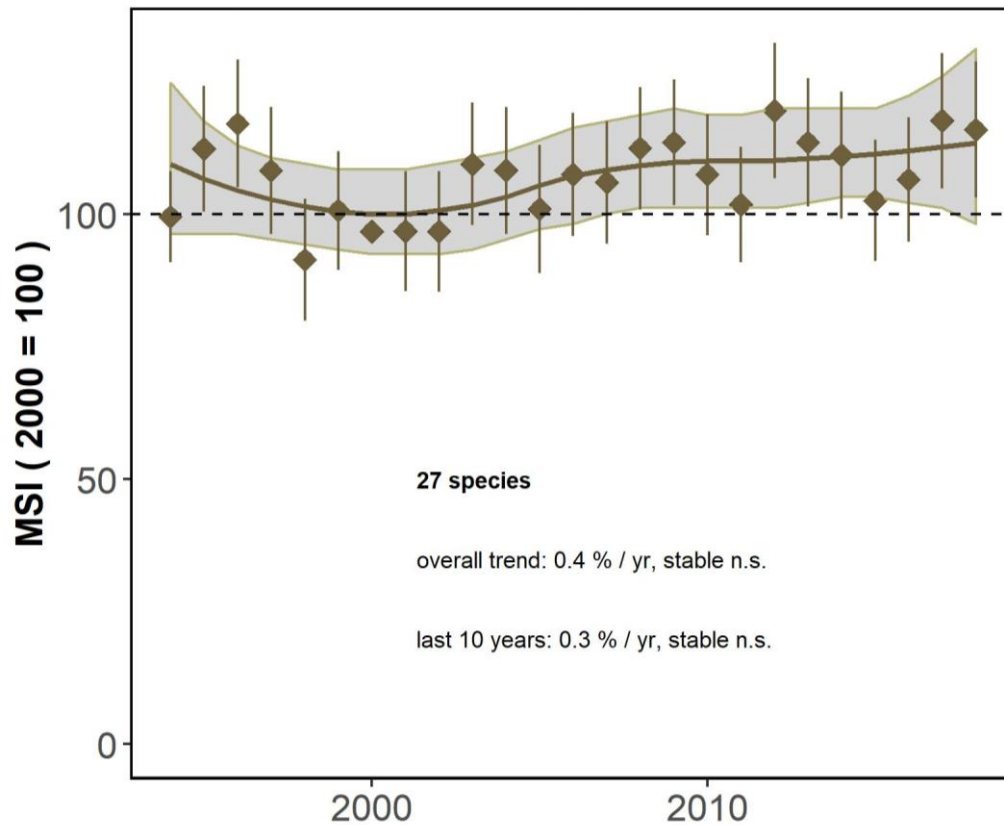
Dragonflies in Wallonia



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
578	Calopteryx splendens Harris, 1780	increase	1990	2018	wetlands	NA	1547	100,48	0,14
579	Calopteryx virgo Linnaeus, 1758	increase	1990	2018	wetlands	NA	2574	100,72	0,13
580	Sympecma fusca Vander Linden, 1820	increase	1990	2018	wetlands	hot	271	105,31	1,82
581	Lestes barbarus Fabricius, 1798	increase	1990	2018	wetlands	NA	95	104,81	2,07
582	Lestes dryas Kirby, 1890	stable	1990	2018	wetlands	NA	108	101,00	0,84
583	Lestes sponsa Hansemann, 1823	stable	1990	2018	wetlands	cold	643	100,01	0,14
584	Lestes virens Charpentier, 1825	uncertain	1990	2018	wetlands	NA	46	104,22	2,43
585	Chalcolestes viridis Vander Linden, 1825	increase	1990	2018	wetlands	NA	889	100,84	0,25
587	Ischnura elegans Vander Linden, 1820	stable	1990	2018	wetlands	NA	1917	100,11	0,14
588	Ischnura pumilio Charpentier, 1825	increase	1990	2018	wetlands	NA	355	105,19	1,41
589	Pyrrhosoma nymphula Sulzer, 1776	increase	1990	2018	wetlands	NA	2019	100,52	0,15
590	Enallagma cyathigerum Charpentier, 1840	stable	2000	2016	wetlands	NA	1731	100,21	0,13
594	Coenagrion puella Linnaeus, 1758	stable	1994	2018	wetlands	NA	2165	100,10	0,08
595	Coenagrion pulchellum Vander Linden, 1825	stable	1990	2018	wetlands	NA	53	100,17	0,96
596	Coenagrion scitulum Rambur, 1842	increase	1990	2018	wetlands	hot	261	115,08	3,00
597	Erythromma lindenii Selys, 1840	increase	1990	2018	wetlands	hot	241	106,36	1,29
598	Erythromma najas Hansemann, 1823	increase	1990	2018	wetlands	NA	472	101,75	0,41
599	Erythromma viridulum Charpentier, 1840	increase	1990	2018	wetlands	NA	448	101,03	0,25
604	Gomphus pulchellus Selys, 1840	increase	1990	2018	wetlands	hot	627	101,15	0,47
608	Brachytron pratense Müller, 1764	increase	1990	2018	wetlands	NA	60	104,36	1,76
610	Aeshna cyanea Müller, 1764	increase	1990	2018	wetlands	NA	2238	100,42	0,11
611	Aeshna grandis Linnaeus, 1758	increase	1990	2018	wetlands	cold	986	101,31	0,24
612	Aeshna juncea Linnaeus, 1758	stable	1990	2018	wetlands	cold	245	100,41	0,31
613	Aeshna mixta Latreille, 1805	increase	1990	2018	wetlands	NA	798	100,65	0,21
616	Anax imperator Leach, 1815	increase	1990	2018	wetlands	hot	1917	100,72	0,13
617	Anax parthenope Selys, 1839	increase	1990	2018	wetlands	hot	136	105,55	2,15
619	Cordulegaster boltonii Donovan, 1807	stable	2008	2018	wetlands	NA	820	99,92	0,17

