



Atlantische
Sandlandschaften
Integriertes LIFE-Projekt

Bezirksregierung
Münster



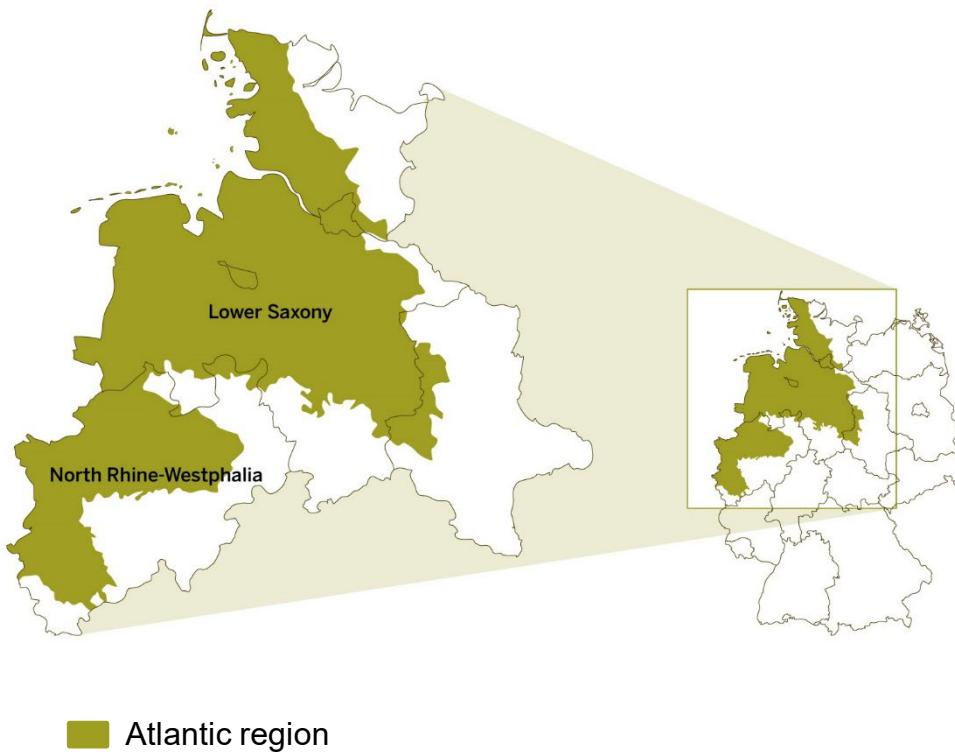
LIFE IP Atlantic Region DE (Atlantische Sandlandschaften)

Martina Raffel (District Government of Münster)

