



OCTOBER 2021

# Extractive Sector Species Protection Code of Conduct:

A manageable approach for planning  
and permitting procedures respecting  
EU legislation and fostering biodiversity



**Joint Signing between BirdLife Europe, Cembureau, Eurogypsum and UEPG**

**Initiating Co-author:**  
HeidelbergCement

**BirdLife Europe and Central Asia**  
Dr Shane Sparg  
c/o Hive5, Cour Saint-Michel 30 B -1040 Brussels, Belgium  
Shane.Sparg@birdlife.org

**CEMBUREAU**  
**The European Cement Association**  
Nikos Nikokakos  
Rue d'Arlon 55, B-1040 Brussels, Belgium  
n.nikolakakos@cembureau.eu

**Eurogypsum**  
Tristan Suffys  
Rue de la Presse 4, B-1000 Brussels, Belgium  
t.suffys@eurogypsum.org

**HeidelbergCement AG**  
Dr Carolyn Jewell  
Berliner Straße 6, D-69120 Heidelberg, Germany  
Carolyn.jewell@heidelbergcement.com

**UEPG, European Aggregates Association**  
Alev Somer  
Rue d'Arlon 21, B-1050 Brussels, Belgium  
secretariat@uepg.eu

**Design & Layout:**  
Dogeatcog.co.uk

**Front Cover photo:**  
Little Ringed Plover by Tomasz Wilk

**Acknowledgements**  
Grateful acknowledgement goes to HeidelbergCement AG for initiating the concept and generously providing the financial support in making this manuscript possible.

BirdLife Europe gratefully acknowledges financial support from the European Commission. All content and opinions expressed on these pages are solely those of Stichting BirdLife Europe. The European Commission is not responsible for any use that may be made of the information it contains.



**HEIDELBERGCEMENT**

# Prefaces: BirdLife Europe

**Biodiversity – the variety of life – is important for its own sake and underpins our human prosperity. This is why it makes sense for public and private investment in nature.**

Yet, recent reports from both within and outside the European Union, have shown that biodiversity continues to decline at an alarming rate. Globally, one in eight bird species are at risk of extinction; and within the European Union, 42% of species continue to decline, 11% are at risk of extinction, and just 15% of habitats are in favourable condition. This erosion of our natural environment is driven by unsustainable land use, overexploitation of species and the introduction of non-native species. The climate crisis is compounding these threats and it is set to get a lot worse.

In 2021, governments around the world must agree on a new ambitious global deal for nature, and this must then be translated into regional and national action plans. It is heartening to see the European Union develop its own Biodiversity Strategy for the next ten years – branded by the UN as the Decade on Ecological Restoration.

All of us – governments, business and civil society – have a part to play in coming up with creative solutions that help decouple growing prosperity from environmental harm. Given that change in land use is one of the major drivers of biodiversity loss, we need to think differently about how to maximise the opportunities for wildlife in these changing landscapes.

This is particularly the case for quarries where, once the green light for development has been granted, new habitat can be created

during the operational phase even if then subsequently removed through the course of mineral extraction. Under existing interpretation of environmental legislation (especially the EU Nature Directives) there would be disincentives to manage this land for nature as there could be legal constraints to enabling the commercial activities to continue.

As a solution, we (a consortium of CEMBUREAU, Eurogypsum, UEPG and BirdLife Europe and Central Asia initiated and supported by HeidelbergCement) have developed new guidance for the management of temporary habitats linked to the extractive sector creating a win-win for business and for nature.

We believe that our new Code will have a positive effect on local species populations by offering a framework that will support species conservation from the planning stage through to the closure of operations. These biodiversity management criteria complement the work done on the Directives Strict Species Protection Guidelines and practical work trialled in the EU LIFE funded “LIFE in Quarries” project.

This is an example of how nature conservation organisations and the business community can collaborate to come up with lasting solutions to meet the needs of biodiversity and people – ultimately helping to create a nature positive future.

**Martin Harper**  
Regional Director,  
BirdLife Europe & Central Asia



# CEMBUREAU

**CEMBUREAU, the European Cement Association ([www.cembureau.eu](http://www.cembureau.eu)), is the representative organisation of the cement industry in Europe, acting as spokesperson before the EU institutions and other authorities.**

A key priority for the European cement industry is to protect and preserve species in and around our quarries. Whilst these sites are the source of our products, nature conservation is at the heart of our activities. New habitats created during the rehabilitation process ensure animal and plant life, including rare and threatened species.

The cement industry's ambition is to contribute to the halting of the biodiversity loss through the lifecycle of a quarry. This can be achieved through projects related to dynamic habitat management during the active phase, and then post extraction through the creation of natural habitats with the potential to leave the land with

a significant biodiversity gain. In turn, this provides an educational resource for academic institutions, non-governmental organisations and the general public.

As CEMBUREAU, we are absolutely committed to the Extractive Sector Species Protection Code of Conduct and we firmly believe that it is an excellent tool for both operators and authorities, which is fully compliant with the EU's Birds and Habitats Directives. On top of that, our view is that the Code of Conduct is an ideal example of a productive collaboration between different stakeholders aiming at the best result for biodiversity conservation. Finally, we are convinced that the Code of Conduct will play a positive role in the implementation of the EU Biodiversity Strategy 2030 and we are ready to contribute towards the common goal of protecting and reversing the loss of biodiversity.



**Koen Coppenhelle**  
Chief Executive Officer, CEMBUREAU

# Eurogypsum

**The European gypsum industry has a fundamental role to supply raw materials needed for a sustainable built environment.**

Gypsum being endlessly recyclable, we manufacture products such as plaster and plasterboard, which are best suited to build and renovate homes or offices, providing outstanding performance for fire resistance, acoustics or energy efficiency. They are also proper enablers of change in adjusting building spaces to evolving needs and facilitating new forms of urban development, such as the vertical extension of buildings.

