

The first LIFE about Invasive Alien Species in France...



LIFE15 NAT/FR/000864

01/09/2016 – 31/08/2022

With the technical and financial support of :



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Platform Meeting on Invasive Alien Species (IAS)
29-30 November 2017, Milan (Italy)



The Société Herpétologique de France in few words lashf.org



Presentation

- NGO founded in 1971
- Approved by the Ministry in charge of the Environment since 1978
- Member of the French Federation of Natural Sciences Societies and, through him, IUCN
- Co-founder of Reptile and Amphibian Conservation Europe (RACE)



Aims

- Facilitate relationships between French-speaking herpetologists
- Increase awareness of Reptiles and Amphibians and their role in natural ecosystems
- Contribute to a better knowledge of French herpetofauna and its distribution
- Improve breeding conditions for Reptiles and Amphibians



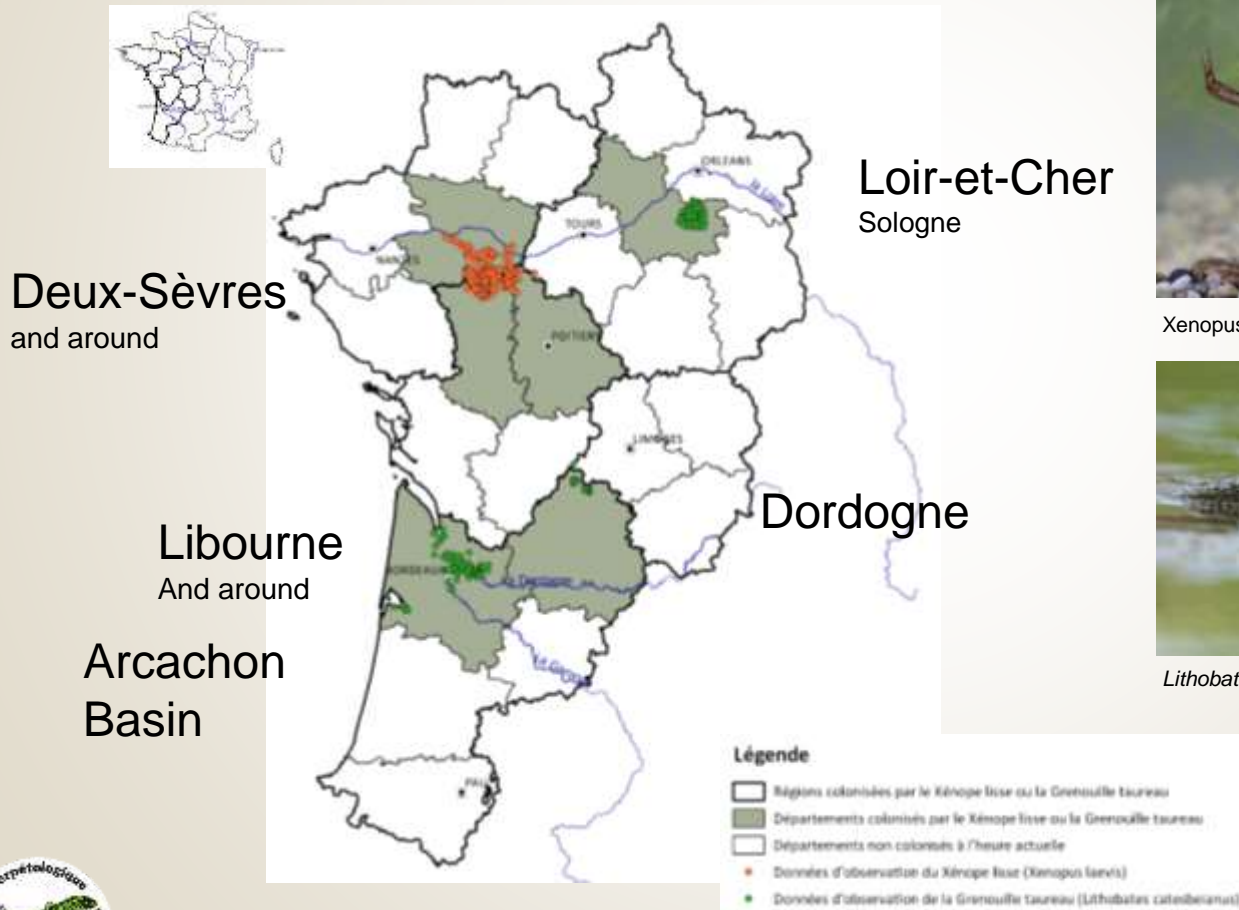
Working

- 8 thematic commissions: Conservation, Distribution, Sea Turtles, Overseas territories, Terrariophily, Cistude, Information & Communication, Participatory Science
- Salaried team: a director, a project manager, an administrative and financial manager
- Network of regional coordinators
- Group of passionate volunteers, Herpetology experts...