May 2024, Santander



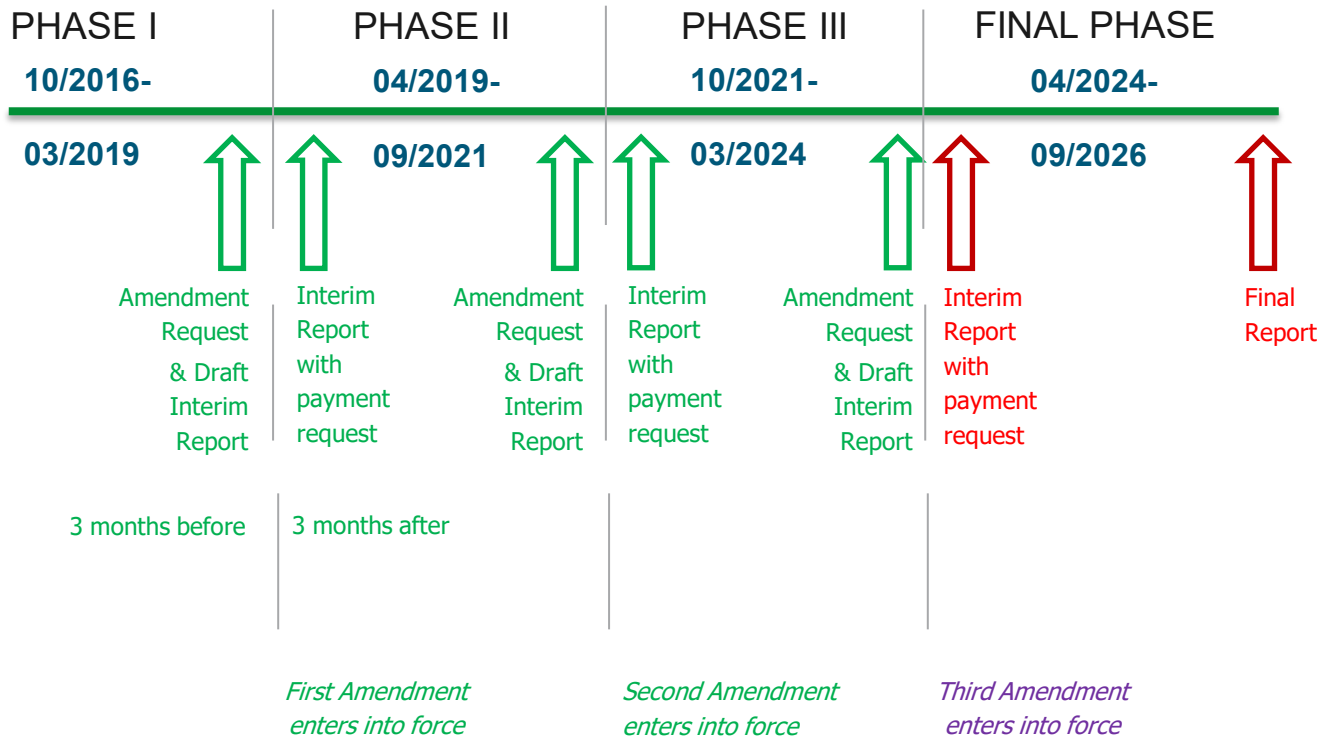
LIFE IP Atlantic Region DE



- *Exemplary implementation of the EU 2020 target with a focus on oligotrophic habitats on sand in the Atlantic region of Germany*
- Joint project of North Rhine-Westphalia and Lower Saxony
- Six federal states have a part in Germany's Atlantic region
- North Rhine-Westphalia and Lower Saxony cover about 80%
- Target 1 of EU Biodiversity Strategy to 2020 (2030)
- Budget: 16.875 m € (60% EU)



Timeline



Project structure

Beneficiaries

MUNV NRW

Coordinating beneficiary

MU NI

Associated beneficiary

Management & Implementation

**BR Münster
NLWKN**

LANUV

Technical tasks

NLWKN

Technical tasks

Project structure

Beneficiaries

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Germany

Ministries and agencies
of all federal states
of the Atlantic region
BMUV
BfN

Federal states

Chambers of agriculture
Federal state forestry
Nature conservation groups
Interest groups/ land owners
Regional authorities

Regional

Biological Stations
Regional forestry authorities
Nature conservation groups
Interest groups/ land owners
Local authorities

Management & Implementation

**BR Münster
NLWKN**

LANUV

Technical tasks

NLWKN

Technical tasks

Objectives

1. Implementation of the national PAF

⇒ developing a methodological approach ('overall concept') for the Atlantic region



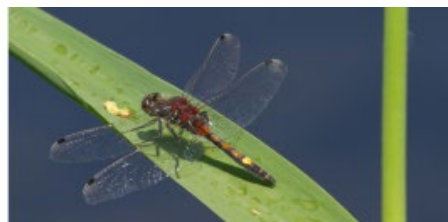
2. Implementation of concrete measures

⇒ focus on 15 habitat types and 10 species which are typical for the sand landscapes of the Atlantic region



Photo: M. Hochbruck

- Inland dunes and heathland
- *Nardus* grassland
- Freshwater and peatland habitats
- One dragonfly and plant species each



Focus habitat types and species

Photos on this and on the next page:
 O.v. Drachenfels,
 R. Podloucky,
 G.-M. Heinze,
 T. Täuber,
 R. Theuer,
 M. Raffel,
 Pixabay (public domain)

Focus amphibian and reptile species



Crested newt
(*Triturus cristatus*)



Common spadefoot toad
(*Pelobates fuscus*)



Natterjack toad
(*Epidalea calamita*)



Sand lizard
(*Lacerta agilis*)



Tree frog (*Hyla arborea*)



Pool frog
(*Pelophylax lessonae*)