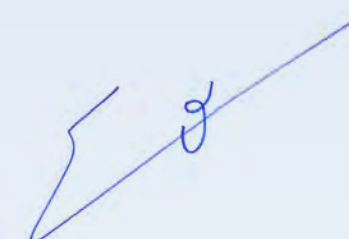
We are aware of our responsibility to embrace a comprehensive approach, shaping our customers' overall quality of life – in the products that we supply and in ensuring that we do not degrade the environment we live in.

Industrial activities can have an adverse impact upon the environment. While gypsum processing has a relatively low impact, we are committed to further reducing it. In compliance with legislation,

such as the EU Habitats and Birds Directives, our industry has a long record in protecting species, enabling temporary nature during extraction or restoring ecosystems. This is a social and ethical responsibility for our sector.

However, global challenges such as biodiversity loss require collective efforts. We already cooperate with local communities, scientific and civil society organisations to maintain and develop ecosystems in quarries. Today, we are proud to join forces with BirdLife Europe and other major European extractive industries, to go the extra mile in applying common practices for species protection in quarries.

At Eurogypsum we are fully committed to the present Code of Conduct and will enthusiastically promote its application throughout our membership!



**Emmanuel Normant**  
President, Eurogypsum







## UEPG

**UEPG, the European Aggregates Association represents the by far largest non-energy extractive industry with 26,000 extraction sites across Europe operated by 15,000 companies (mostly SMEs).**

This huge network has great potential to contribute to green infrastructure if responsibly managed aggregates extraction sites can function as stepping-stones connecting parks and nature protected areas.

The concept of “temporary nature”, the many environmental projects aggregates producing companies are involved in with local NGOs, such as “Life in Quarries”, and this “Code of Conduct” are valuable tools to ensure the compatibility of aggregates extraction and nature protection.

The European Aggregates Industry and UEPG’s Sustainable Development Awards scheme demonstrate a track-record of promoting business and biodiversity. Many former and active sand, gravel sites and hard rock quarries have been declared Natura 2000 areas or national or regional protected areas.

UEPG supports this voluntary “Code of Conduct” and welcomes further developments in the EU Member States contributing to bringing industries and dynamic nature management together. With the EU Green Deal and its renovation wave and other EU policies requiring massive amounts of primary and secondary construction raw materials, the question is not whether we need aggregates but rather where and how to source it from in the most sustainable way.

**Antonis Antoniou Latouros**  
President, UEPG

# HeidelbergCement

**HeidelbergCement is one of the world’s largest integrated manufacturers of building materials and solutions, with leading market positions in aggregates, cement, and ready-mixed concrete. At the centre of our actions lies the responsibility for the environment.**

Our sustainability strategy includes the protection and enhancement of nature as a key material issue, with specific goals laid down in our Sustainability Commitments 2030, and constant effort to improve our operations so any impact is kept minimal.

The protection of biodiversity is a global challenge, and the private sector needs to play a key role in this. HeidelbergCement is highly committed to contribute to the global restoration agenda and has been promoting the protection of biodiversity during and after the quarrying activities for many years. Throughout the Group, we promote a high variety of local flora and fauna in more than 800 quarries worldwide.

The reclamation of quarries to a nature-based end use is one such contribution where the extractive sector can provide significant net gain for biodiversity.

Another is during the active phase of a quarry which HeidelbergCement also recognises as having a huge opportunity to support nature, particularly species associated with pioneer habitats that have been lost in the wider landscape. However, this comes with challenges that need to be addressed collectively.

This is why HeidelbergCement fully supports the development and implementation of this Code of Conduct, which provides a consistent approach to maximising biodiversity within the quarry context, while ensuring compliance with European legislation and continued extractive activities.

With the launch of the EU Biodiversity Strategy for 2030, HeidelbergCement considers the Code of Conduct a key element in facilitating the extractive sector’s contribution to reversing biodiversity loss across Europe.

**Dr Dominik von Achten**  
Chairman of the Managing Board

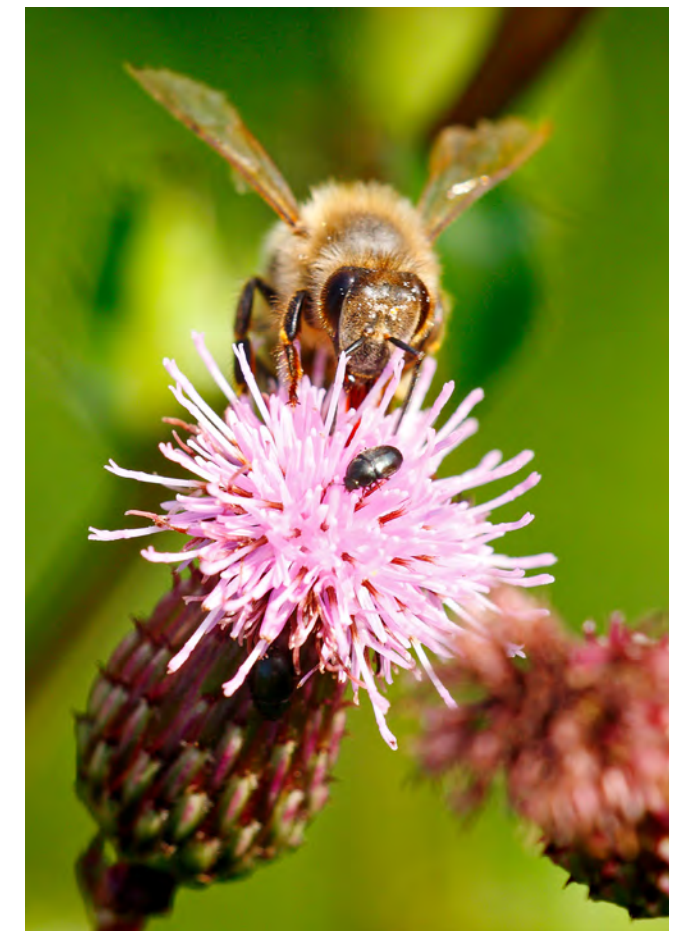






Photo: Eurasian Eagle Owl (Bubo bubo) by Rollin Verlinde

# Contents

<b>Foreword</b>	<b>10</b>
<b>Preamble</b>	<b>11</b>
<b>1. Introduction</b>	<b>12</b>
1.1 Background	
1.2 The Case for good Guidance	13
1.3 The purpose the Code of Conduct	14
1.4 The Commitment of the Parties	16
1.5 Active conservation part for Member States and the Commission	18
<b>2. Species protection during the life cycle of an extraction site</b>	<b>19</b>
2.1 Habitat clearance for new extraction sites	20
2.2 Temporary Habitat within an operational extraction site	24
2.3 Reclamation of extraction sites	26
<b>3. Our tailored approach for the operational phase</b>	<b>27</b>
<b>4. Closing Note</b>	<b>30</b>



# Foreword

## The European Green Deal is the EU's compass for a truly transformative change – moving towards a regenerative economy that gives back to nature more than it takes.

