Connecting quarries, nature and people-Six years of partnership





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Global approach, local action

When minerals are extracted, the landscape inevitably changes. But the impact on biodiversity can be minimised. Quarries not only host rare species, but provide habitats that reconnect nature in both agricultural and urban landscapes. Even active mining sites can be biodiversity rich 'hot spots'!

Our close partnership aims to contribute to global biodiversity through better management of quarry operations and their eventual restoration. We implement local projects and jointly develop best practice for how NGOs and business can work together.

The local perspective is extremely valuable and, thanks to BirdLife's 120 national partners, expertise and support is available to HeidelbergCement operations worldwide. Our partnership is the perfect combination of global commitment and local action.



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Six years of partnership - Introductory words

Being one of the of the world's largest manufacturers of building materials, HeidelbergCement is very well aware that quarries and gravel pits transform the existing landscape. That is why maintaining biological diversity is systematically pursued as an essential element of our sustainability strategy and nature conservation is of extraordinary importance. Over the past six years, we have developed a fruitful partnership with BirdLife International based on our shared values of promoting biodiversity while using natural resources sustainably. BirdLife and its national partner organisations have helped us maximise the role our sites can play for global biodiversity through better management of quarry operations and landscape rehabilitation.

It is important to look ahead and further highlight the relevance of biodiversity for achieving sustainable development as well as the welfare of current and future generations. We invest in the future by continuously improving our processes and products to achieve the most efficient use of all resources and supporting innovation and efficiency in the built environment. Our "Sustainability Commitments 2030", published in 2017, describe the core principles of our sustainable behaviour and biodiversity is a fundamental pillar to reduce our environmental footprint. In BirdLife, we have found a trustful and highly competent partner to help us to manage land use sustainably by focusing on biodiversity and societal value. This is why we want to continue and strengthen this valued collaboration.

BirdLife International is the world's largest nature conservation partnership, bringing together over 120 local organizations around the world to conserve birds for the benefit of nature and people. Building alliances and partnerships is at the heart of our work. We have long engaged with leading companies in the private sector, such as HeidelbergCement, to promote responsible environmental practices so that we can address together their impact on biodiversity and attain sustainable use of natural resources.

Over the six years of our partnership with HeidelbergCement we have contributed to the conservation of biodiversity through good management of quarries, their restoration and the opportunities they offer to species and habitats. Our joint work, which sets an example for others, explores new ways of attaining environmental sustainability by involving the private sector as a key stakeholder in the delivery of sustainable development and economic growth.

At BirdLife International we are proud of the achievements we've had working with HeidelbergCement and continue to commit our core strengths: scientific credibility, our unique approach of local action for global impact, and our ethos of working in partnership to achieve environmental sustainability.



Bond Schaifele

Dr. Bernd Scheifele

Chairman of the Managing Board HeidelbergCement



Patricia Zurita

CEO BirdLife International



Opportunities that quarries offer to biodiversity

Quarries host many rare and threatened species thanks to the special, often unique, conditions they offer: nutrient poor soils, structural diversity of habitats and a dynamic environment. These conditions favour the establishment of pioneer species, as well as organisms that are sensitive to pollution and excessive nutrients.

Through BirdLife's access to global biodiversity data, quarries are evaluated for their biodiversity potential based on their location, surrounding habitats and the species present. The data is used to prioritise sites of high biodiversity value, for which the Group's standards require the development of a biodiversity management plan (BMP).

The quarry life cycle and the type of projects BirdLife partners can contribute to



Before development

Biodiversity surveys
Project scoping and screening
Finding alternatives
Project design
Design mitigation measures
Develop compensation
Design of offset measures



During operations

Protection and management of species and habitats
Implementation of mitigation measures
Monitoring biodiversity
Training and awareness raising



After closure

Ecological restoration
Monitoring and evaluation



Many of our sites provide an important refuge for rare species. To protect and enhance such species, we aim to implement biodiversity management plans at quarries of high ecological value."

Carolyn Jewell Senior Manager Biodiversity & Natural Resources, HeidelbergCement

Twenty-five projects have been funded by the BirdLife-HeidelbergCement Partnership, with a total budget of over € 700 000, including funding from HeidelbergCement Group, local subsidiary companies and third parties. At a site level, the partnership offers many project opportunities through the life cycle of a quarry as demonstrated in the table before.

