

LIFE in Quarries



Active quarries: opportunity for nature?

Extractive activity

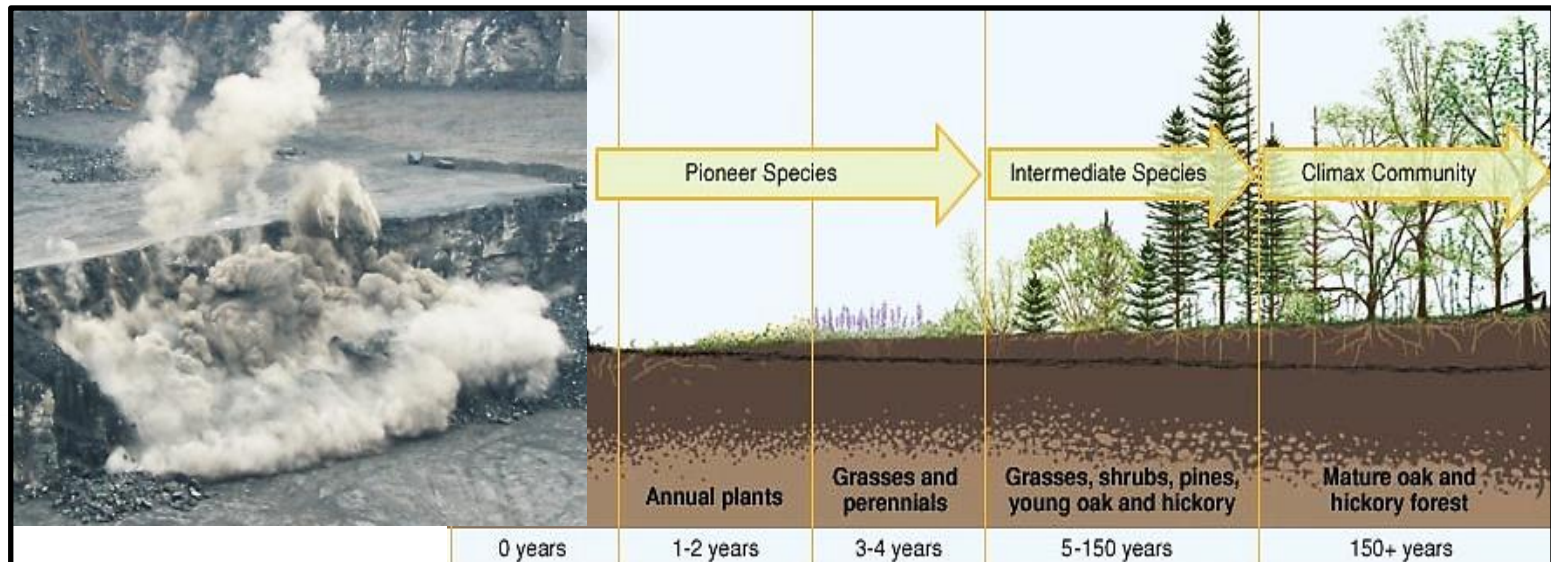
- Regular **perturbation**
- Creation of **rare conditions** (bare soil, poor-nutrients...)
- Continuous creation of heterogeneous habitats



Active quarries: opportunity for nature?

Ecological activity

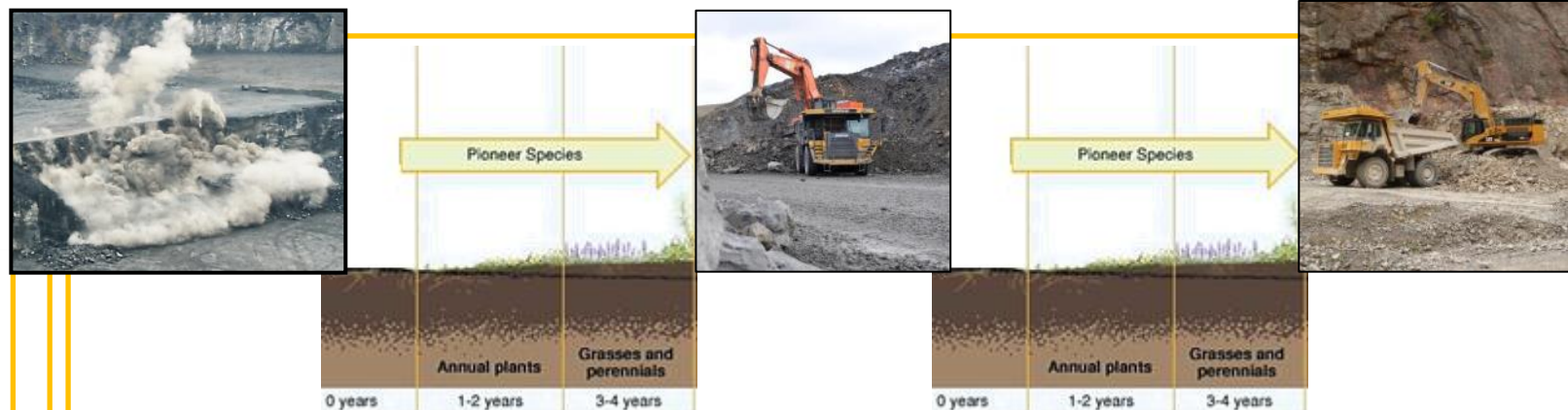
- Simulate natural **perturbation**
- Secondary ecological **succession**



Active quarries: opportunity for nature?