Protecting and restoring nature is not a limit to economic and social development but rather an inbuilt feature of a modern, climate neutral, resource-efficient and competitive economy that is also fair and inclusive.

The latest assessment of the State of Nature in the EU, published in 2020, shows that we are unfortunately still losing nature as too many protected species continue to decline. The new European Biodiversity Strategy, as part of the EU Green Deal, provides a real opportunity – which we must seize – to put Europe's biodiversity on a path to recovery by 2030.

The idea of reconciling socio-economic goals with the conservation of threatened species and habitats is not new. It has been part of the core objectives of EU Nature legislation. Already in 2010, the Commission published a guidance document on 'Non-energy mineral extraction and Natura 2000', to clarify how such activity can be carried out in accordance with the protection requirements of Natura 2000 sites. There are plenty of good practices and examples demonstrating that nature and economic activity can go hand in hand. An EU co-funded project called "LIFE in Quarries" is an interesting example of creating a network of temporary habitats in quarries, demonstrating

that these development sites can be managed dynamically in time and space, in parallel with the extractive activity, thus ensuring continuous availability of suitable habitats for nature. I am very pleased to see that nature conservationist and the industry have joined forces to stand up to the challenge. The present **Extractive Sector Code of Conduct** is an excellent practical guidance on how to integrate high nature conservation standards and the successful economic operation of the extractive sector. The Code of Conduct focuses on the protection of wildlife species, which is one of the two pillars of the Nature directives, and which applies both within and outside designated Natura 2000 sites. Such a cooperative partnership between organisations is an encouraging signal that workable solutions can be found that fully respect the EU Nature directives.

We can only succeed in restoring and protecting our nature through full engagement of all key actors (private, public, local, national and regional levels) actively contributing to this common goal.

I hope that the Code of Conduct will help the industry play an increasingly important role in protecting and restoring nature as well as tackling climate change, which are the defining challenges of our time.



**Florika Fink-Hooijer**  
Director General, DG Environment,  
European Commission



## Preamble

### This Code of Conduct seeks to guide certain activities that at the same time contribute to the protection of wild species.

It thereby seeks to build on the provisions of the EU's Birds and Habitats Directives (also named the EU's Nature Directives), without conflicting with EU law but providing a joint understanding for better implementation. Obviously, first reference to specific species protection provisions is found within the national law of the Member States, transposing the provisions of Art. 12, 13 and 16 of the Habitats Directive, as well as the provisions of Articles 5 and 9 of the Birds Directive. This Code of Conduct works within this legal framework as an overall guide to provide a practical solution to species protection.

The Code of Conduct provides guidance for the management of temporary habitats associated within the sector. This can be seen as adaption of the temporary nature concept. It defines the procedures to cater for the establishment of habitats for nature that temporarily exist and provision to secure their potential within extraction sites.

Deploying and ideally anchoring the concept of temporary habitats in relevant legislation or jurisprudence provides flexibility and legal certainty for the derogation procedure, allowing the beneficial creation and ultimate removal of these habitats during the quarrying process. Current legislation can result in quarries operating as sterile environments denude of flora and fauna with minimal benefit to biodiversity. The concept of temporary habitats as defined in this Code of Conduct mitigates this situation and creates a win-win for business and nature.



# 1. Introduction

## 1.1 Background

**Note:** BirdLife supports constructive dialogue and cooperation to find workable solutions that are both legally sound and effective for the conservation of European Protected Species (EPS).

E.g. in the area of “temporary habitat” or when it comes to the protection of individual specimens.

HeidelbergCement and BirdLife Europe have been working in partnership since 2011 to achieve better protection of biodiversity at extraction sites. Both organisations recognise the crucial importance of the EU’s Birds and Habitats Directives in achieving the targets of the EU Biodiversity Strategy for 2030 and beyond. [1] Whilst declaring the directives themselves to be “fit for purpose”, the findings of the Fitness Check of EU’s Nature Directives stressed the need for better guidance, in particular with respect to species protection. [2] Subsequently, stakeholders including BirdLife Europe, have proposed the update of existing and the development of further species protection guidance.

Through this document, the stakeholders want to constructively contribute to the existing and ongoing guidance work, to add on e.g. the “Non-energy mineral extraction and Natura 2000” guidance document and the “Strict Species Protection Guidelines in line with the objectives of the EU Birds and Habitats Directives”.

Just as a reminder: Species protection under the EU’s Birds and Habitats Directives is one of the key pillars within the legislative framework to protect the most vulnerable species. Together, both Directives cover all wild bird species and around

1400 European species other than birds, including reptiles, insects, plants, etc. The protection provisions are similar in both Directives, creating a regime of strict species protection that needs to be applied both within and without Natura 2000 sites. The strict species protection prohibits inter alia deliberate killing and capture of specimens, deliberate disturbance and deterioration or destruction of breeding sites or resting places. Both Directives foresee derogations from those provisions under certain conditions.

The principle on which the Code of Conduct is based upon is the following: The derogation provisions of the Directives are designed to provide a workable and legally certain framework, to also be recurred at if needed for certain developments and operation of economic actors. In event of an unavoidable impact, the derogations framework assists decision-making with regards nature conservation objectives, while allowing economic developments that meet the criteria set out in the Directives to proceed.