The Life CROAA context

Presence of two major species of Invasive Alien Amphibians in France



Xenopus laevis © D. Troquereau



Lithobates catesbeianus- © M. Berroneau

The Life CROAA context

Presence of two major species of Invasive Alien Amphibians in France

- **Predation** on the whole trophic chain

Clawed frog: from zooplankton to macroinvertebrates (odonates in particular) to native Amphibian larvae
 Bullfrog: invertebrates, Amphibians, fish, Reptiles, sometimes Birds and micro-mammals

- **Competition** on native Amphibians
- **Carriers of pathogens** responsible for global Amphibian decline: chytridiomycosis and ranavirus



Stomacal contents of Xenopus (up) and a Bullfrog (below)

(Sources : Communauté de Communes de l'Argentonnois / Dominique Beguin - SEBB)



Before the Life project :

Xenopus

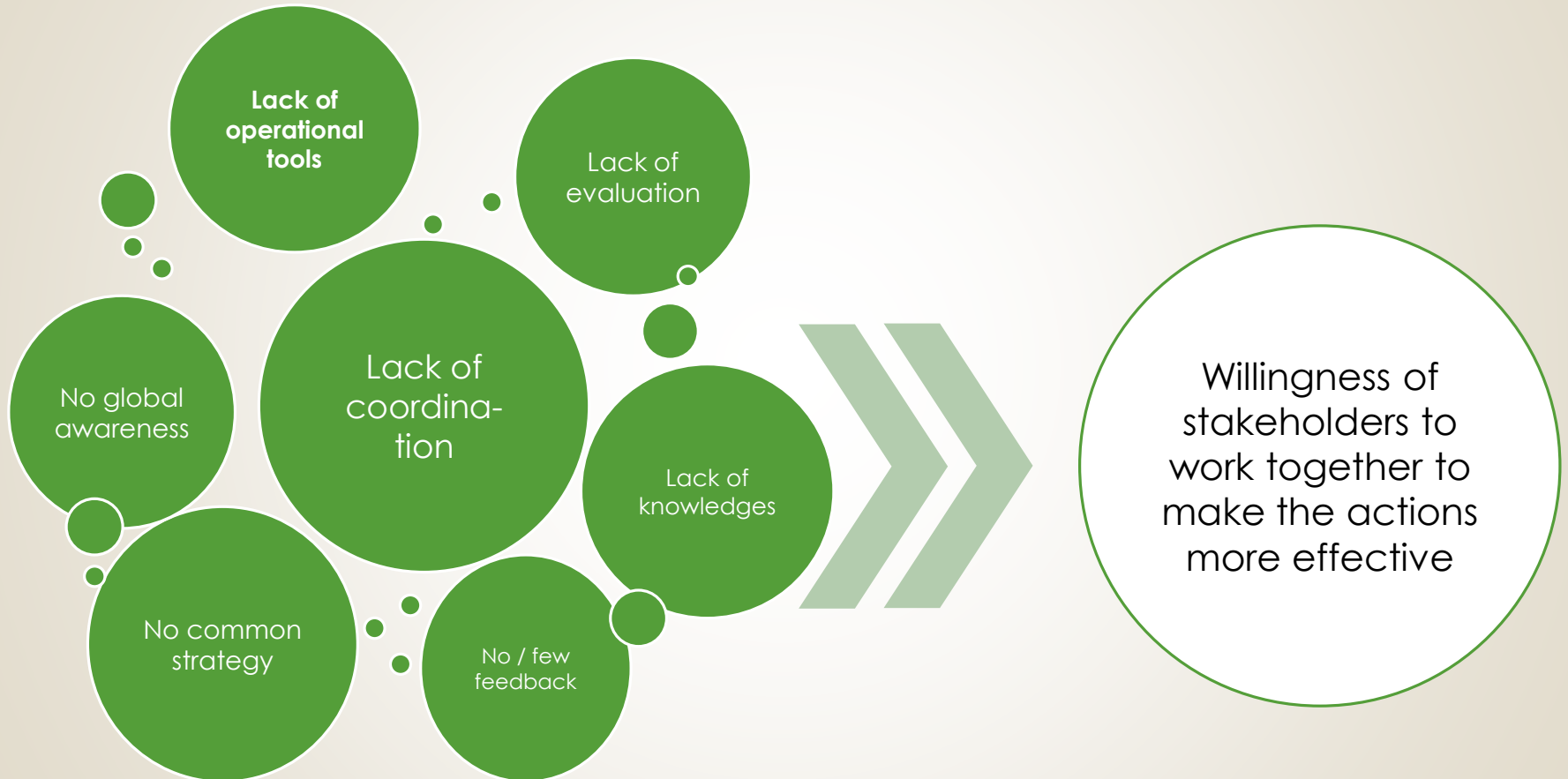
- ▶ Trapping in the Deux-Sèvres since 2011 implemented by two Communities of Communes (CdC de l'Argentonnais, CdC du Thouarsais)
- ▶ No control action in Maine-et-Loire