Ecological activity

- Simulate natural **perturbation**
- Secondary ecological **succession**
- Opportunity for pioneer species



Active quarries: opportunity for nature?

Ecological activity

- Simulate natural **perturbation**
- Secondary **succession**
- Opportunity for pioneer species
- Ecological niches for rare, endangered species



Active quarries: opportunity for nature?

Wallonia: Exceptional **geological** diversity

Key facts:



73 million tonnes of
rock extracted and sold
in Belgium in 2015



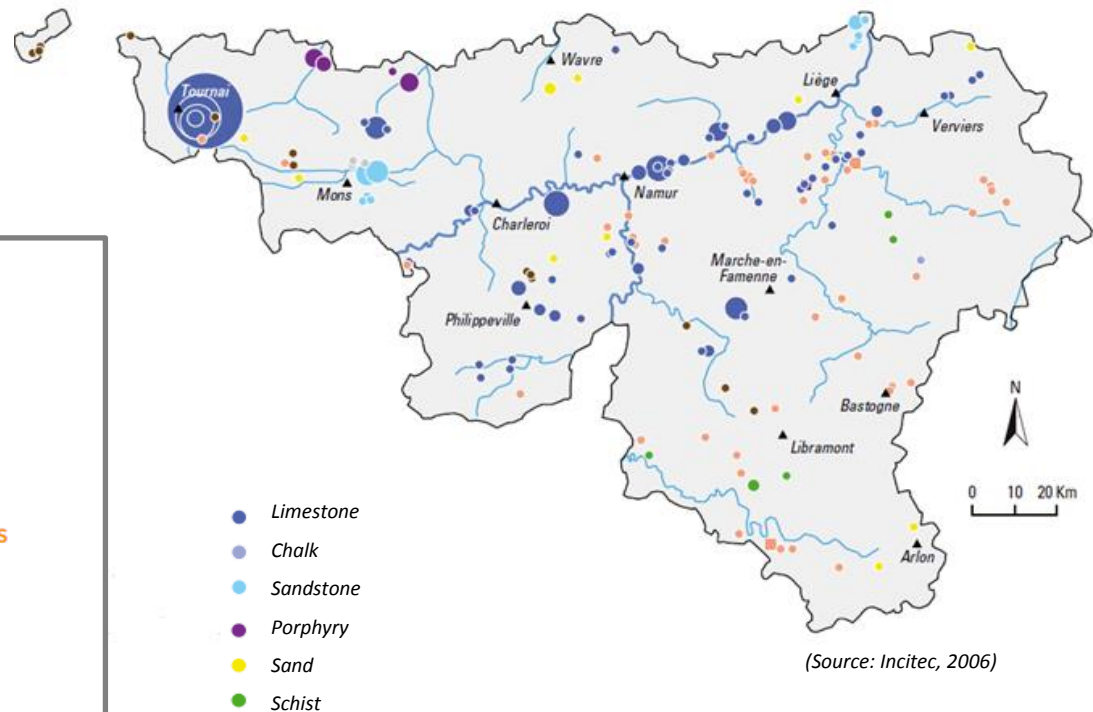
200
production sites



3500
direct employees



10.500
indirect employees



Active quarries: opportunity for nature?

Wallonia: Exceptional **biological** diversity

Key facts:



90% of Eagle-Owls



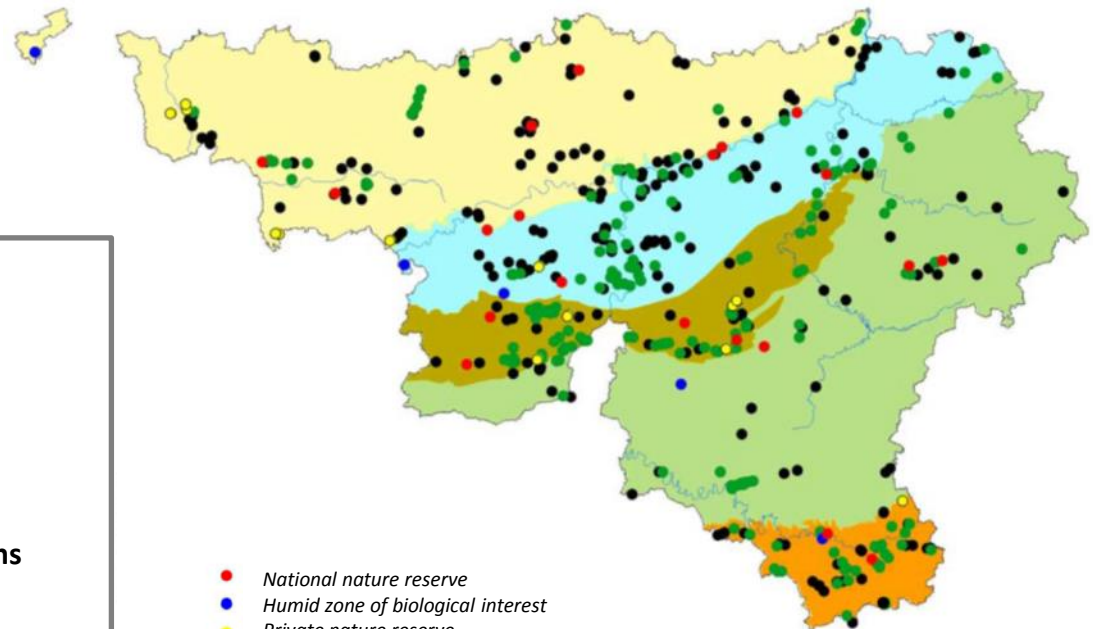
94% of Sand martins



55% of Sand lizards



Natterjack toad



- National nature reserve
- Humid zone of biological interest
- Private nature reserve
- Quarries Natura 2000
- Other quarries SGIB

(Source: A. Remacle, 2008)

Active quarries: opportunity for nature?