Photo: European Bee-eater (Merops apiaster) by Lars Soerink



## 1.2 The Case for Good Guidance

The findings of the “Fitness Check” of the EU’s Birds and Habitats Directives showed the importance of concrete Guidance for properly implementing the Directives. Such guidance is also needed to cover the treatment of derogations. BirdLife Europe has engaged in the development and update of European Commission Guidance Documents explaining the rules of species protection, in order to support industrial projects and other activities ensuring respect of legislation. BirdLife proposed to the European Commission to approach the development of species protection guidance on a sectoral basis (mineral extracting industry, roads and railways, agriculture) or by focusing on coherent species groups (e.g. pioneer species linked to bare soil attracted by earth moving operations, colonial species roosting or nesting in buildings etc.).

As an action to follow up on the Fitness Check, the European Commission updated several guidance documents. BirdLife Europe welcomes the work on the general Guidance Document “Managing

Natura 2000 Sites”, updated in November 2018. We also welcome the work on the Guidance on Art. 12, 13 and 16 of the Habitats Directive, covering important aspects of the EU’s regime of strict species protection, and dedicating a short section to the concept of “Temporary Nature” which has been supported by all stakeholders.

While clarifying the legal systems and accompanying text is a necessary start, for stakeholders of different sectors on the ground it would be helpful to a) cover the species protection requirements of both the Birds and the Habitats Directives and b) to have even more concrete and pragmatic suggestions about how to develop projects and management practices that both comply with the law and serve biodiversity.

Stakeholders also need immediate and effective action to address longstanding implementation gaps.

Photo: Quarry in Czech Republic by HeidelbergCement



## 1.3 The purpose of the Code of Conduct

It is well recognised that the opening and subsequent operating phase of extraction sites results in the creation and maintenance of habitats that may be important for biodiversity (e.g. gravel pits developed on former conventional arable land), which can be either temporary or incorporated into the reclamation and site closure plans.

During the various stages of a quarry's life, conditions can therefore arise that would conflict with the species protection provisions of the Birds and Habitats Directives and therefore trigger the requirement for a derogation if relevant conditions are met.

The development of quarries – granted that the permit prerequisites are given – often cannot avoid impacts, hence a process of minimising negative impacts where possible must be applied. The following document is covering situations where the impact is unavoidable. In those cases, the sector would support the use of this Code

### This Code of Conduct fully recognises the following three-step mitigation hierarchy of:

- Avoid or prevent negative impacts on species and their habitats
- Minimise and rehabilitate on-site effects
- Offset/compensation measures that are undertaken as a last resort (on or off-site) for the residual adverse impacts, in the cases where the legislation allows for the project/operation to proceed.

of Conduct as approach to direct the derogation actions during the operational phase, when the conditions set in Article 16 of the Habitats Directive and Article 9 of the Birds Directive are met. On the other side, the principles of this Code of Conduct should not be used to justify situating quarries on environmentally sensitive land where permitting criteria are not given.

As there is a wide variation in quarry types, sizes, locations, and the duration of quarrying activities, a case-by-case assessment is necessary to reach compatibility with the derogation criteria. This means that an approach for temporary habitats in the extractive sector needs diversified management specifications for the different types of extraction sites and a planning for each individual case. This Code of Conduct seeks to support businesses in this sector by identifying workable solutions that are beneficial for nature, that make sound business sense, and that are fully compliant with the Birds and Habitats Directives.

First authorisation to open/extend a quarry must fully comply with relevant legislation, including the requirement for an Environmental Impact Assessment and an Appropriate Assessment under the Habitats Directive as relevant.

Having been compiled by cross-disciplinary stakeholders with the input of the European Commission's Directorate-General for the Environment, this document provides not only a code of conduct for the stakeholders of the supporting sectors, but aims also at becoming a reference guide to Member States and their (permitting) authorities, by providing a checklist, and practical hints on how to manage biodiversity in extraction sites in harmony with the species protection provisions, including its derogation procedure.

### The Code of Conduct considers four aspects of quarrying operations and levels of actors:

- The role of national governments and the European Commission in implementing those elements of the Directives that support the effective implementation of the species protection provision under the EU's Birds and Habitats Directives and the smooth functioning of the derogations process in the context of the quarrying and minerals sector, when the relevant conditions are met.
- Actions needed during the operational phase of any quarry to ensure compliance with relevant legal requirements, effective delivery of species conservation measures, and early warning of any breaches of requirements of EU's Birds and Habitats Directives.
- Actions preparatory to quarrying operations that operators should be taking in order to plan for the lifetime of a quarry, to minimise potential negative impacts, determining timeslots for activities and / or create opportunities to contribute to biodiversity gains. Whether or not the derogation process covers both the approval, and the operational phase depends on the legal framework at member state level.
- Actions needed in preparation for and during the closure and reclamation of a quarry to ensure compliance, to deliver the optimum outcome for biodiversity, and to minimise any residual business risk through non-compliance.



Photo: Little Ringed Plover (Charadrius dubius) by Yves Adams



## 1.4 The Commitment of the Parties

BirdLife Europe, CEMBUREAU, Eurogypsum and UEPG have come forward with this Code of Conduct suggesting a manageable approach for one sector to deal with species protection while at the same time fully respecting EU's Birds and Habitats Directives and calling for urgent progress with implementation. This document is to be seen as commitment by key actors of the extractive and nature conservation sectors to stand behind the EU's Birds and Habitats Directives.

The following Code of Conduct also partially takes up on the concept of "Temporary Nature" through the spontaneous colonisation of habitats which follow the extraction process and are transient. This dynamic environment during the operational phase ultimately leads to subsequent reclamation.

Therefore, with potential opportunities for progressive reclamation, it is understood that the entire operational phase cannot be seen as the debated concept of temporary nature.

Through the chosen approach, the sector stakeholders want to achieve clarification on the implementation of EU's Nature Directives in the context of managing extraction sites. The signing parties are convinced that in the event of an impact, the most appropriate approach to species protection in the context of the mineral extraction sector is through derogations as set out in the EU's Nature Directives, when the conditions set therein are fulfilled.



