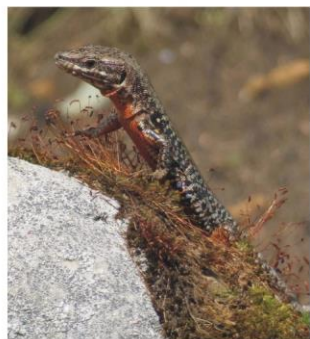


Monitoring of amphibians and reptiles in Luxembourg

Results of targeted monitoring since 2010



Mondorf, 22 novembre 2017

Roland Proess, Bureau d'études Ecotop

Hyla arborea (Annexe IV)



Survey of the site Bous

Variable frequency between 2010 & 2015

Since 2016: 2 controls / year: 1 nocturnal control (adults) and 1 diurnal control (juveniles)

Coordination: LIST, Fieldwork: ECOTOP

Site Bous = 5 ponds

- Reckingerhaff / Weiergewan: old pond, population of *Hyla arborea* known since 1978
- Grondelsbur: 2 new ponds, created in 2013, distance to Weiergewan: 600 m
- Becherdellt: 2 new ponds, created in 2014, distance to Weiergewan: 1.100 m

Reckingerhaff / Weiergewan

Date	Adults	Juveniles
28.04.2010	> 50	
15.07.2010		4
07.05.2011	30	
05.07.2011		0
10.05.2012	> 50	
25.07.2012		25
07.05.2013	> 50	
16.07.2013		> 50
11.05.2015	> 50	
21.07.2015		8
12.05.2016	> 50	
15.07.2016		37
17.05.2017	10-15	
11.07.2017		0

Site	Date	Adults
Becherdellt	11.05.2015	24
	12.05.2016	4
	17.05.2017	24
Grondelsbur	11.05.2015	10
	12.05.2016	3
	17.05.2017	3

Re-introduction of Hyla arborea in Bertrange & Useldange

(Survey realized by SICONA)

	2012 (juveniles)	2013 (juveniles)	2014 (juveniles)	Total (juveniles)
Bertrange	500	252	198	950
Useldange	600	334	181	1115