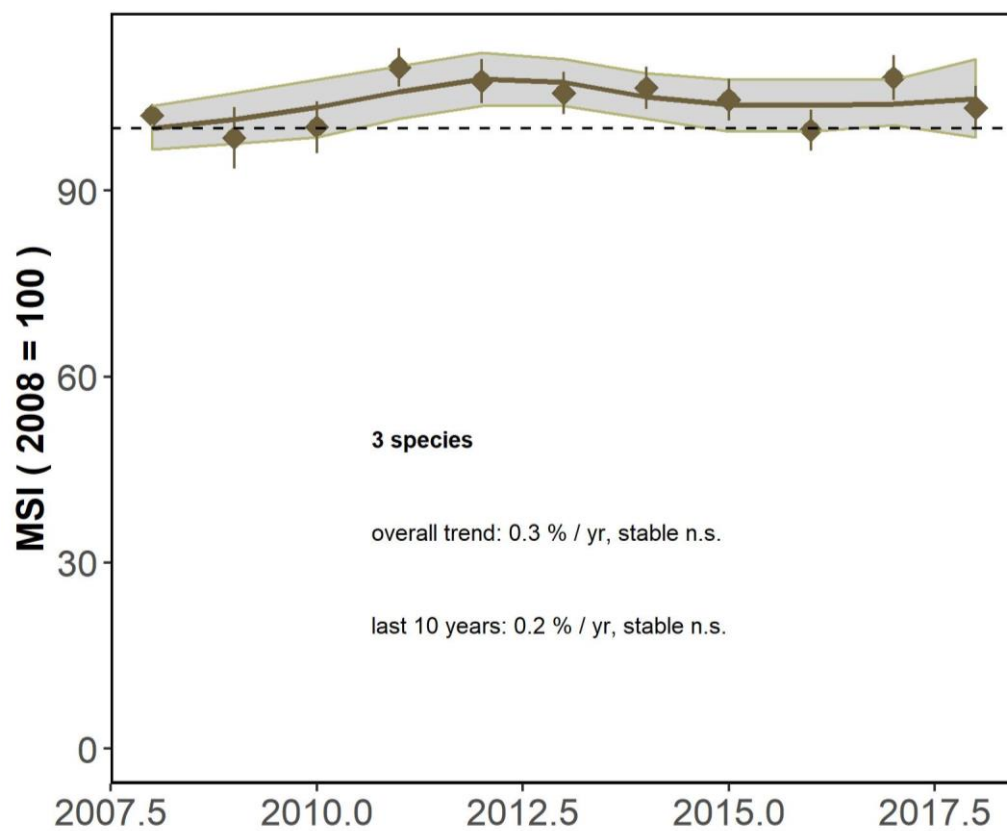
621	Cordulia aenea Linnaeus, 1758	increase	1990	2018	wetlands	cold	786	101,19	0,35
624	Somatochlora metallica Vander Linden, 1825	stable	1990	2018	wetlands	cold	603	100,21	0,19
627	Libellula depressa Linnaeus, 1758	increase	1990	2018	wetlands	NA	2324	100,37	0,11
628	Libellula fulva Müller, 1764	increase	1990	2018	wetlands	NA	127	109,46	1,63
629	Libellula quadrimaculata Linnaeus, 1758	increase	1990	2018	wetlands	NA	828	101,54	0,31
630	Orthetrum brunneum Fonscolombe, 1837	increase	1990	2018	wetlands	hot	256	102,70	0,98
631	Orthetrum cancellatum Linnaeus, 1758	increase	1990	2018	wetlands	NA	1494	100,33	0,14
632	Orthetrum coerulescens Fabricius, 1798	increase	1990	2018	wetlands	hot	357	110,01	1,36
633	Crocothemis erythraea Brullé, 1832	increase	1990	2018	wetlands	hot	357	106,69	1,63
634	Sympetrum danae Sulzer, 1776	decrease	1990	2018	wetlands	cold	551	99,34	0,13
637	Sympetrum fonscolombii Selys, 1840	increase	1990	2018	wetlands	hot	251	105,81	2,03
640	Sympetrum sanguineum Müller, 1764	increase	1994	2018	wetlands	NA	998	100,74	0,25
641	Sympetrum striolatum Charpentier, 1840	increase	1994	2018	wetlands	NA	1204	101,69	0,27
642	Sympetrum vulgatum Linnaeus, 1758	stable	1994	2018	wetlands	NA	254	99,25	0,46
644	Leucorrhinia dubia Vander Linden, 1825	decrease	1994	2018	wetlands	cold	217	99,31	0,26
645	Leucorrhinia pectoralis Charpentier, 1825	uncertain	1990	2018	wetlands	cold	111	104,23	2,71
646	Leucorrhinia rubicunda Linnaeus, 1758	uncertain	1990	2018	wetlands	cold	55	103,54	1,90
1524	Platycnemis pennipes Pallas, 1771	increase	1990	2018	wetlands	NA	1530	100,77	0,19