Photo: Common Cuckoo *Cuculus canorus* by Yves Adams

Photo: Heath Fritillary and Ringlet butterfly by Olivier May







## 1.5 Active conservation part for Member States and the Commission

Initially, the signing parties want to stress the importance and responsibility that Member States have in maintaining or restoring natural habitats and species of wild fauna and flora at favourable conservation status. Only by fulfilling this obligation arising from the Habitats and Birds Directives can Member States open the ground for sustainable economic activities.

The need for enforcement action by the European Commission and for Member states to address gaps and inadequacies in implementation has been explicitly recognised in a joint letter to the European Commission from BirdLife and CEMBUREAU [3] in 2017 setting out recommendations for improving the implementation and enforcement of the Birds and Habitats Directives.

Derogations from the species protection provisions of the Nature Directives can be granted when these activities are deemed necessary for one of the reasons and at the conditions set out in Article 16 of the Habitats Directive and Article 9 of Birds Directive, which include: where there are no satisfactory alternatives; where they do not hinder the maintenance of populations of the species concerned at favourable conservation status (FCS) in their natural range. Judging when an activity can be carried out without undermining the FCS of an European Protected Species (EPS) with a sufficient degree of certainty is only possible where Member States have delivered the necessary monitoring activities to understand the overall conservation status of the species, and it is easier in cases where favourable reference values have been identified.

Photo: Midwife Toad by Animals Belgium

## 2. Species protection during the lifecycle of an extraction site

**Mineral extraction companies need clear rules about how to safeguard species during all phases of the quarry lifecycle, encompassing the initial habitat clearance, managing temporary habitats during active operations and during the phased or final closure and reclamation.**

The expansion of an existing or the opening of a new extraction site will involve an initial land use change, e.g. from agricultural fields to an active quarry. Such a transformation can affect protected species directly (destruction of individuals by heavy machinery during habitat clearance) or indirectly (destruction of habitats utilised).

During the operational phase, previously disturbed areas located within the quarry site can quickly develop into pioneer habitats and be rapidly colonized by a range of wildlife, including protected species which may lack such suitable opportunities in the wider landscape. Due to the nature of extractive activities, areas may be worked, left, and reworked during the lifetime of operations, resulting in temporary habitats that may vary geographically through the site from year to year.

The operational phase of a quarry can be seen as a temporary activity, and following the cessation of extraction, the site will be reclaimed. Depending on the deposit, this may be a progressive activity through the life of a quarry, or occur once the mineral has been fully exhausted.

Photo: Eurasian Eagle Owl (Bubo bubo) Vilda by Rollin Verlinde



During the reclamation, depending on the permitted afteruse, another land-use change may occur, for example from bare to early successional habitats to agriculture/commercial forest, built development or be flooded to form wetlands. Again, this transformation may affect protected species as pioneer habitats are lost.

Land left unused either prior to or during extraction activities can provide precious biodiversity habitat, but operators often prefer to prevent species colonization of such land for fear that once established it will become impossible to work the land due to automatic protection afforded to particular habitats / species. This issue has been identified and referred to in different Member States – e.g. in the proposed new policies of the UK's Department for Environment, Food and Rural Affairs (DEFRA) regulations on European Protected Species (EPS), which allows protected species like the Great Crested Newt to access development sites and occupy temporary habitats without stopping operations [4].



## 2.1 Habitat clearance for new extraction sites

When commencing with new/extended extraction sites, habitat clearance and species protection are two of the main factors under consideration. It is not trivial to come up with general recommendations that deliver both a pragmatic solution on the ground and respects the species protection provisions of the Nature Directives.

This Code of Conduct is intended to assist quarrying operatives in developing relevant actions for this stage of the quarry lifecycle that is integrated into the overall biodiversity management plans for the site.

These management plans are developed in the light of the objectives for the entire lifecycle of the quarry, both in operational terms and in terms of nature conservation objectives. The content of these actions must reflect the state of knowledge of habitats and species that occur on and around the new/extended extraction site in order to provide a complete picture for site managers. For example, the existence of a species action plan addressing likely colonising species in the location of the new extraction site, or conservation projects already underway in the areas around the extraction site for species that the new activities would likely impact upon.

Habitat clearance should in all cases follow certain procedures and respect common principles, including that of the species protection provisions:

- Surveying the area is crucial in order to know which habitats and species are concerned and what are their ecological needs. These surveys should form part of the sites relevant Environmental Impact Assessment (EIA) or Appropriate Assessment (AA) in regard to Natura 2000 site impacts.
- Deterring of colonizing or nesting species is restricted to the non-breeding or hibernation periods and operational activities within the quarry synchronised accordingly.

Handling of strictly protected species requires application of the EU's Nature Directives derogation procedure, if relevant conditions set in the Habitats and Birds Directives are met. There is extensive case-law guiding the procedure, so here only the following aspects should be stressed:

- Species with populations that are not in a favourable conservation status will in most cases need supporting measures to move or in some cases may require active relocation.
- An active approach to measures to avoiding and mitigating impacts or compensating for unavoidable impacts should be encouraged. No two sites are the same, and site managers should be empowered to work with local conservation agencies and civil society to develop innovative solutions, while respecting the legislation.
- Following case law, derogations should cover disturbance, removal or killing of protected species individuals with exception of European listed critically endangered species, as impacts on these species should always be avoided. For species listed in Annex IV of the Habitats Directive, it must be ensured that the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range. Steps should be taken to avoid impacts, and mitigation measures need to be put in place to minimise any residual impacts. Similar conditions hold for birds. For, all naturally occurring bird species in the wild state, derogations must be justified in relation to the overall objectives of the Directive, amongst others to maintain the population of the species at a level which corresponds to ecological, scientific, and cultural requirements; there furthermore must be no other satisfactory solution, and derogating is only possible for limited reasons (see Art. 9 of EU's Birds Directive).