Bertrange: 105 calling males in 2017
colonisation of ponds distant

900 m

1.000 m

1.300 m

1.900 m

2.900 m

from reintroduction pond

Useldange: 76 calling males in 2016

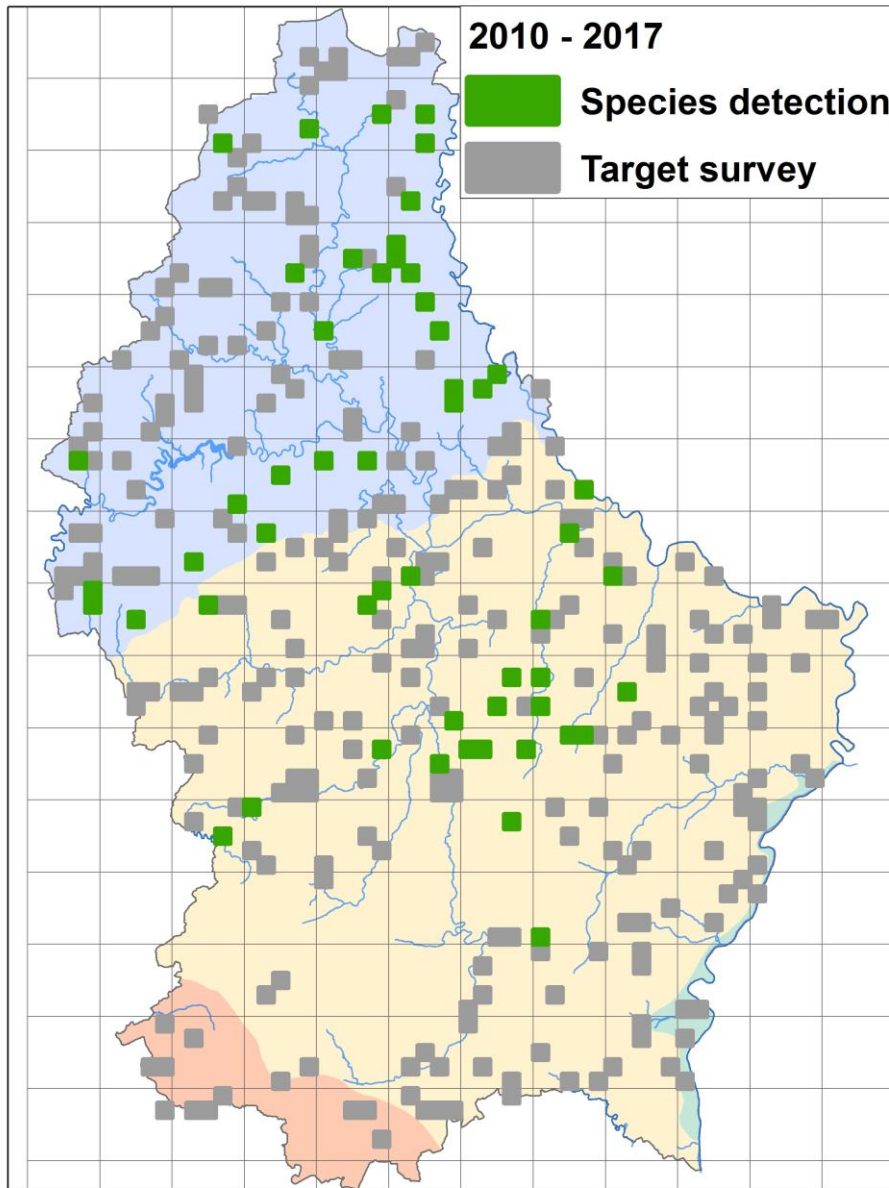


Alytes obstetricans (Annexe IV)



Method: Nocturnal calling survey in potential sites
(historic sites, standing water bodies, 1 control / year and site)
Coordination: LIST, Fieldwork: LIST & ECOTOP

Common Midwife Toad (*Alytes obstetricans*)