Grasshoppers in Wallonia



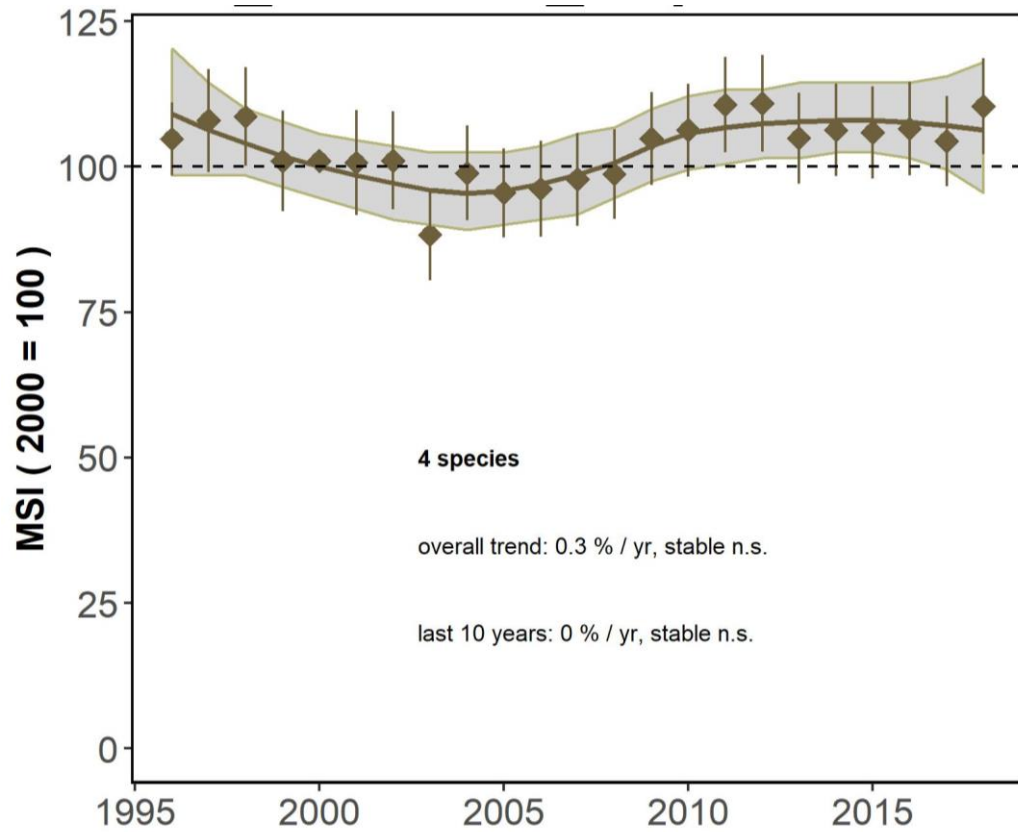
code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
1681124	Tetrix subulata	uncertain	1990	2018	eurypotic	NA	285	102,76	1,67
1681181	Tetrix tenuicornis	stable	1990	2018	open nature land	NA	154	100,18	1,13
1681247	Tetrix undulata	stable	1995	2016	eurypotic	NA	416	99,61	0,54
1683067	Conocephalus fuscus	increase	1995	2016	open nature land	NA	1069	101,90	0,62
1683331	Conocephalus dorsalis	stable	1995	2016	wetlands	NA	250	99,42	0,52
1686243	Phaneroptera falcata	increase	1995	2016	open nature land	NA	559	104,89	1,44
1688020	Leptophyes punctatissima	increase	1995	2016	open nature land	NA	668	101,60	0,75
1688979	Bicolorana bicolor	stable	1995	2016	open nature land	NA	312	99,66	0,38
1690432	Meconema thalassinum	stable	1995	2016	woodlands	NA	526	100,87	0,56
1692898	Tettigonia viridissima	stable	1994	2018	eurypotic	NA	2069	100,54	0,29
1695297	Pholidoptera griseoptera	increase	1996	2018	open nature land	NA	1569	100,36	0,17
1700023	Gomphocerippus rufus	stable	1994	2018	open nature land	NA	392	100,45	0,56
1700310	Oedipoda caerulea	increase	1990	2018	open nature land	NA	548	100,82	0,41
1700841	Chrysochraon dispar	stable	1990	2018	open nature land	NA	1482	99,97	0,16
1701365	Myrmeleotettix maculatus	decrease	1990	2018	open nature land	NA	257	98,85	0,49
1708251	Chorthippus biguttulus	stable	1994	2018	open nature land	NA	1099	99,84	0,15
1708459	Chorthippus brunneus	decrease	1994	2018	eurypotic	NA	1174	99,58	0,16
1708567	Chorthippus albomarginatus	stable	1994	2018	open nature land	NA	109	100,26	1,76