Quarries play major role in Wallonia:

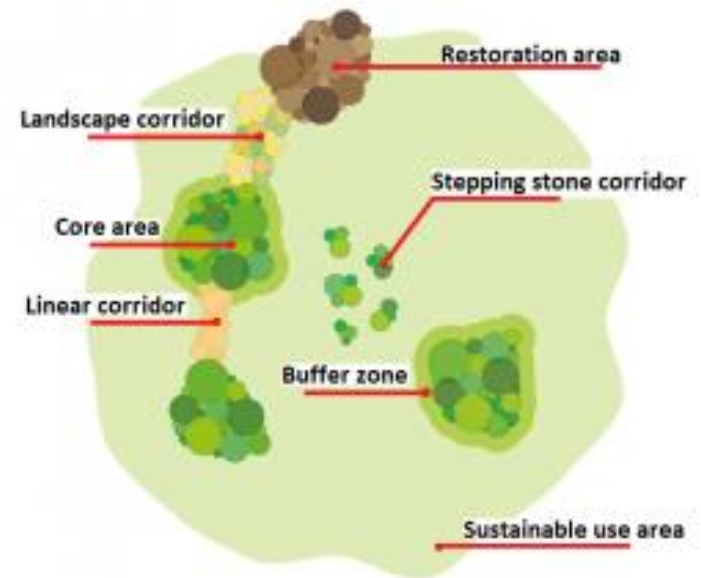
- **survival** of rare and protected species
- reinforcement of core populations of species
- Contribution to maintenance of regional population



Active quarries: opportunity for nature?

Quarries play major role in Wallonia:

- Acting as a **stepping stone** in high-urbanised landscape
- Contribution to **ecological network**
- connectivity outside or between Natura 2000 sites



Active quarries = opportunity for nature?

Hosting capacity is closely linked to the extractive activity

→ **Maximise** hosting of early-stage biodiversity

1. Necessity to define adequate **management measures**
2. Include **ecological** concerns in extraction planning
3. **Best-practices** in day-to-day activities
4. Advantage of **on-site** machineries

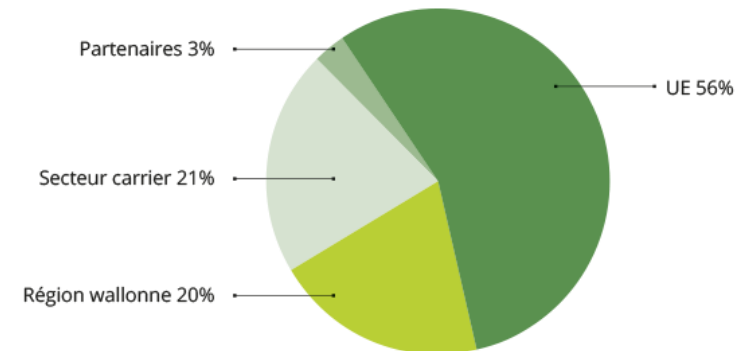


LIFE Nature & Biodiversity – Demonstration project

Duration: 2015 – 2020

Budget: > 5 millions €

Co-funding: 56% EU – LIFE program
21% extractive companies
20% Walloon Region



WHY?

To demonstrate that a dynamic management of biodiversity on active extractive sites is technically possible and beneficial to biodiversity

To develop:

- a scientific and legal expertise
- concrete actions on the extraction sites
- important communication tools

WHO?

A Multi-sectorial collaboration

“Private – University – NGO – Public authority”



WHO?

A Multi-sectorial collaboration

“More than 15 private companies involved”