2010 - 2017

- Species detection
- Target survey

Survey of 338 sites

Species detected in 54 sites

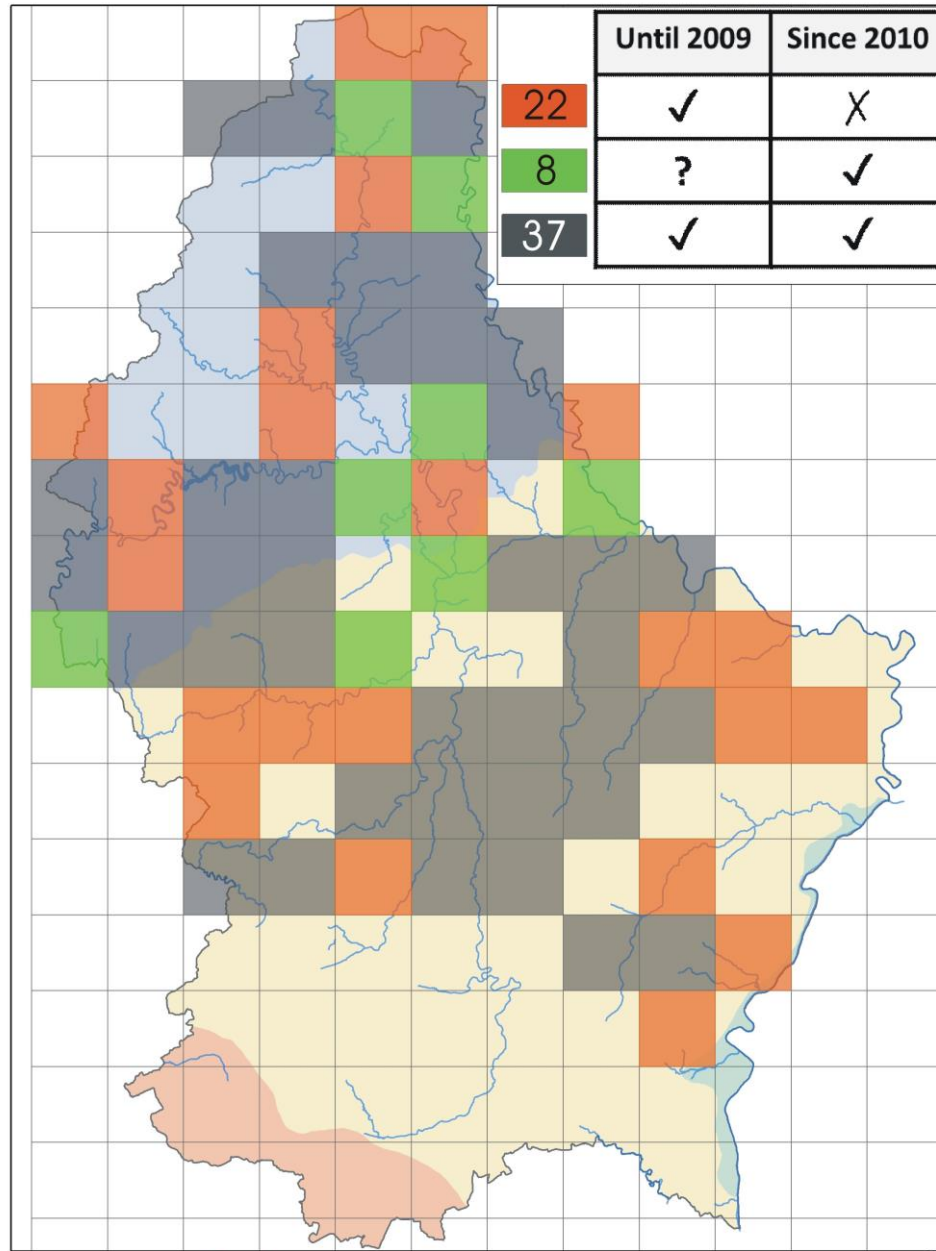
- 25 new sites

- 29 historic sites confirmed

- 43 historic sites not confirmed



Common Midwife Toad (*Alytes obstetricans*)



Epidalea calamita (Annexe IV)



Survey of the 3 Luxembourgish populations (Ehlerange, Ernzen & Steinfort)
Variable frequency between 2010 & 2015, since 2016: 2 controls / year and site
Method: 1 nocturnal counting (adults) and 1 diurnal control (eggs & larvae)
Coordination: LIST, Fieldwork: LIST & ECOTOP

Ehlerange

maximum: > 50 adults (16.05.13)
annual reproduction

Ernzen

maximum: 144 adults (28.04.12)
annual reproduction

Steinfurt

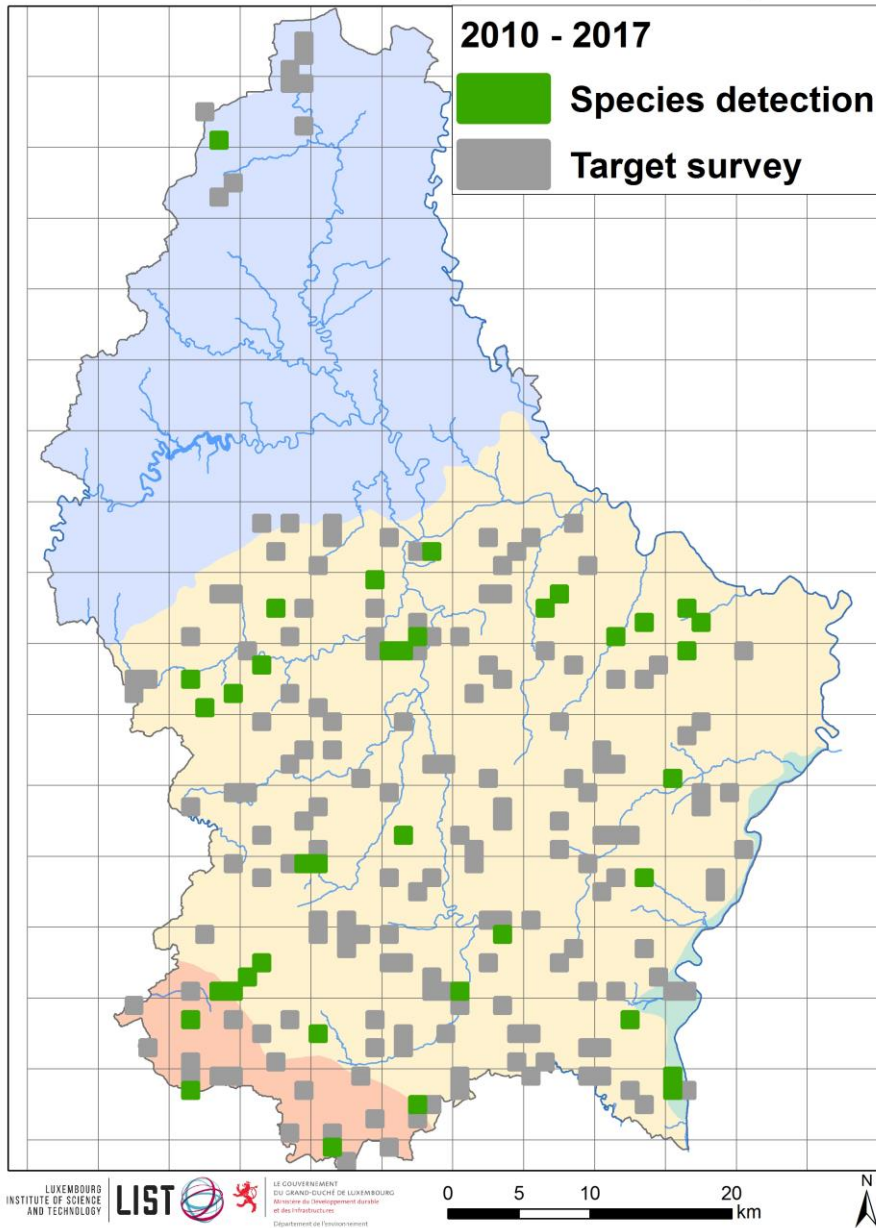
maximum: 6 adults (30.04.12)
reproduction: difficult and not every year