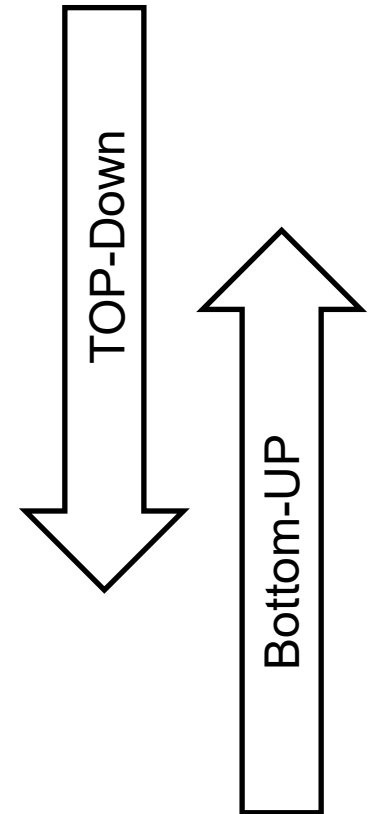
Moor frog (*Rana arvalis*)



Smooth snake
(*Coronella austriaca*)

Concrete implementation

- **Delimitation of area**
 - NW: 28 districts (20 Biological Stations)
 - NI: 32 districts
- **Analysis of current situation of habitats and species**
- **Systematic evaluation of need for action and potentials within the federal states**
 - **Regional working groups + networking**
 - > 800 proposals for actions
 - ~ 225 restoration actions in phases 1 - 4





Actions - overview

— borders
Atlantic Region

Measures* in the first to fourth phase of the project
LIFE IP "Atlantic region DE"

- planned measures
- ongoing measures
- implemented measures
- preparatory measures

borders

Atlantic Region

* The numeration of the actions corresponds to the state of planning at the time of the application. In the course of the LIFE IP there have been some changes or deletions of actions.

Lower Saxony

North Rhine-Westphalia



Initial situation for the ten focus species (Report on the Habitats Directive 2013)

	Range	POP	HAB	FP	Total	Trend
<i>Epidalea calamita</i>	U1	U1	U1	U1	U1	↓
<i>Hyla arborea</i>	U1	U1	U1	U1	U1	↓
<i>Pelobates fuscus</i>	U2	U2	U2	U2	U2	↓
<i>Rana arvalis</i>	U1	U1	U1	U1	U1	↓
<i>Pelophylax lessonae</i>	XX	XX	XX	XX	XX	x
<i>Leucorrhinia pectoralis</i>	U1	U1	U1	U1	U1	↑
<i>Lurionium natans</i>	U2	U2	U2	U1	U2	↓
<i>Lacerta agilis</i>	FV	U1	U1	U1	U1	↓
<i>Coronella austriaca</i>	U1	U1	U1	U1	U1	↓
<i>Triturus cristatus</i>	U1	FV	U1	U1	U1	↓

Pelobates fuscus (annex IV)

Objectives

- Stabilize existing populations (only 26 proven sites 1993-2010)
- Reintroductions at selected sites
- Creation of further stepping stone habitats via optimization of habitat and creation of new spawning waters



Photos: M. Raffel, L. Hauswirth

Continuation of the amphibian conservation centre (established within the LIFE+ project „Protection of the spadefoot toad in parts of Münsterland“)



Photos:
NABU-Naturschutzstation Münsterland
M. Raffel



Examples for actions in the Lippe floodplain (districts of Soest and Warendorf)