Carrières les Petons

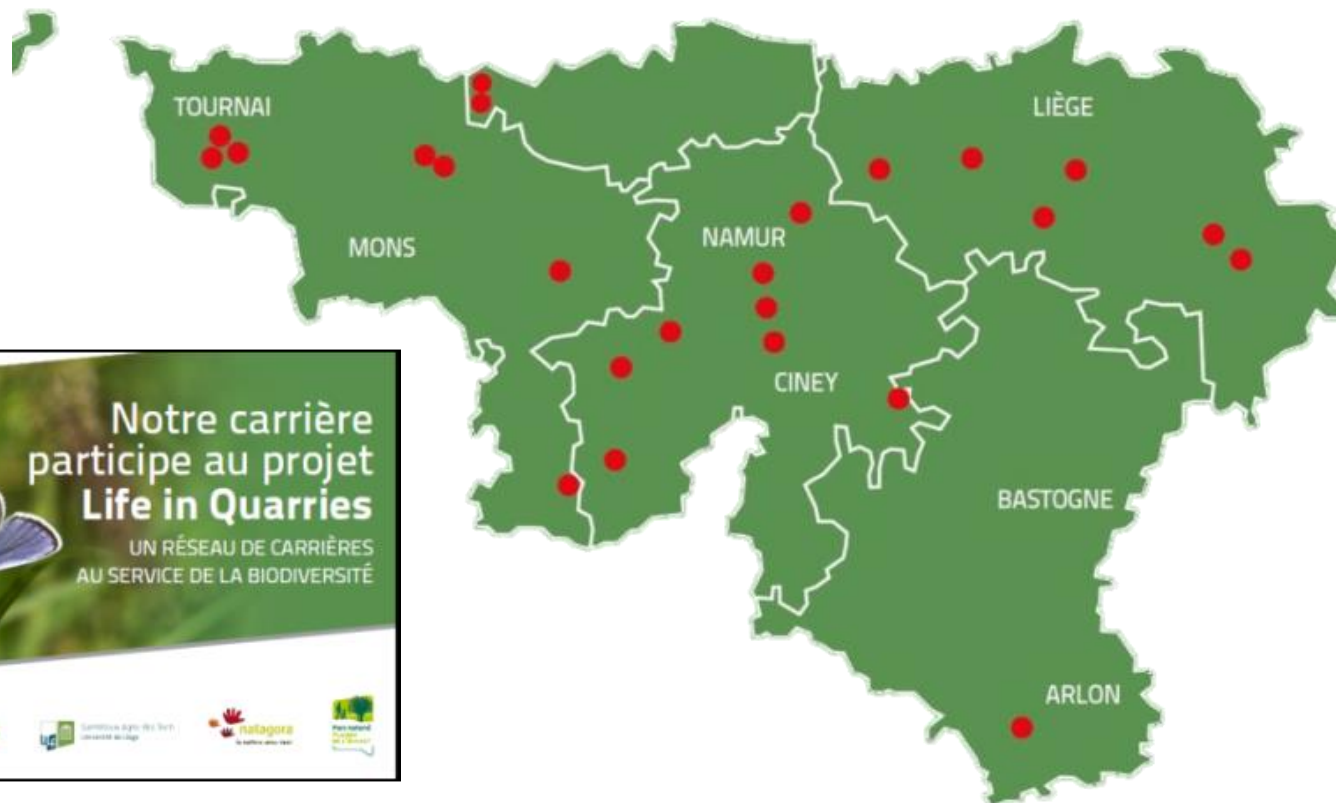


CARRIÈRES DU HAINAUT



WHERE?

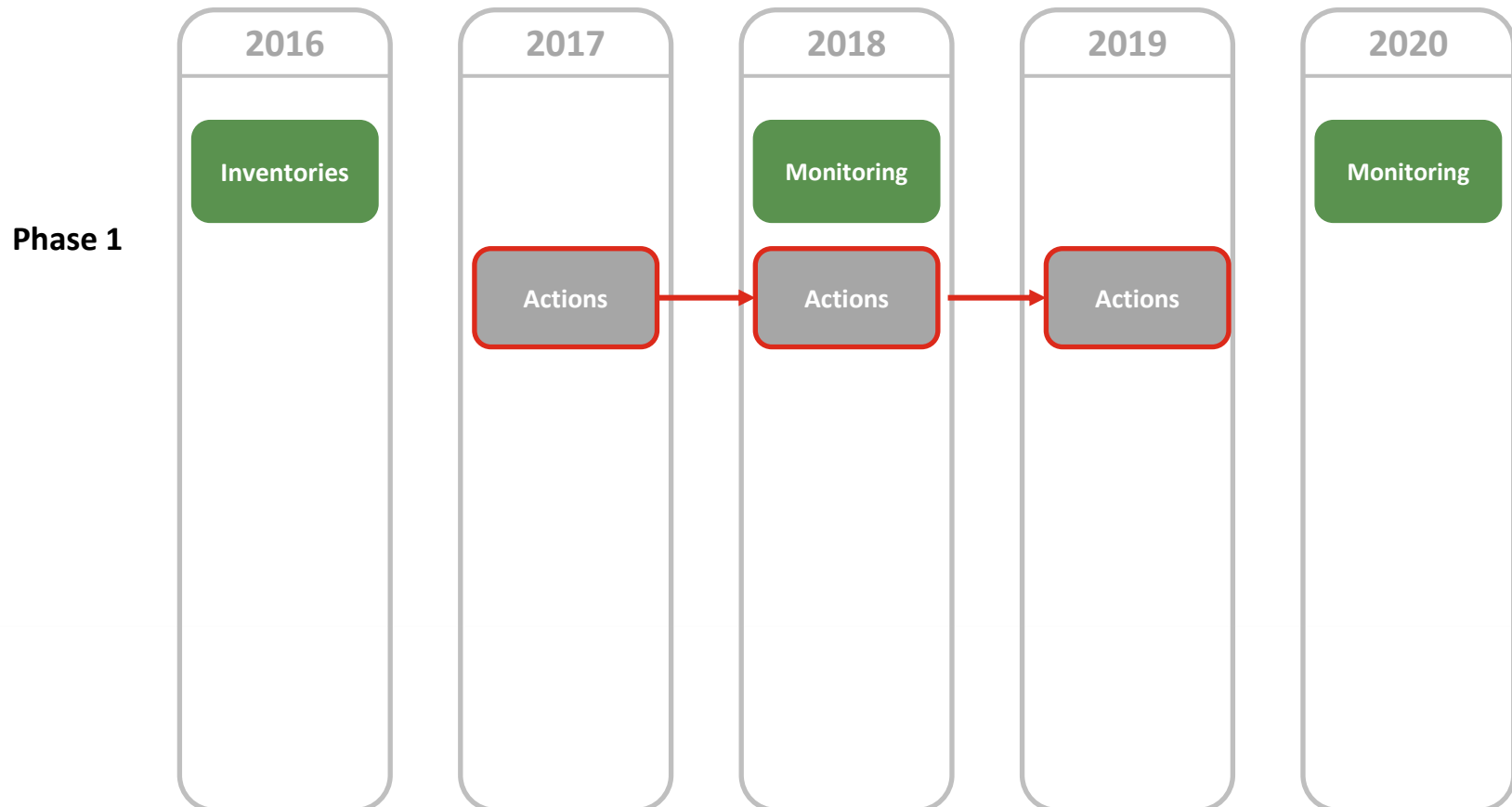
“More than 25 quarries in Wallonia”



HOW LONG?