- A Biodiversity surveys
- Local biodiversity surveys were carried out at mining concessions in Ghana and Burkina Faso. They greatly improved the knowledge of biodiversity values present and serve as a basis for improved project design of both new guarries and planned rehabilitation.
- A Controlling invasive plants
- If not controlled, invasive plants can contaminate quarry products. BirdLife in Israel (SPNI) and the Israel National Park Authority helped Hanson to tackle invasive plants on their sites. A 'Code of Conduct' was developed and successfully reduced the invasive plants in two years. This document is now available for others to help minimise the damage caused by invasive species.
- B Protecting species
- Common Terns (*Sterna hirundo*) breed and raise their chicks in gravel pits. Since 2010, floating concrete islands have been installed across Českomoravský Šterk gravel pits in Central Moravia. The Czech Society for Ornithology helps to monitor and protect the terns, as well as other threatened species present on site, close to Natura 2000 areas.
- C Restoring habitats
- Restoring a species rich grassland on a former quarry at Gerhausen in Baden-Wurttemberg, Germany, through year-round grazing by a semi-wild herd of cattle and horses, is helping rare plants such as the grass vetchling (*Lathyrus nissolia*) and orchids (*Orchis militaris*) and (*Dactylorhiza maculata*) to survive. Many birds depend on such grasslands and bare gravel, including the Red-backed Shrike, Little-ringed Plover and Woodlark. The quarry is located close to Natura 2000 sites.
- Supporting rare species
- Nyskie reservoir is one of the most important breeding sites for Black-headed gulls, Common terns and Mediterranean gulls in Poland. Nest predation is a key threat for these birds. The Polish BirdLife Partner OTOP is developing measures to protect the colonies from predators. The birds have successfully colonized the islands created by gravel extraction in this Natura 2000 site.

10 key principles of the biodiversity strategy

Biodiversity is a key pillar in HeidelbergCement's Sustainability Strategy. But, Nature is much trickier to tackle than other, more technical, parameters like greenhouse gas emissions or water use.

To make company's impact on species and habitats concrete HeidelbergCement formulated ten principles that are designed to promote nature during and after mining operation, but also to facilitate dialogue with environmental protection authorities and associations, as well as with the broader public. Birdlife International endorsed these principles and has supported HeidelbergCement local operations with their implementation.

Protecting nature and environment

- ₩ Plant local species
- * Protect soil and subsoil
- * Avoid contaminating water

Increasing biodiversity

- Maximise the land area with ecological value, both on active and reclaimed sites
- * Temporary out of use areas in active quarries should also maximise ecological benefit where appropriate
- ₩ Biodiversity enhancements in all after-use plans
- ▼ Include few habitats that connect with existing wildlife areas
- * Promote naturally regenerating vegetation.