Photos: L. Hauswirth

Summary of actions

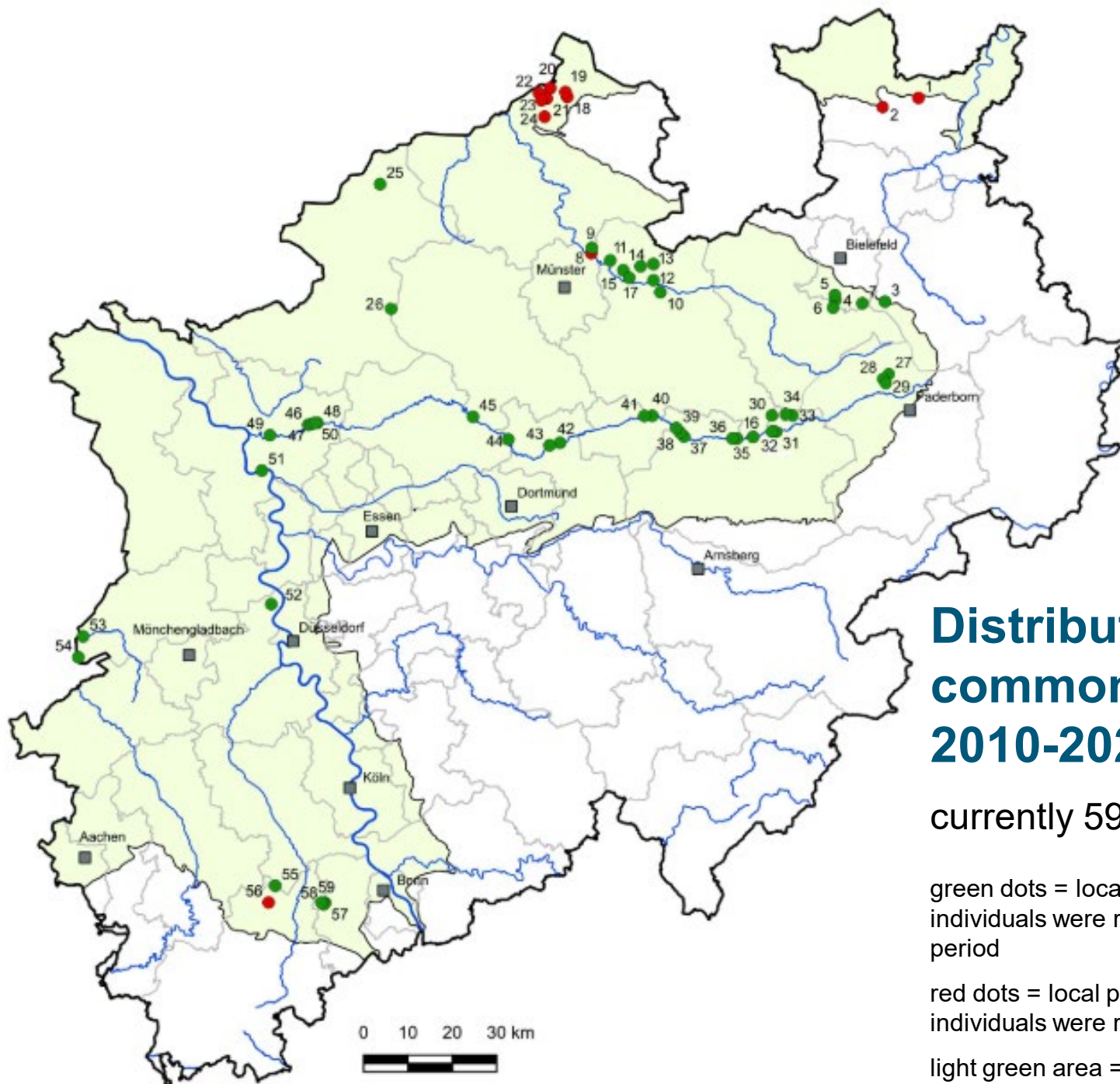


- Creation of 28 new potential spawning grounds
- Optimization of 7 small waterbodies
- Optimization of about 130 ha of habitat
- More than 90,000 individuals released
- More than 1.15 million euros spent so far