Phase I [2015 - 2018]

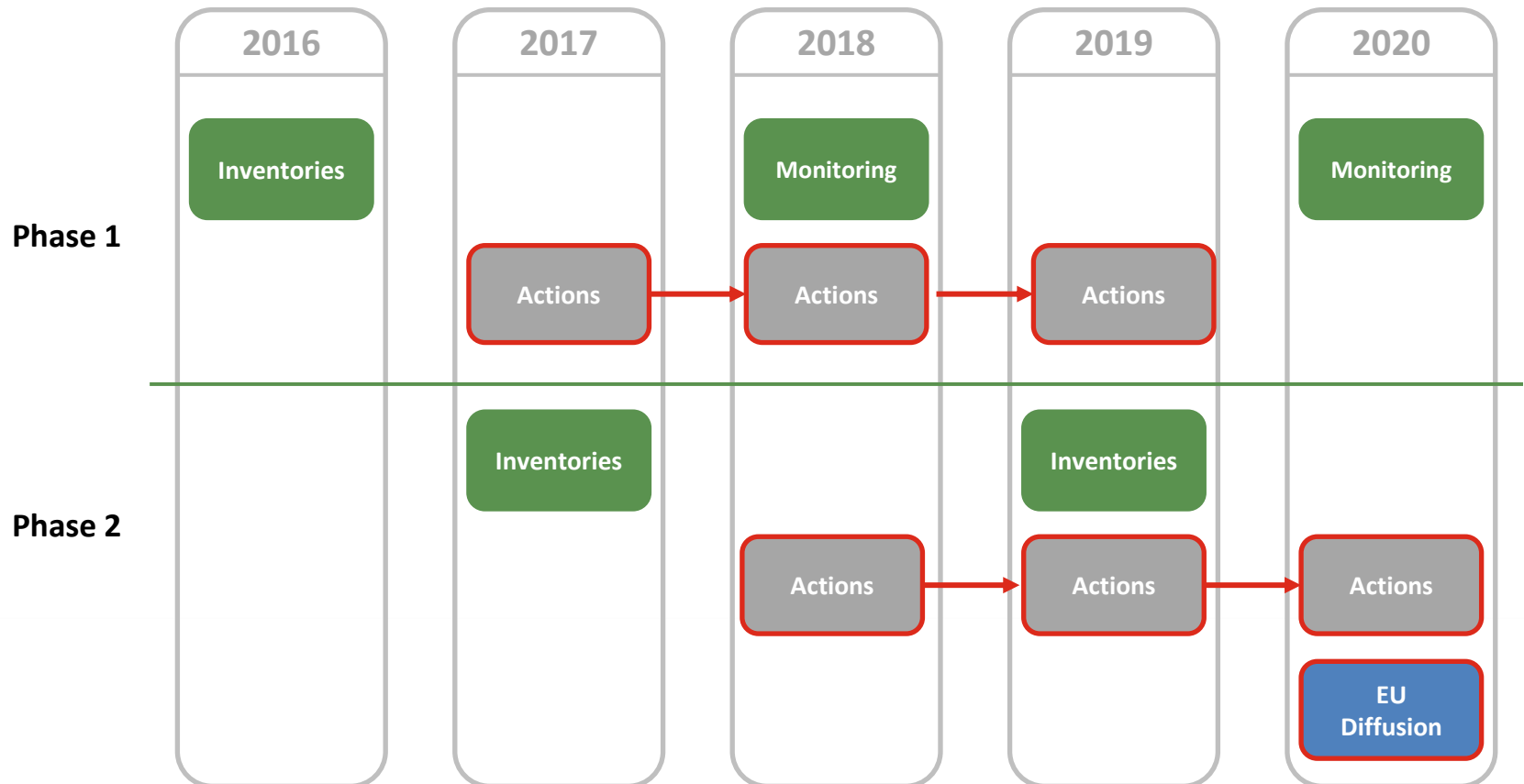
Implement biodiversity management plans in 14 pilot quarries



HOW LONG?

Phase II [2017 - 2020]

Confirm biodiversity management plans in min. 12 additional quarries



HOW?

Integrate biodiversity management in extraction plans

Biological
inventories



→ Identification of the potential
for biodiversity

HOW?

Integrate biodiversity management in extraction plans

Biological
inventories

Biodiversity
management
plans



→ Dialogue between operators and biologist to elaborate concrete action plans

HOW?