Triturus cristatus (Annexe II & IV)



Method: adult counting with traps
(historic sites, standing water bodies, 1 control / year and site)
1 trap per site during one night
Coordination: LIST, Fieldwork: LIST & ECOTOP

Great Crested Newt (*Triturus cristatus*)



Survey of 239 sites

Species detected in 37 sites

- 7 new sites

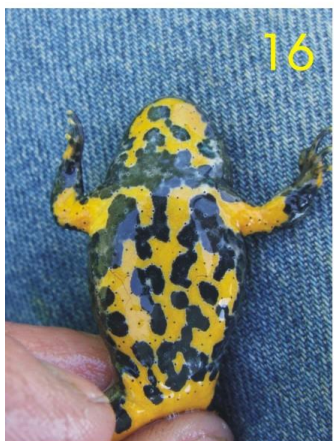
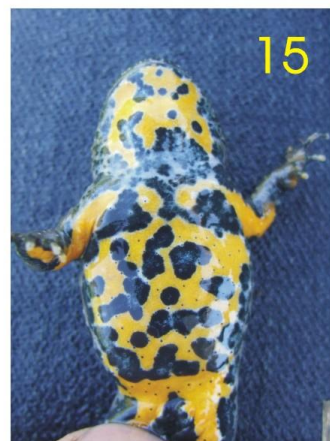
- 30 historic sites confirmed

- 14 historic sites not confirmed

Bombina variegata (Annexe II & IV)



Survey of the 3 Luxembourgish populations (Beidweiler, Dudelange, Trintange)
Variable frequency between 2010 & 2015, since 2016: 1 control / year and site
Method: individual identification by the unique pattern of black and yellow mottles on the belly, recorded by photographs (adults and juveniles after overwintering)
Coordination: LIST, Fieldwork: ECOTOP