Photos: L. Hauswirth, M. Raffel

Reintroduction of the common spadefoot

District	No. of areas	Action no.	Years with releases	No. of released individuals	Latest monitoring results
Lippe	1	-	2023	1,000	-
City of Bielefeld	4	LIFE+ C20, C20a	2014-2021	1000+10700+600+250 = 12,550	a few adults in fence from 2019 on, egg strings in two areas in 2021 and 2022, tadpoles in one area in 2021
Warendorf	9	LIFE+ C117, C149	2013-2018, 2020-2023	3461+4158+14845+4420+60+510 +320+150+600 = 28,524	a few to several males calling in various areas, 2 egg strings in one area in 2022
Borken	2	C99, C100	2011-2017	3554+4517 = 8,071	3 egg strings in 2022, 104 adults in fence in 2019
Paderborn	3	C11	2018-2021	6500+750+600 = 7,850	52 adults in fence in 2019, 15-60 males calling in 2020-2023
Soest	10	LIFE+, C14, C15, C16, C106, C108	2016-2021, 2023	1250+7224+950+2250+500+3382 +2180+1300+250+750 = 20,036	10-49 adults in fence in 2019, 2021 or 2023
City of Hamm	2	C162	2023	250+250 = 500	-
Unna	3	C208	2023	850+500+150 = 1,500	-
Recklinghausen	1		2020-2021	2550	several males calling, some tadpoles in 2022
Wesel	6	LIFE+	2016, 2020-2021	1351+728+300+700+1400+200 = 4,679	several males calling, some tadpoles in 2023
Neuss	1	C10	2013-2014, 2022	1,168	20 adults in fence, several males calling in 2023
Viersen	2		2020-2021	815+1790 = 2,605	13 and 7 adults in fence, several males calling in 2022
Total	40	LIFE+, LIFE IP: 14	2011-2023	90,033	



Distribution of the common spadefoot 2010-2023

currently 59 proven sites!

green dots = local populations into which individuals were released during this period

red dots = local populations into which no individuals were released

light green area = Atlantic region

Publication

Zeitschrift für Feldherpetologie



Die Knoblauchkröte in Nordrhein-Westfalen –
ein Zwischenfazit nach mehr als zehn Jahren
Naturschutzarbeit im Rahmen von LIFE

Norbert Menke, Christian Göcking,
Sebastian Schmidt & Martina Raffel (Hrsg.)



Kofinanziert von der Europäischen Union



Band 30, Heft 2

November 2023



www.laurenti.de

The common spadefoot toad in North Rhine-Westphalia – an interim conclusion after more than ten years of conservation action within the framework of the EU LIFE programme

Zeitschrift für Feldherpetologie, volume 30
(issue 2), 120 pp.

Network meetings for conservation of the common spadefoot and amphibian species in general

Meeting on the common spadefoot in the district of Steinfurt (Heiliges Meer, 2018)



Network meeting of NABU Lower Saxony in Stadthagen in 2018

Photos: NABU Niedersachsen, M. Raffel





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Cooperation with Life B4B for breeding and restocking of the common spadefoot toad in Flanders



Photo:
LIFE B4B



Prospects

- Further habitat optimization and eventually subsequent releases
 - Further monitoring of release sites
 - Expansion of releases to bordering districts in Lower Saxony
 - Continuation of network meetings and collaboration (e.g. LIFE B4B in autumn 2024)
- ➡ Improved conservation status in North Rhine-Westphalia (change from U2 to U1)

Epidalea calamita (annex IV)

Starting point

- Wide distribution, but isolated populations
- Pioneer species

Objectives

- Stabilize remaining sites
- Connect isolated habitats and populations
- Improve state data sets by remapping historic occurrences and update data on the species in Lower Saxony)

Measures implemented

- More than 25 C-actions targeting the species

Results

- 150 small ponds improved or installed
- More than 300,000 euros spent
- Monitoring is ongoing, usually positive responses on sites

Conclusions: structure of the project and partners

- Advantage of the project: mixture of top-down and bottom-up approach!
 - Systematic evaluation of need for action and potentials within the federal states
 - Precise planning and implementation by local experts (e.g. biological stations)
 - Additional external experts for site surveillance and planning can make a difference and help spending environmental funds.
- Long-term finance (minimum 6 years) because time for planning and readjustment is needed.
- Species protection is often more intense on personnel costs than on investment.

Conclusions: species conservation

- Pioneer species respond quickly, but the effects last a short time.
- A continuous effort is needed to scale up from a single spot to a larger project area to a region.
- Parameters such as isolation are difficult to handle and usually remain unsolved.
- Many hands, funds and a cooperating network are needed.
- Cooperation with the excavation industry can be important for the conservation of pioneering species.
- Many populations are small in numbers and isolated. Supportive conservation breeding (catch – grow – return) may increasingly become the only viable option.
- Specific funding schemes for Amphibian conservation would be helpful to guarantee the required long-term management both of aquatic and terrestrial habitats.



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Photo: M. Raffel

Thank you!