Integrate biodiversity management in extraction plans

Biological
inventories

Biodiversity
management
plans

Implementation

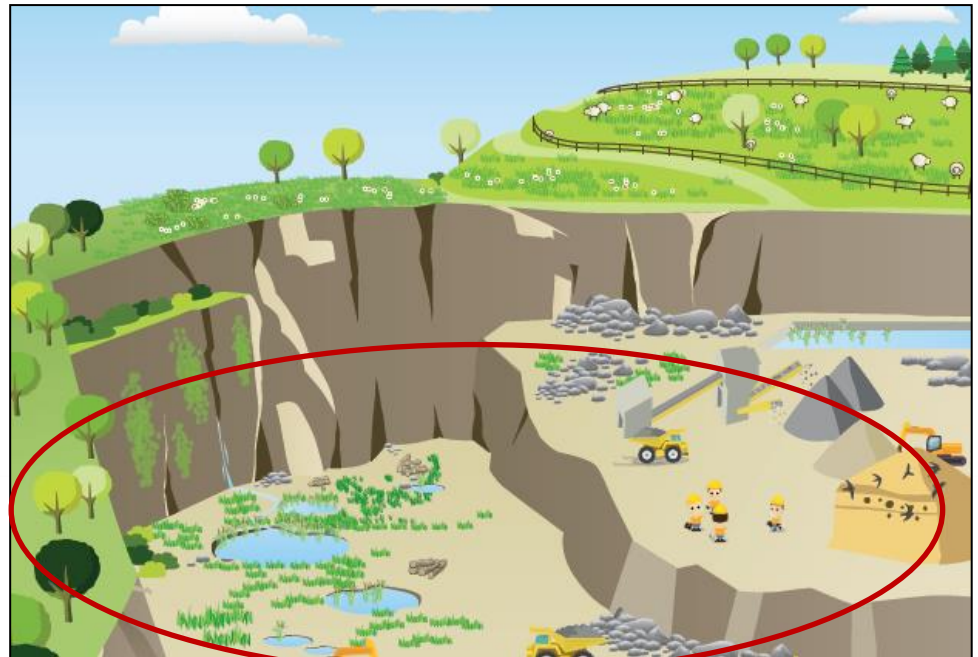


HOW?

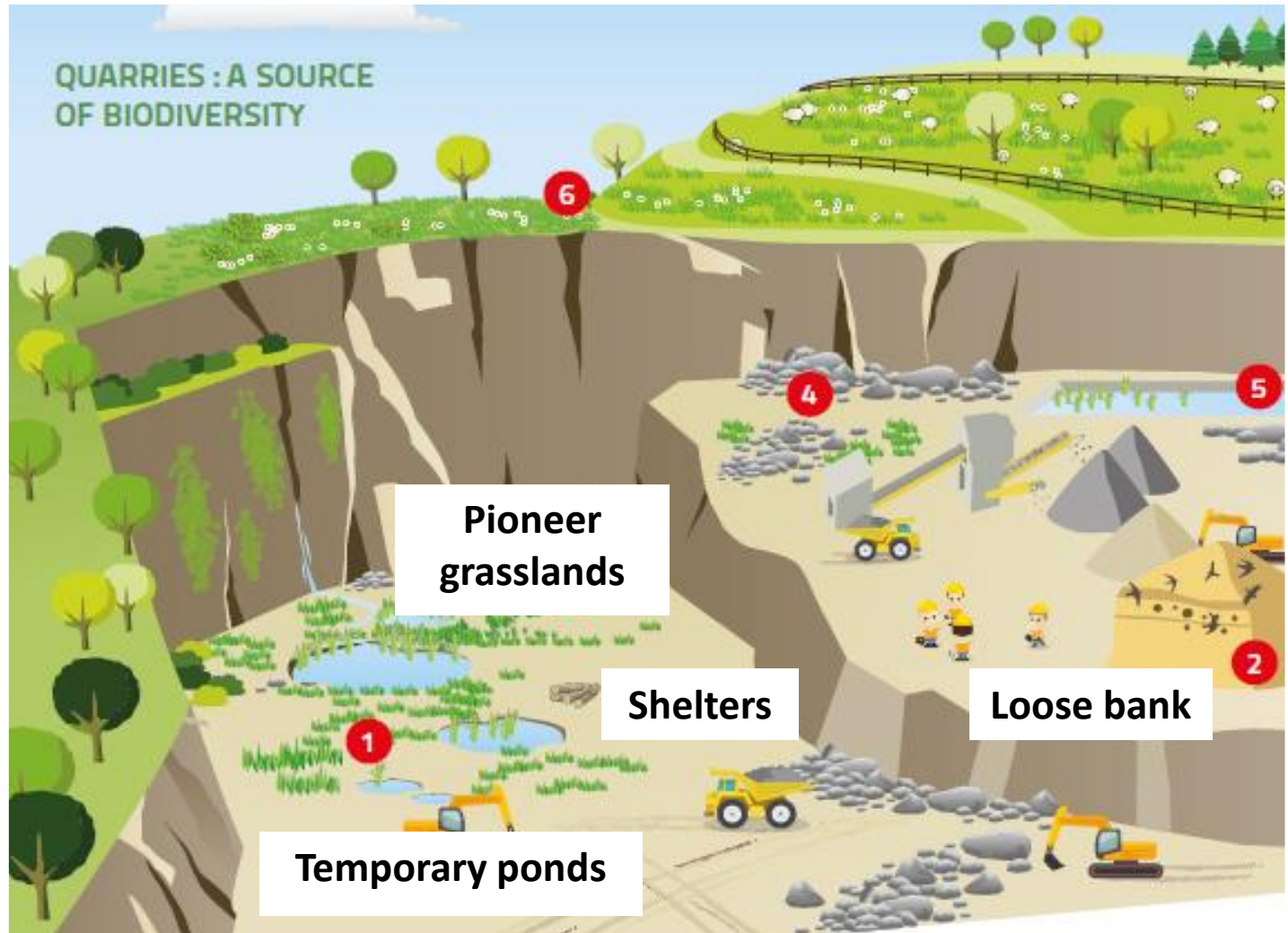
Integrate biodiversity management in extraction plans

Implementation

Active areas = > « **Temporary nature** »



Temporary nature conservation



Temporary nature conservation

Requirements to make these 2 animals live together ?