**Conservationists, Governments, and the extractive industries share a common interest and responsibility in ensuring that extraction sites operate in full compliance with legal requirements and that the granting of derogations, if needed and possible, contributes to the overarching objective of delivering effective conservation for protected species.**



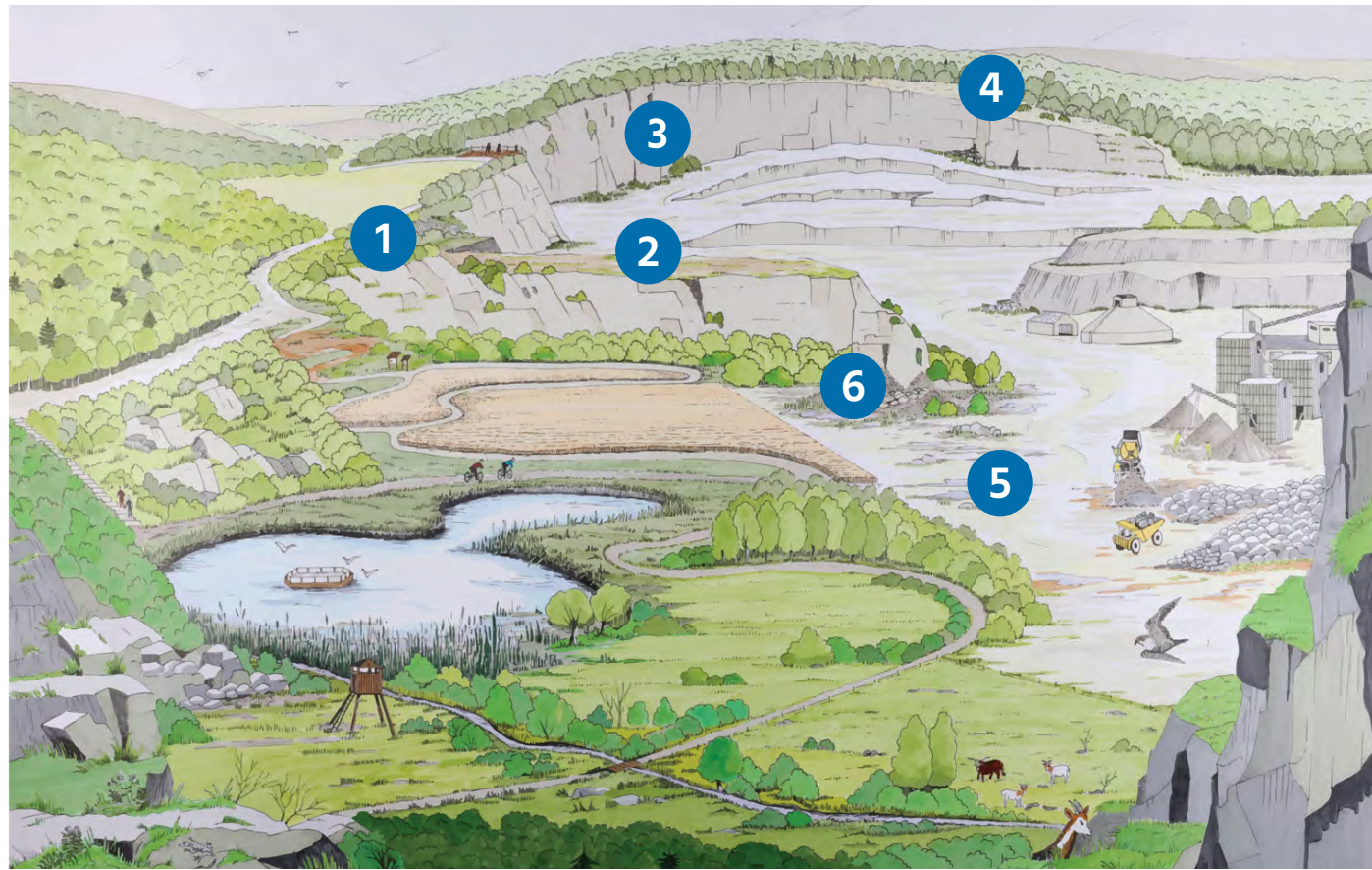


Photo: Common Tern (*Sterna hirundo*) by Lars Soerink



Figure 1

**Schematic representation of zones within the extractive site that could trigger the need for derogations (designed by Francoise Laruelle for HeidelbergCement).**

- 1 Natural habitats within the quarry footprint that eventually shall be cleared for new or existing quarry extensions.
- 2 Areas cleared in preparation for future quarry activities that have become colonised with spontaneous natural species.
- 3 Areas within the active quarry zone that are left for a short period or season and become habitat for pioneer species.
- 4 Cleared areas in the active portion of the quarry adjacent to natural habitats that could act as trans-frontier zones for migratory species.
- 5 Temporary habitats that form due to the surface undulation created by the active operations.
- 6 Areas where extraction is completed and spontaneous habitats have developed which may not be aligned with the permitted reclamation plan.



## 2.2 Temporary Habitat within an operational extraction site

Management of active quarries presents a different set of challenges than the development of new areas converted from a different land use. The main challenge is with protected species that regularly use active parts of the quarry. For example, amphibians breeding in water accumulating in machinery tracks or birds nesting on cliff faces that are being actively worked / extracted.

Preventing species from making use of land is an illogical lose-lose option. It harms biodiversity by depriving species, including rare and threatened ones, from potential habitat and it imposes costs on Companies (fencing, spraying, mechanical control) for no good reason. For those extraction sites whose lifetime may be measured in decades or centuries, the costs to the company and to biodiversity can be considerable. It is therefore highly desirable from both a conservation and a business perspective to come up with workable solutions that are compliant with nature conservation laws.

Within a quarry context, temporary habitats are defined as areas that fall within the zoned quarry site, which may be disturbed, set aside or cleared during either preparation or extraction activities and will at some stage commence with activity. These areas are then colonized by species of fauna or flora.

For protected species that occupy a quarry site on a temporary basis, i.e. those that exploit pioneer habitat, it is important to anticipate their likely colonisation, and to have a coherent plan that is compliant with nature conservation laws and is operationally practical.