Bullfrog

- ▶ No actions in Gironde, since the finished study program in 2007
- ▶ Control plan since 2007 in Dordogne, but eradication is still not achieved
- ▶ Control plan since 2008 in Sologne, but eradication is still not achieved



That is ...



First thoughts on setting up a LIFE program



➤ Founding meeting of 31/10/2013

- Organized by the GT-IBMA

In the presence of managers, public institutions (DREAL, ONCFS) and scientists

- Discussions about setting up a LIFE project: which species? what scale? which project carrier? what financing?

Following this meeting:

- Project leader: SHF
- Recruitment in September 2014 of a project manager dedicated to the editing and writing of the application, by the University of Angers and then by the SHF

LIFE CROAA

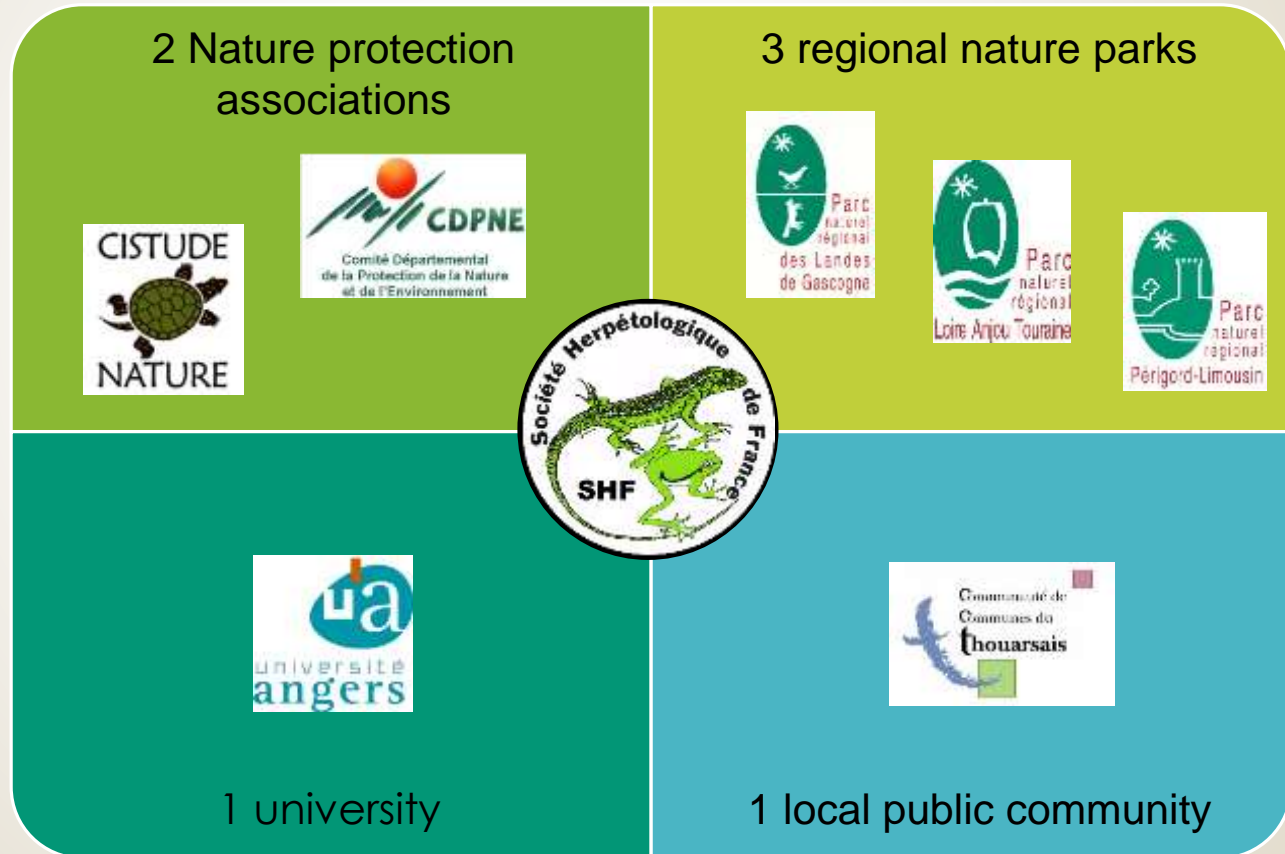
Control stRategies Of Alien invasive Amphibians