Results of the survey of *B. variegata* at Dudelage/Haardt

Individu	11.06.10	02.07.10	19.07.10	21.05.12	19.06.12	24.07.12	31.05.14	24.06.14	17.07.14	18.07.16	17.07.17	Nombre de captures
1	x			x								2
2	x	x	x	x		x	x					6
3	x		x	x	x	x		x			x	7
4	x											1
5	x	x	x									3
6	x		x		x	x			x			5
7	x				x		x			x		4
8	x		x					x	x	x	x	6
9	x	x	x				x			x		5
10	x		x	x					x			4
11		x	x									2
12			x					x	x			3
13				x		x			x	x		4
14		x	x		x				x			4
15		x	x		x	x						4
16		x	x			x	x		x	x		6
17		x										1
18		x		x		x	x		x		x	6
19			x		x	x						3
20			x		x		x					3
21			x					x			x	3
22			x									1
23			x		x							2
24			x				x		x		x	4
25				x								1
26				x		x			x		x	4
27					x							1
28						x						1
29						x	x	x				3
30					J							1
31					J							1
32					J						x	2
33						J		x		x		3
34							J					1
35							J					1
36							J		J			2
37							J	J				2
38								J	J			2
39								J				1
40									J			1
41									J			1
42									J		x	2
43									J		x	2
44							x	x	x			3
45							x					1
46							x			x		2
47							x					1
48									x		x	2
49									x			1
50									x			1
51									x			1
52										x		1
53										x		1
54										x		1
55										x		1
56											x	1
57											x	1
58											x	1
59											x	1
Nombre d'individus capturés	10	9	18	8	9	11	16	10	21	11	14	

J = juvenile
x = adult

Beidweiler

discovered in 2013

5 individuals, no juveniles, no larvae

Trintange

discovered in 2016

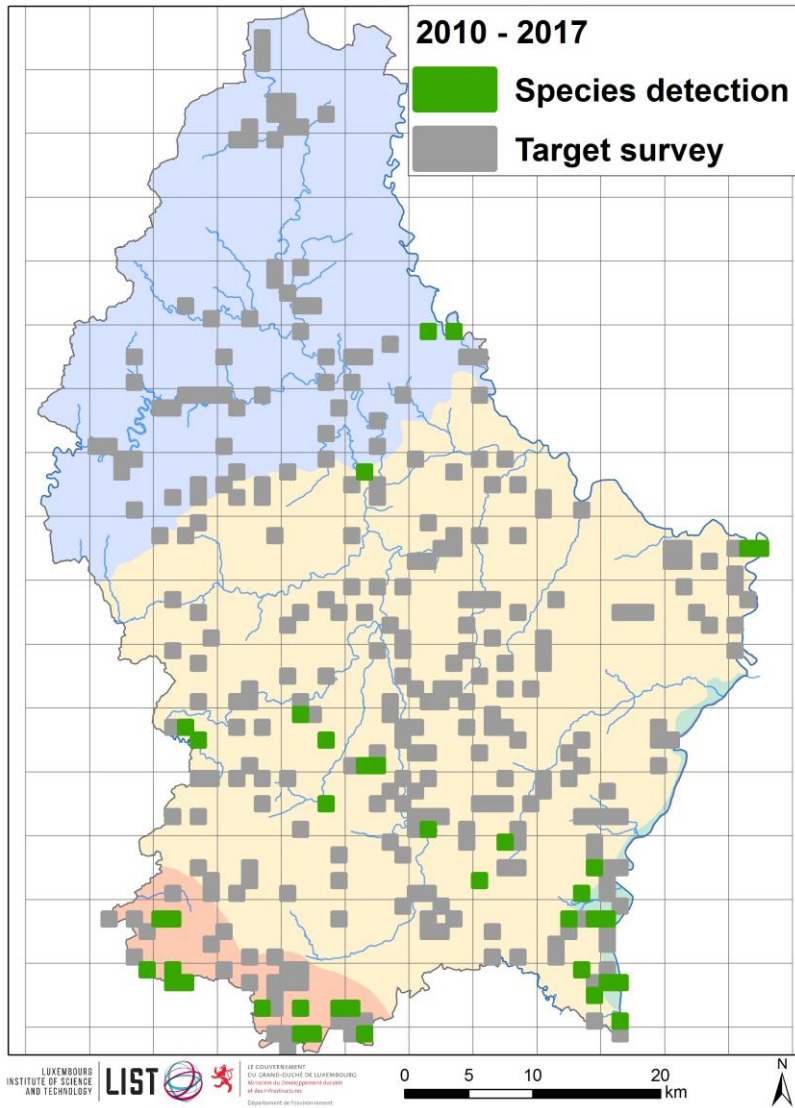
5 individuals, larvae in 2017

Lacerta agilis (Annexe IV)



Method: control of potential sites (historic sites, biotope cadastre)
first control in spring
if detected: second control in autumn
if not detected: second control in summer, third control in autumn
Coordination: LIST, Fieldwork: LIST & ECOTOP