1710755	Omocestus viridulus	stable	1990	2018	open nature land	NA	539	100,35	0,26
1710802	Omocestus rufipes	stable	1990	2018	open nature land	NA	236	99,37	0,44
1710962	Stenobothrus lineatus	stable	1990	2018	open nature land	NA	133	99,40	0,63
1711091	Stethophyma grossum	stable	1990	2018	wetlands	NA	637	101,43	0,78
1716462	Gryllus campestris	increase	2008	2018	open nature land	NA	180	102,05	0,99
1722903	Nemobius sylvestris	stable	1990	2018	woodlands	NA	643	100,48	0,36
4402879	Roeseliana roeselii	increase	1990	2018	open nature land	NA	534	103,11	0,95
7792296	Pseudochorthippus parallelus	stable	1990	2018	eurypotic	NA	1811	100,01	0,10
8347376	Tettigonia cantans	stable	1994	2018	eurypotic	NA	283	101,50	1,07

Mammals in Wallonia



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
389	Sciurus vulgaris Linnaeus 1758	decrease	1990	2018	woodlands	NA	2703	99,31	0,26
409	Oryctolagus cuniculus (Linnaeus 1758)	stable	1990	2018	eurytopic	NA	986	99,20	0,57
418	Capreolus capreolus (Linnaeus 1758)	increase	1990	2018	eurytopic	NA	5421	102,46	0,40

Reptiles in Wallonia



code	tax	trend	from	to	Habitat	category	n_square	slope	se_slope
14	Coronella austriaca	increase	1990	2018	open nature land	NA	502	100,84	0,32
38	Natrix helvetica	stable	1990	2018	eurytopic	NA	1119	100,45	0,24
49	Podarcis muralis	stable	1990	2018	eurytopic	NA	773	99,87	0,15
79	Zootoca vivipara	stable	1990	2018	eurytopic	NA	2620	100,04	0,07

Comparison of the global LPI and LPI calculated without one of the taxonomic group.