- national project
- Led by SHF, with 7 project beneficiaries
- 2 main species targeted :
 - Clawed frog (*Xenopus laevis*)
 - American bullfrog (*Lithobates catesbeianus*)
- Duration 6 years :
 - 1st september 2016 - 1st september 2022



The team



Technical partners :

Local NGO







Collectivities




Public Institutions









Academics









National organisations





Others




Project objectives

1

Eradicate the small nuclei colonised by Bullfrogs



- population nuclei present in Sologne, in the Dordogne and on the Bassin d'Arcachon
- Finding: eradication difficult to achieve after several years of struggle

Examples of actions

- ✓ Development and field experimentation of new control techniques
- ✓ Increase of the control pressure



Project objectives

2

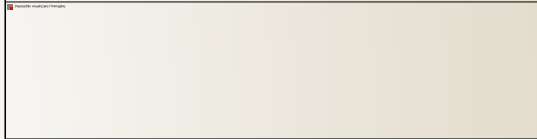
Develop a strategy for controlling invasive amphibians when the size of the colonized area impede the possibilities of eradication

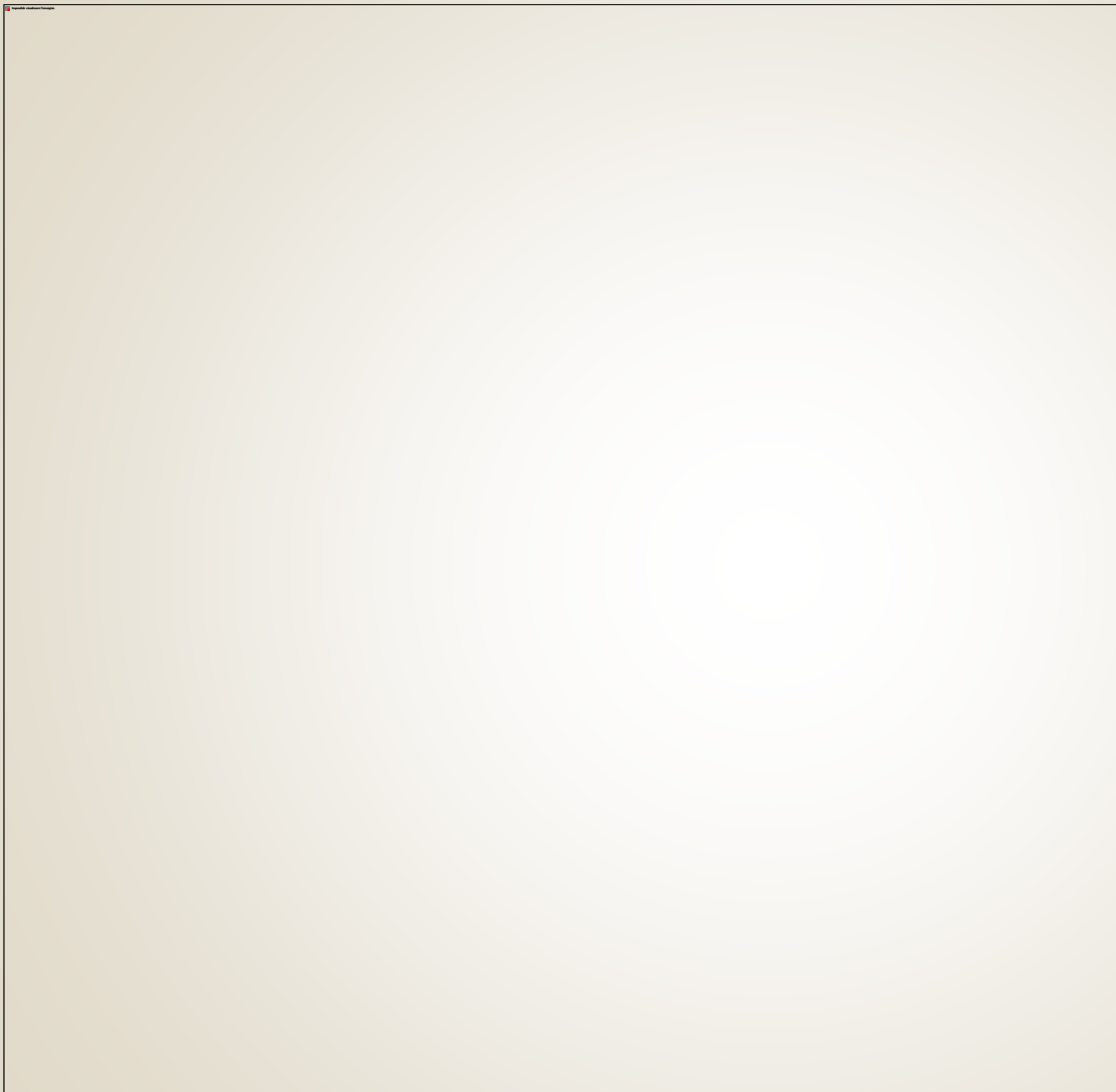
- ▶ population of Bullfrog in the Bordeaux region and the population of the Xenopus in Deux-Sèvres / Maine-et-Loire
- ▶ Strategy developed in partnership with French and European research laboratories