There are a number of practices that have been successfully used in different situations in either redirecting colonisation or accommodating the species without excessively impacting on the operations. These include but are not limited to: providing alternative habitat outside of the active zone (e.g. sand banks or pools), rendering habitat within the active zones unsuitable prior to colonisation (e.g. batters on sand faces), stand-off zones from occupied areas, adjusting scheduling of operations to avoid high risk areas at critical times,

and so on. This approach would aim to avoid the need for multiple derogations, provided it could be shown that the operations would not cause disturbance.

An overall solution to this problem can be the so-called and well-crafted “temporary nature” permits whereby the Company commits to allowing the naturally occurring biodiversity to inhabit the land in exchange for a single-act derogation allowing the removal of temporary habitats once the sensitive period (i.e. breeding and or hibernation season) has completed and the time has come to start or proceed with the onsite activities.

This relatively new concept of “temporary nature” respectively “temporary habitat” licenses that has arisen within the EU goes back to a formulation that has been inter alia led by the Netherlands. Such licenses provide incentives for landowners to make their land available for nature, while the area is awaiting development. It is aimed at pioneer species that quickly colonize barren soil or wetland habitats such as construction lands, sand heaps or reclaimed port areas.[5]



Photo: 4-9-Sand Martin by Wolfgang Kruck

**We are convinced that a “temporary habitat” approach could be adapted to the specifics of the non-energy mineral extraction sector using the following recommendations:**

- There should be a clear distinction between the approval- and operational phase[6]. The temporary habitat approach should not be used as a replacement for conservation measures, i.e. a temporary habitat license should never allow destruction of pre-existing nature values. Instead, it should be seen as a complementary means to contribute to conservation. An agreed baseline should be established, formulated on the species status at approval phase on which a no net loss at the site can be determined.

**In light of respecting a Member State’s legal framework and the specific site by site circumstance, the derogation criteria need to be met in order to maintain a temporary habitat license for the operational phase of a quarry. In the end, the specific regulatory implementation needs to be adopted and implemented at the site level. Important aspects are:**

- The operation should be based on a biodiversity management plan and assessment of the potentially expected species that may take up residency on the site having been known to inhabit neighbouring sites, existing conservation areas within close proximity or the wider landscape.
- The operation should explicitly aim at improving the conservation status of biodiversity as a whole, understanding that many of the pioneering species, which may colonise these extraction sites, would naturally be displaced or replaced through ecological succession.

- Such an approach does not provide the legal grounds to the deliberate disturbance or killing of the species inhabiting these temporary habitats, but instead their presence and removal should be recorded.
- At the end of the license period of the temporary habitat, the population of colonizing protected species that is covered under the license must not be smaller than the agreed baseline.

**Derogations must comply with the rules set out in the Habitats and Birds Directives. For this approach certain procedures and principles must be followed:**

- Initial and ongoing monitoring is crucial to ensuring measures adopted to avoid or minimise impacts on protected species are effective, and to demonstrate compliance with applicable legislation.
- Data gathered through monitoring should be made available to relevant stakeholders to support conservation planning and inform review / decision making in relation to those areas around the extraction site, and to inform planning for species protection in other extraction sites.
- Provision must be made for assessing progress and revisiting biodiversity management plans as operations proceed to allow for changes to circumstances on the ground and developing experience and expertise.
- Ongoing and regular contact between quarry operators, government conservation agencies, and interested civil society groups is essential to ensuring and demonstrating compliance, minimising risks to business from actual or perceived breaches of applicable legislation.
- It is in the interests of all civil society groups concerned by quarrying generally or in relation to an individual quarry, to engage openly and constructively with quarry operators.





### 3. Our tailored approach for the operational phase

**The best way to ensure proper protection of species while allowing mineral extraction is for the granted operation to be based on a biodiversity management plan that both covers all of the protected species interests and complies with the rules applicable to derogations under the Birds and Habitats Directives.**

It is essential that the plan enhances species prospects during extraction and acts as the basis for preventing involuntary damage to specimens that might happen despite adherence to the plan. [7]

The plan would prescribe what the company is required to do. Inspectors would be able to verify compliance (without necessarily having to detect species presence) and accidental impacts would not trigger sanctions, unless disregard of plan prescriptions.

#### 2.3 Reclamation of extraction sites

Following the cessation of extraction, the site will be reclaimed. In some cases, particularly for sand and gravel extraction, reclamation is coordinated to follow the operational process.

The decision process for determining an afteruse of an exhausted quarry can be complicated and involve a great number of stakeholders. Often is the case that land is owned by a 3rd party who has a say in what the quarry is returned to or that the authorities have already highlighted through spatial planning the desired land use for that area. The long lifecycle of some quarrying sites may also mean that the best end use of the site may not be clearly known at the point extraction commences at the site, particularly in light of climate change, changing nature conservation objectives, and social pressures.

From a nature conservation point of view, reclamation to natural habitats is the preferred option. In any eventuality, the after-use should be nature friendly, which means that for instance completely hardscaping the extraction site should be avoided. While in some cases pioneer habitats can be retained, reclamation activities will most likely result in the loss of habitats favoured by protected pioneer species. During the life of the quarry these habitats would have increased the permeability of the surrounding landscapes and provided an opportunity for these populations to grow and disperse. Given the nature of mineral deposits there is often a clustering of extraction sites at different phases creating ongoing opportunities for temporary habitats.



Photo: Yellow-bellied Toad (*Bombina variegata*) by Rollin Verlinde

Photo: Common Tern by John Fox





## General Conditions

From the structure and approach, plans should in general follow the following principles, in accordance the work of which then needs to be defined more into detail according to the occurring species (see below):

- Information setting out how the legal requirements under the Birds and Habitats Directives have been complied with, including on derogations, if applicable.
- Clear site-based biodiversity management objectives with associated indicators for habitats and the potentially occurring protected species. This includes a minimum requirement of an updated species records and associated monitoring programme aiming at contributing to the national/biogeographical conservation of the species.
- A spatial understanding of provisional safe habitats and species movement requirements.
- Management precautions (according to seasons, areas, type of operations).
- A provision foreseeing regular monitoring.
- Prescriptive conservation measures (e.g. habitat creation, provision of breeding substrate, for example for ground nesting birds, and the condoning of temporary pools during the breeding season).
- Reporting requirements to the competent authority in case of unforeseen problems (e.g. substantial number of specimens turning up in areas or times not foreseen by the plan, high mortality; e.g. specimens crushed by heavy equipment despite full adherence to plan provisions, or species affected by planned conservation measures, for instance specimens destroyed by renewing the early succession stages on dumps etc.).
- The management plan is adaptable and includes a revisable list of potentially negative impacts of extractive activities (e.g. specimens crushed by heavy equipment despite full adherence to plan provisions, or species affected by planned conservation measures, for instance specimens destroyed by renewing the early succession stages on dumps etc.). Provision for the periodic review and, if necessary, revision of the plan to address changes in circumstances.