Sand Lizard (*Lacerta agilis*)



Survey of 380 sites

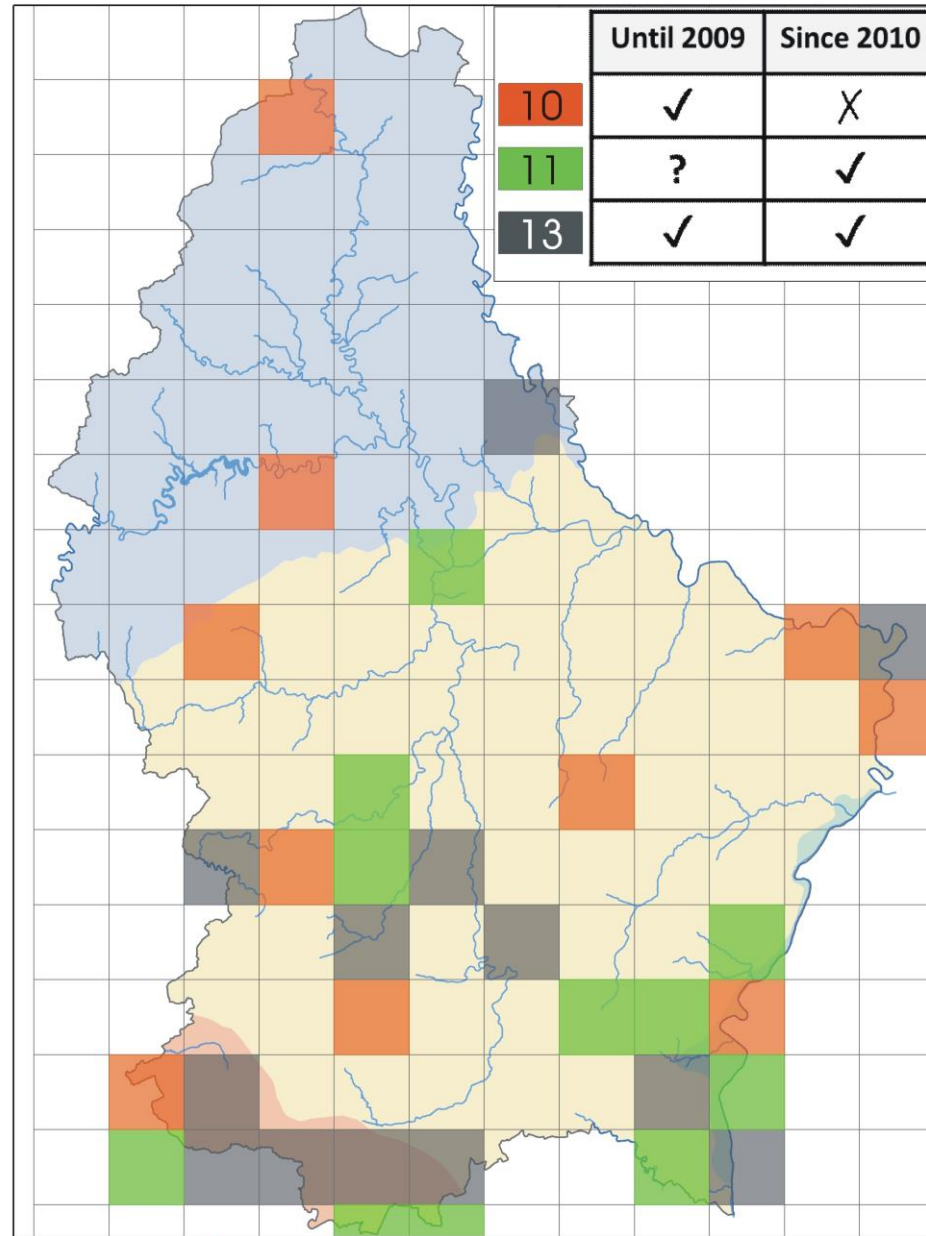
Species detected in 38 sites

-21 new sites

-17 historic sites confirmed

- 14 historic sites not confirmed

Sand Lizard (*Lacerta agilis*)



Podarcis muralis (Annexe IV)



Method: control of potential sites (historic sites, biotope cadastre)