Examples of actions

- ✓ Definition of optimal control strategies for large invasive amphibian population nuclei
 - Modeling approach, integrating biological and ecological parameters
- ✓ Implementation of the method developed on the two targeted nuclei in order to control them

- **Xenopus detected**





- **Xenopus detected**
- **Xenopus not detected**
- **eDNA sampling**



Géoportail (IGN)





Project objectives

3

Prevent new introduction

- Identification of major pathways for alien Amphibians
- Raising awareness among stakeholders involved in trade or exchanges

Examples of actions

- ✓ Raise awareness among young audiences and the general public
- ✓ Raise awareness among breeding centers and scientific laboratories likely to use exotic amphibians
- ✓ Sensitize pet shops and terrarium societies

Project objectives

4

Create an early detection and assessment system

- Meets the expectations of the EC, in accordance with the European regulation on IAS
- Will help to reinforce the prevention against the installation of new IAS (= quick reaction)
- Tool based on the expertise of IAS specialists

Examples of actions

- ✓ Analysis of existing tools
- ✓ Networking local actors
- ✓ Development of a cartographic tool dedicated to exotic amphibians

Project objectives

5 Facilitate the implementation of control actions

- Facilitate the acceptance of the implementation of the control actions
- Support local actors in their efforts against invasive Amphibians
- Look for long-term financing

Examples of actions

- ✓ Awareness raising of the general public
- ✓ Awareness raising of local actors
- ✓ Awareness raising of decision-makers