**Dynamic management
of biodiversity**



Dynamic management of biodiversity = Core concept



Creation of **refuge zones** co-evolving with extractive activity

Duration? 1 to 5 years

What? Complex of pioneer habitats

How? Good practices in daily quarry activities



Temporary nature conservation

Requirements to make these 2 animals live together ?



**Dynamic management
of biodiversity**

**Cooperation and
training**



On-site collaboration

→ Development of **good-practices** compatible with daily extractive activities

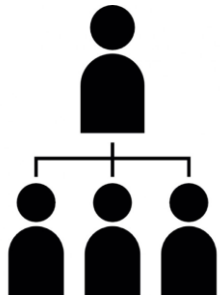
→ Cooperative implementation on site



→ towards **autonomous** management of site's biodiversity

Adequate **training** modules

→ towards different levels of hierarchy



Top management
Quarry/biodiversity resp.
Quarry personnel

: ½ day module on the 15/12/17
: 4days session in May/June17
: on site training 1st semester 2018



Temporary nature conservation

Requirements to make these 2 animals live together ?



**Dynamic management
of biodiversity**

**Cooperation and
adequate training**

Legal certainty



Legal certainty



« *Why should I bring potential problems into my quarry?* »

Legal framework to bring certainty to operators

Compatibility of biodiversity management with the

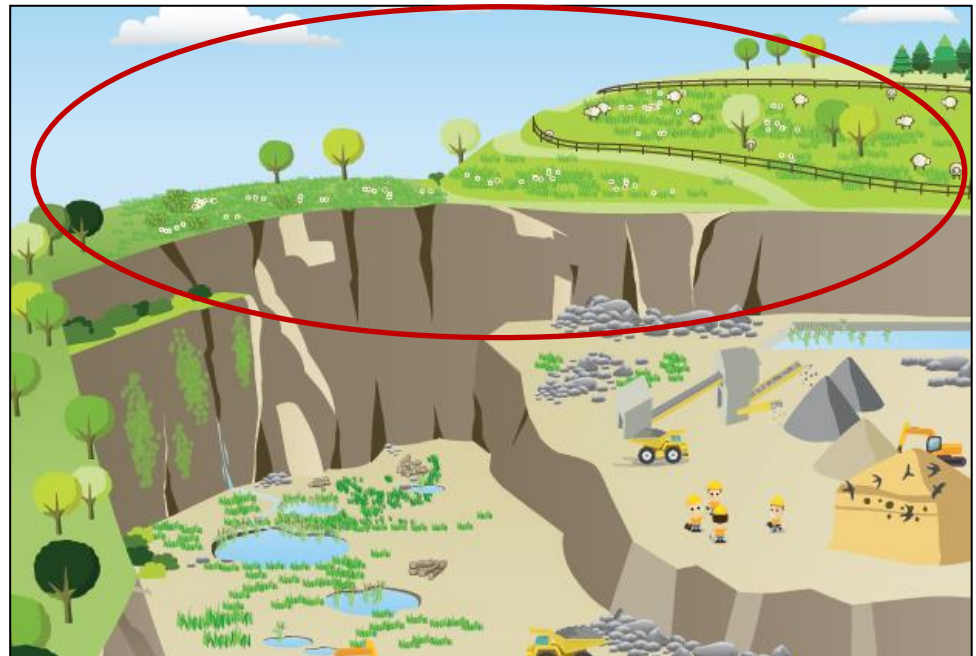
- EU and wallon legislations
- quarries' authorisation

HOW?