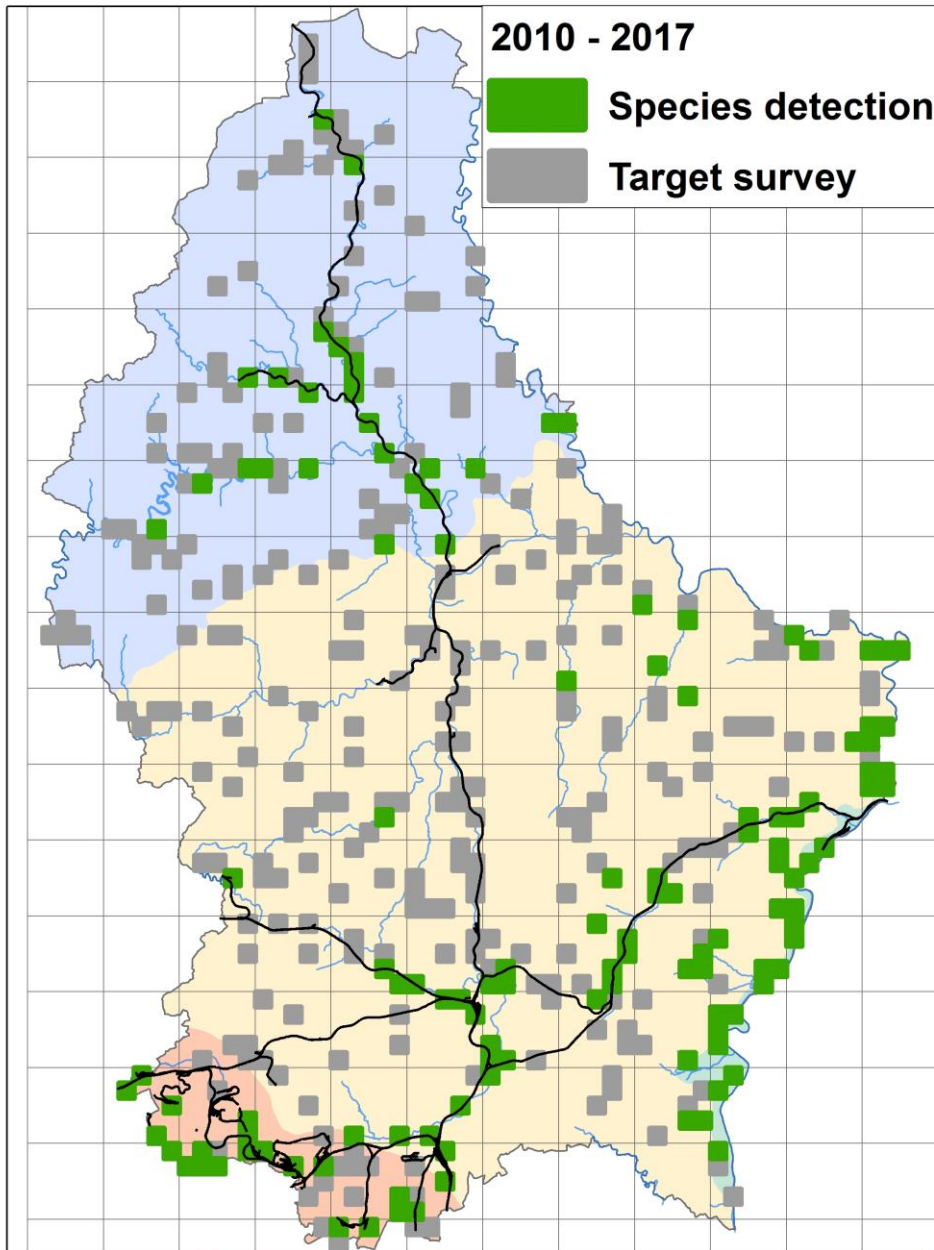
first control in spring

if detected: only one control per year

if not detected: second control in summer or autumn

Coordination: LIST, Fieldwork: LIST & ECOTOP

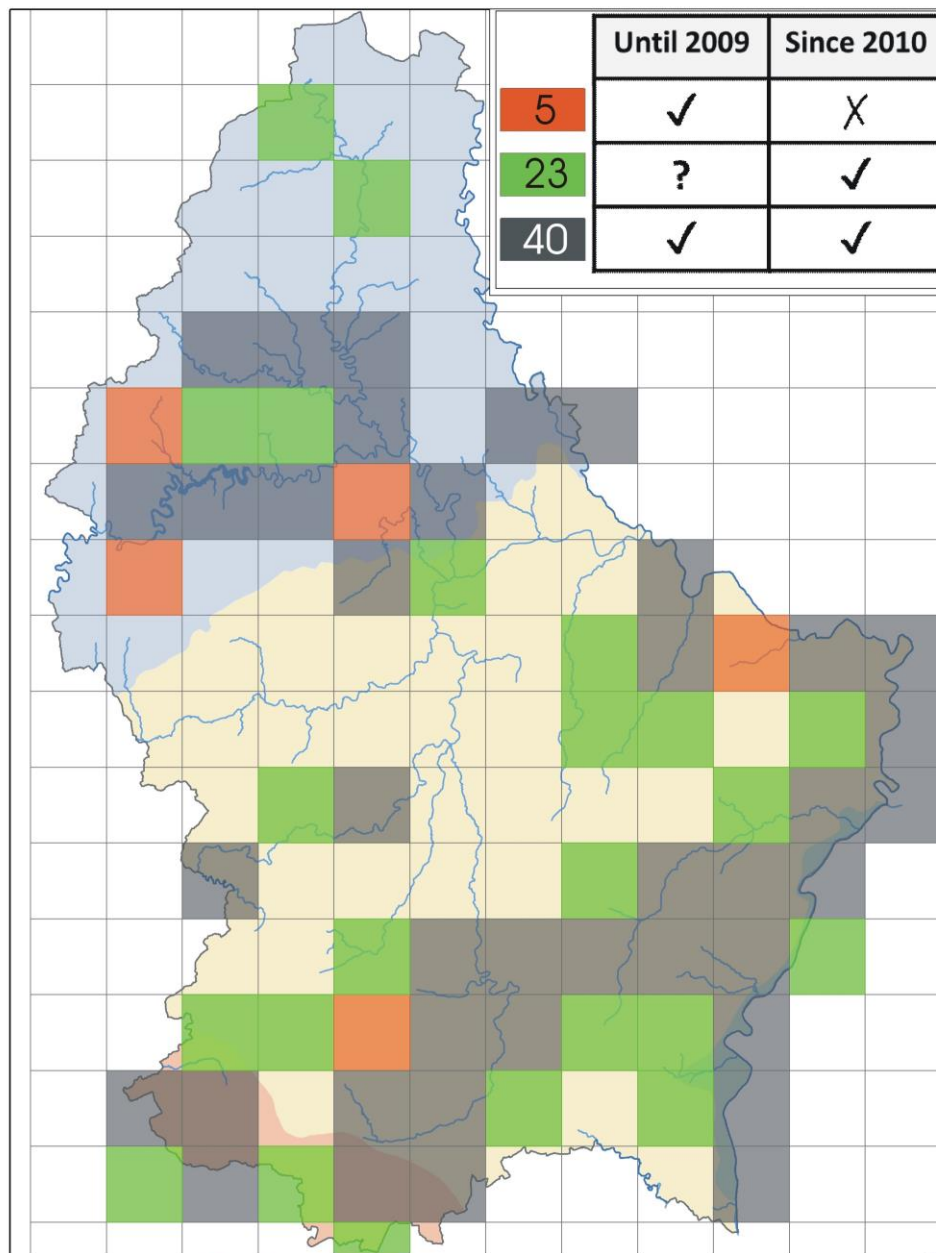
Common Wall Lizard (*Podarcis muralis*)



Survey of 452 sites

Species detected in 125 sites
(a lot of new sites)

Common Wall Lizard (*Podarcis muralis*)



Coronella austriaca (Annexe IV)



no regular survey

two studies realized by Ecotop by order of National Museum of Natural history and ANF

Method: control of potential sites (historic sites, biotope cadastre, aerial photo)

Survey of 77 sites in 2015 & 2016

Species detected in 20 sites

- 7 new sites
- 13 historic sites confirmed
- 6 historic sites not confirmed

+ data from lizard monitoring

+ data from other people

Smooth Snake (*Coronella austriaca*)