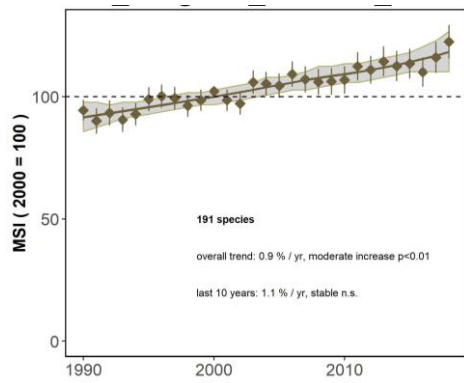


Figure 2: LPI without birds

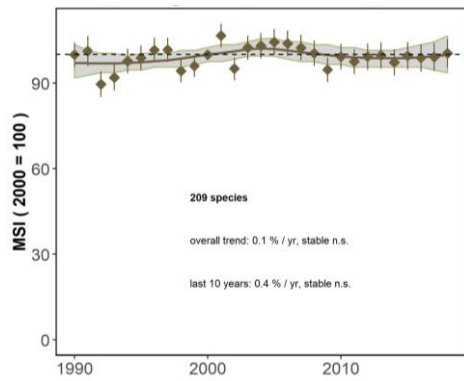


Figure 3 : LPI without butterflies

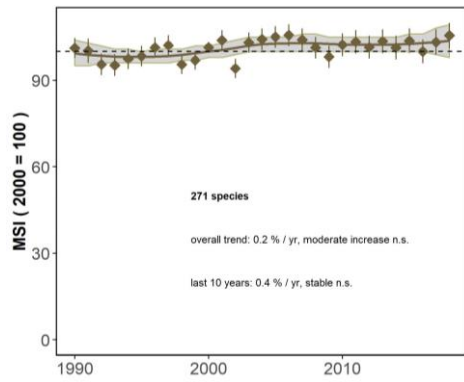


Figure 4: LPI without amphibians

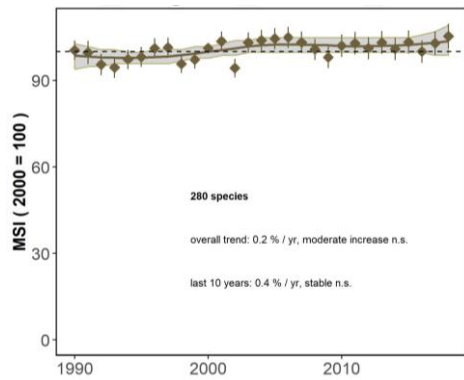


Figure 5: LPI without mammals

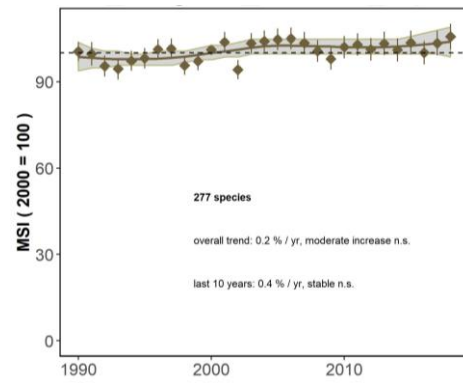


Figure 6: LPI without reptiles

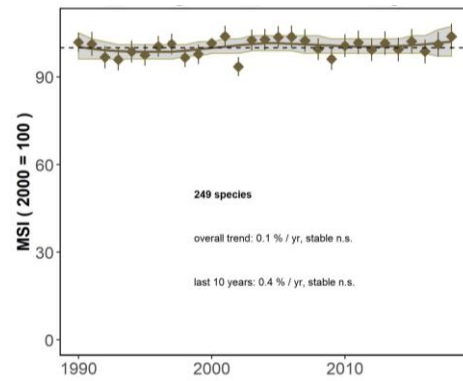


Figure 7: LPI without grasshoppers

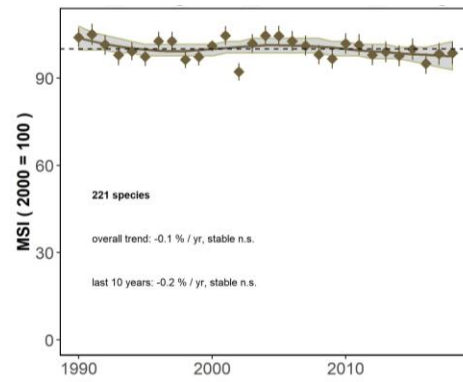


Figure 8: LPI without dragonflies

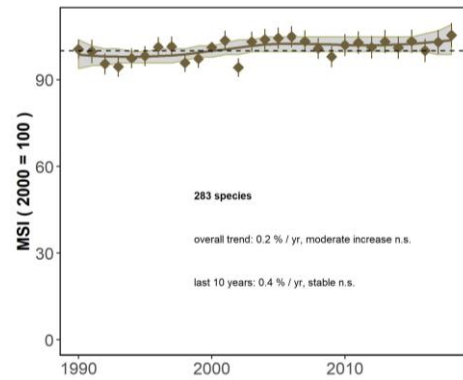


Figure 9: LPI global