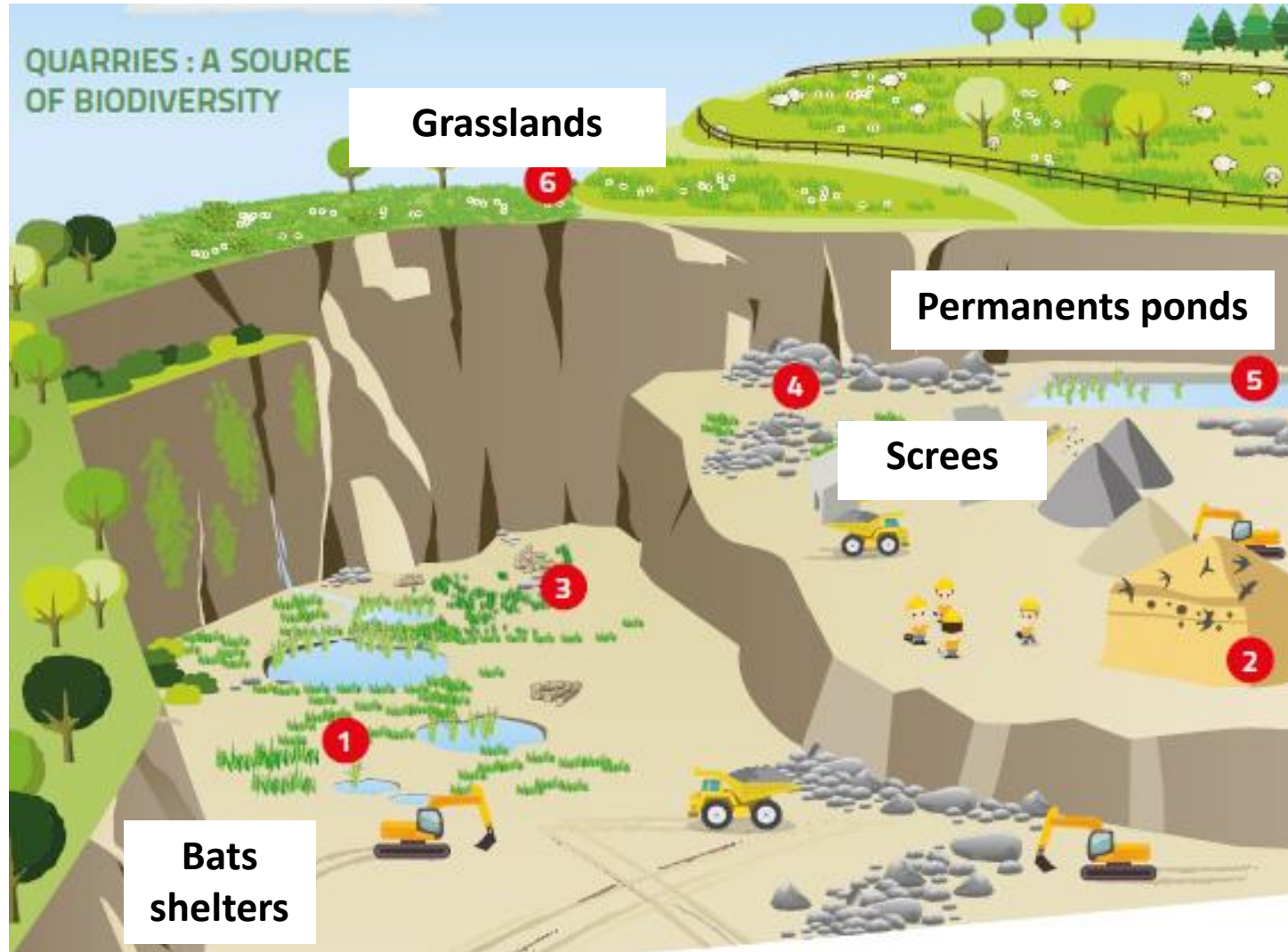
Integrate biodiversity management in extraction plans

Implementation

Side areas = > « **Permanent nature** »

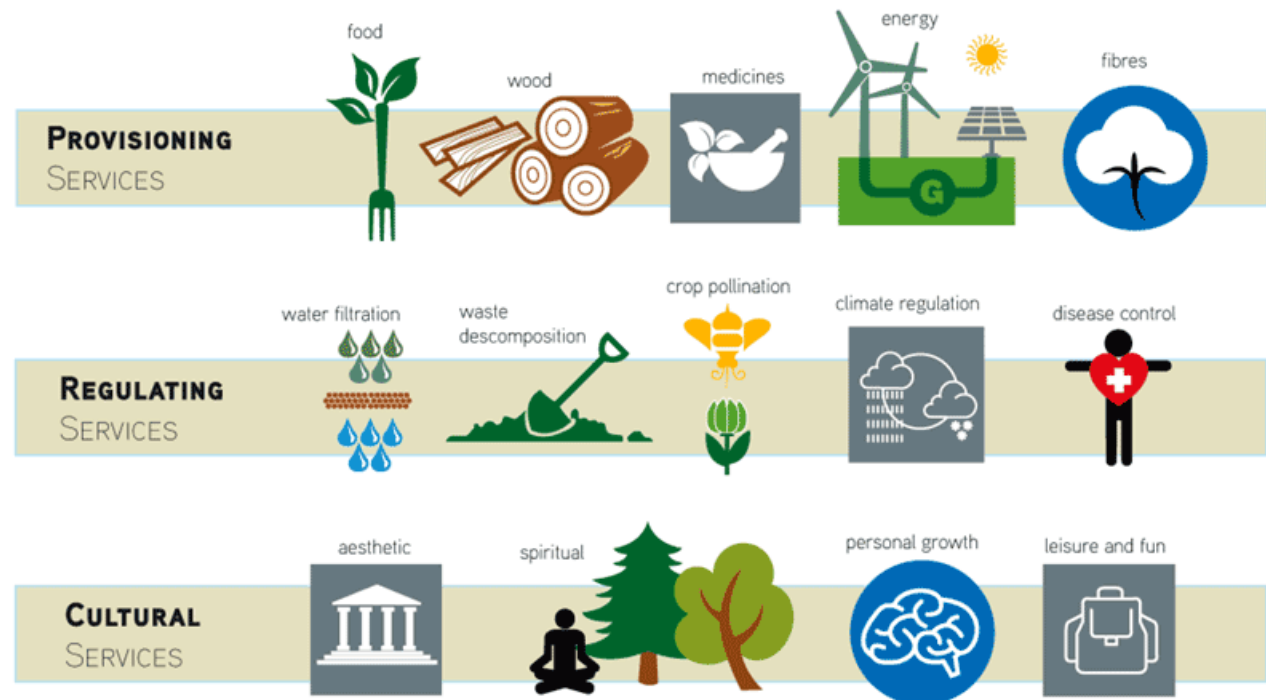


Permanent nature conservation



Ecosystem services-based rehabilitation

- integrated decision tool
- conservation actions maximizing ES



Communication opportunity

To the sector and its stakeholders:
Large diffusion of project actions and results



Communication tools :

- **Trainings sessions**
- Good practices **dissemination**
- Dissemination at the EU level
- International **workshop**
- Increased **public** awareness
- Open quarry days

Targeted audiences:

- Quarries (manager, workers)
- Stakeholders (authorities, NGO's, consultants, steering committees,...)
- European extractive industry
- General public

Thank you for your attention !



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