Project objectives

6

Ensure the transfer of techniques and methods developed during the project

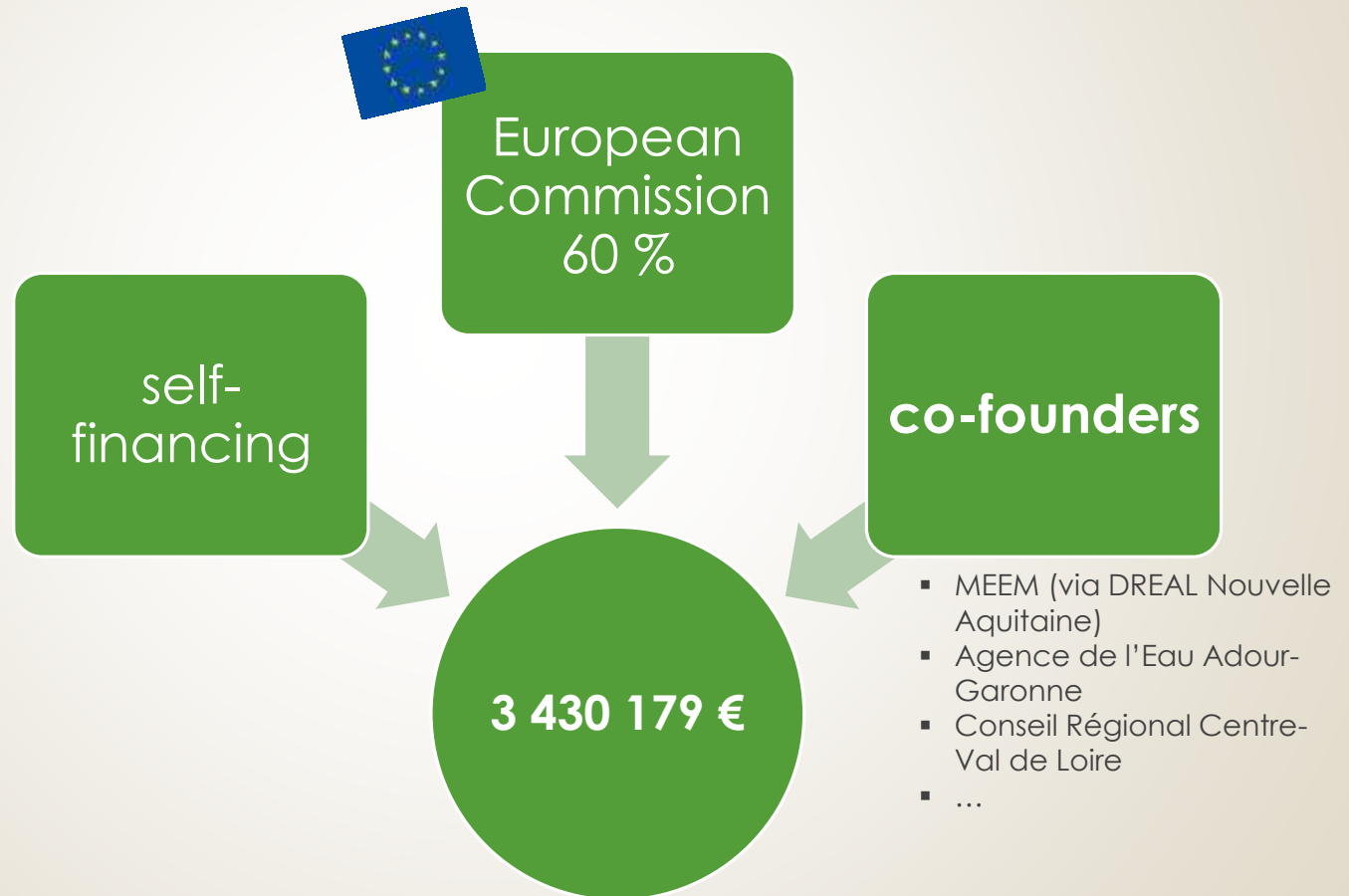
- Community added values
 - Bullfrog present in UK, Spain, Italy, Belgium
 - Xenopus present in UK, Italy, Portugal
- Optimize and rationalize the means to fight invasive Amphibians

Examples of actions

- ✓ Contact with European managers working on invasive amphibians on their territory
- ✓ Dissemination of the methods developed during the project
- ✓ Experimentation on another territory of the developed methods



Budget ...



Thank you !



The screenshot displays the LIFE CROAA website interface. At the top, there is a navigation bar with the LIFE CROAA logo and menu items: HOME, PROJECT, CONTACT, LIFE CROAA, and LIFE CROAA. Below the navigation bar, a large image of a frog is featured on the left, with a circular graphic around it. To the right of the frog image, the text reads: "A LIFE project to preserve Indigenous Amphibian species against the spread of Invasive alien Amphibians". Below this, a smaller image of a frog is shown. The main content area includes a map of Europe with a red dot indicating the project location in Croatia. To the right of the map is a green report cover titled "Invasive Alien Amphibians in Adriatic" with a "REPORT" button. Below the map and report, there is a section titled "The African clawed frog and the Bullfrog, two Invasive exotic Amphibians of high concern". This section includes two small images of frogs, one labeled "African" and the other "Northern Bullfrog". The text in this section discusses the impact of these species on indigenous amphibians and the need for conservation measures. At the bottom of the page, there is a footer with the text "THE LIFE PROGRAMME" and a small logo.

<https://www.life-croaa.eu>