## For quarry-relevant species, plans must specifically refer to:

### Pioneer species

- A provision foreseeing a network of safe reproduction and associated foraging areas where the habitat is suitably appealing (e.g. bare soil, shallow ponds, surface undulations) outside the active work areas of the quarry.
- Provisions foreseeing adequate corridors, avoidance of most sensitive places and times (e.g. suspension of work along corridors during amphibian migration).

### Cliff nesters

- Provisions foreseeing that before blasting operations commence, cliff faces are checked for active nests.
- Blasting activities which could disturb an occupied nest will be discontinued until the nest is no longer in active use.
- Plans to leave some cliffs in the non-active parts of the quarry to create alternative cliffs in already abandoned parts of the quarry.
- For further scenarios visit the Life in Quarries project.

### Orchids and other important flora

- Provision foreseeing that calcareous grasslands which establish within the quarry are surveyed prior to clearing.
- Provision foreseeing that calcareous grasslands with orchids present be sensitively cleared after the flowering season and the upper soil layer be placed in a suitable site in line with the reclamation plan, if possible.

### Reptiles and Amphibians

- Provision foreseeing that standing water, taller vegetation or screes are surveyed prior to clearing. Where possible clearing is to be phased.
- Provision foreseeing that alternative habitats be provided for.
- Provision foreseeing that longstanding waterbodies should be left undisturbed through the breeding season.

### Species like Sand Martins and Bee Eaters, Kingfishers

- Provisions foreseeing survey for nest prospecting / active nests.
- Provisions foreseeing that sand piles and faces are left undisturbed through breeding season if they are being prospected / occupied.
- Provision foreseeing that operational faces are altered to render unattractive to potential nest sites.
- Provisions foreseeing that alternative breeding spots are provided for.

For further scenarios visit the Life in Quarries project[8].





## 4. Closing Note

**The Code of Conduct provides the favoured approach by the signing stakeholders to managing and protecting biodiversity in extraction sites with regards to the provisions of the EU nature legislation on strict species protection, and its derogation procedure.**

The Code of Conduct should not determine specific implementation at administrative level, details for implementing this approach can be set at member state level.

While the examples listed are not exhaustive, they provide a general overview of the most common scenarios encountered where nature and extractive operations can co-exist. This sets the framework under which case specific guidelines for the sector can be developed.

## References

[1] See the Joint Statement of HeidelbergCement and BirdLife Europe from 22 September 2016, <http://www.birdlife.org/europe-and-central-asia/news/best-both-worlds-joint-statement-heidelbergcement-birdlife>. The EU's Birds and Habitats Directives are also crucial for the future new EU 2030 Biodiversity Strategy.

[2] The "Evaluation Study to support the Fitness Check" from March 2016 concludes that there is the need for more guidance, and also to better involve all stakeholders to reduce implementation conflicts, i.a. by effective engagement with businesses affected by species conservation measures, whereby partnerships between businesses, NGOs and nature authorities might be helpful, see [http://ec.europa.eu/environment/nature/legislation/fitness\\_check/docs/study\\_evaluation\\_support\\_fitness\\_check\\_nature\\_directives.pdf](http://ec.europa.eu/environment/nature/legislation/fitness_check/docs/study_evaluation_support_fitness_check_nature_directives.pdf), p. 579. The findings of the Fitness Check itself refer – as to the non-energy extractive industries – to stakeholder contributions complaining about an overly restrictive application of the provisions of the Nature Directives by permitting authorities, see SWD(2016) 472 final from 16.12.2016, p. 77.

[3] See [https://cembureau.eu/media/q3znyxue/10965\\_cembureau\\_birdlife\\_jointletter\\_bhd\\_2017-02-17.pdf](https://cembureau.eu/media/q3znyxue/10965_cembureau_birdlife_jointletter_bhd_2017-02-17.pdf)

[4] DEFRA policy change on European Protected Species mitigation licensing – <https://www.gov.uk/government/consultations/wildlife-licensing-comment-on-new-policies-for-european-protected-species-licences>, and Natural England's report from the consultation of public and potential stakeholders – [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/575709/eps-consultation-outcome.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/575709/eps-consultation-outcome.pdf)

[5] For the Netherlands, a Dutch Policy Note from 2007 which has been updated 2015, lays down some guidance. For further details see the overview with Schoukens, Land Use Policy 67 (2017), pp. 187-189, p. 182, who is also criticising missing guidance at EU level: [http://www.tijdelijkenatuur.nl/Uploaded\\_files/Zelf/land-use-policy-temporary-nature.68343b.pdf](http://www.tijdelijkenatuur.nl/Uploaded_files/Zelf/land-use-policy-temporary-nature.68343b.pdf)

[6] See sections 2.1 Habitat clearance for new extraction sites; 2.2 Temporary Habitat within an extraction site; 2.3 Closure of extraction sites.

[7] Overall the approach is similar to an example of cooperation in Bavaria/Germany. There, the mineral extracting industry ("Steine-Erden-Industrie") and the Bavarian conservation experts ("LBV"), together with the regional authority, found an individual agreement covering similar issues. The BirdLife Europe and HeidelbergCement approach thus provides a more general guidance for authorities and stakeholders in all Member States, with pointing out to some conservation requirements.

[8] [www.lifeinquarries.eu](http://www.lifeinquarries.eu)