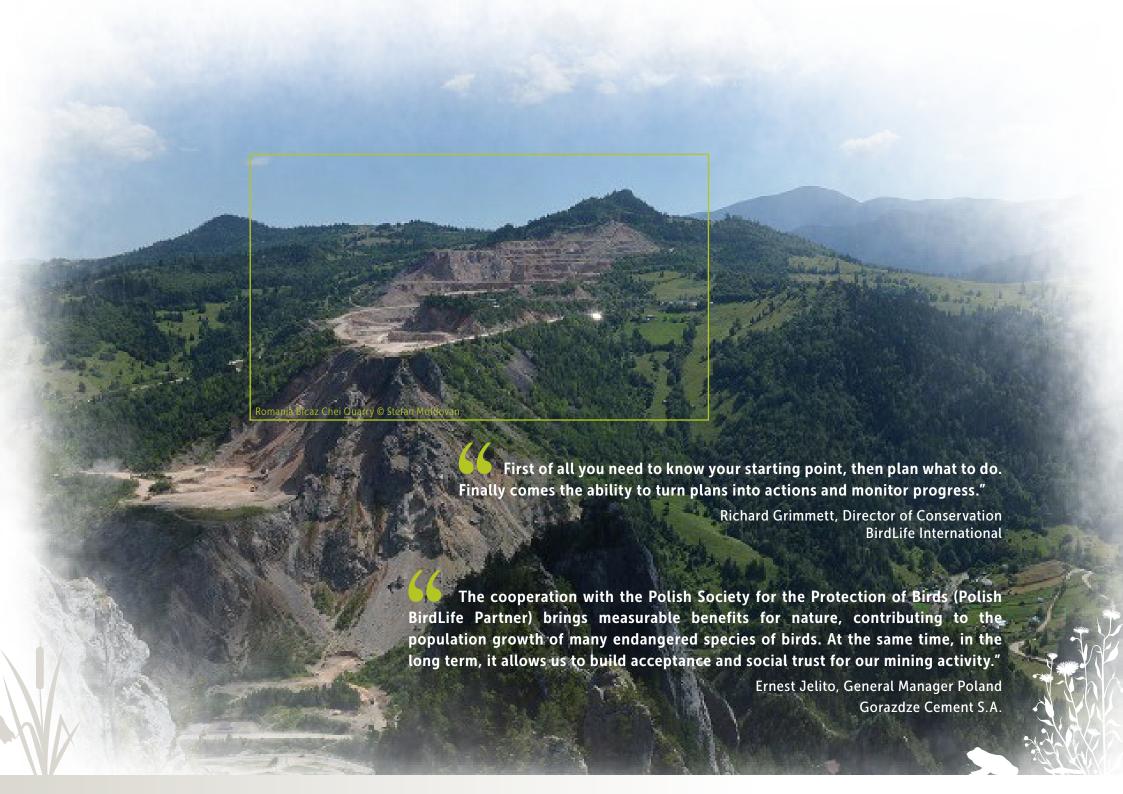
Encouraging dialogue

- * Promote the increase of biodiversity in the planning and implementation of reclamation in dialogue with stakeholders
- * After-use plans are to be discussed with all involved third parties

Putting these principles in practice is not that simple. It is important to combine operational plans and budgets, integrate data on biodiversity, mobilize resources for implementation and build support for the actions in the company and among stakeholders.







Engaging with stakeholders and communities

HeidelbergCement interacts with a large variety of stakeholders from the permit approval and consultation process to proactive engagement around biodiversity management and restoration. Such 'partnerships' bring significant business and environmental benefits to

the company. It also brings the interests of HeidelbergCement closer to those of other concerned stakeholders. BirdLife International is playing an important part in facilitating such stakeholder discussions, where nature conservation is at stake.

Ghana: Forest conservation

The forest reserves within which the critically endangered tree *Tabliotella gentii* is mostly restricted have socioeconomic value, providing local people with their basic needs and supplementary income ahead of the farming season. Ghacem and Ghana Wildlife Society are actively working with adjacent villages to include their interests in the mine rehabilitation plans for the Yongwa limestone quarry.







Germany: Reconnecting habitats

The limestone hills along the River Main are traditionally used for quarrying, grazing livestock, mowing hay and cultivation of grapes and fruit. Their grasslands have rich flora and fauna, but are now threatened by abandonment. Reconnecting the grassland areas into vital networks is essential for species survival. HeidelbergCement is helping to restore and conserve 130 ha of rare ecosystem in Lengfurt and adjacent Natura 2000 sites with the help of volunteers. Local hunters and orchard owners are also involved.







Netherlands: Integrating a quarry, nature and the green economy

Since 1926, ENCI quarry near Maastricht has attracted naturalists, fossil-hunters and anyone who enjoy the outdoors. The quarry will soon be closed and the whole area will be given back to nature and to the city. The site, belonging to the protected Mount St. Peter, is sufficiently large to accommodate nature protection, recreational activities and new green economy initiatives in an integrated way. The ENCI 'transformation plan' was approved at a public hearing in 2010.



Training. Capacity building. Policy dialogue & Project map

Training & capacity building

Through this partnership, BirdLife International has contributed to raising the ecological knowledge of over 150 HeidelbergCement employees through training seminars, knowledge exchange events and by contributing to in the HeidelbergCement Biodiversity Expert

Group. This sharing of knowledge has an external dimension too, with, for example, the two organisations presenting the partnership and individual projects regularly at European and Global Society for Ecological Restoration (SER) conferences.

Policy dialogue

An important element of our partnership is our ongoing dialogue on topics of mutual interest in the broader fields of environmental sustainability. BirdLife and HeidelbergCement policy and public affairs experts meet on a regular basis to discuss how industry and NGOs can work together on the road to a more sustainable economy and society.

In addition to strengthening our joint policy messages, for example in support of Natura 2000 programmes initiatives and EU Nature legislation, this dialogue gives us the possibility to increase mutual understanding of wider environmental issues of concern.

Project map

The BirdLife International-HeidelbergCement Project Map website¹ provides a visual summary of our joint projects around the world. By sharing these stories, the partnership hopes to inspire

future collaborations between other businesses and NGOs by clearly demonstrating that businesses can bring people and planet into harmony – and still deliver profit; the three pillars of true sustainability.







Quarry Life Award

A contest to boost biodiversity in 25+ countries

To further raise the awareness of the value of mining sites, HeidelbergCement initiated in 2011 the "Quarry Life Award" (QLA) – a scientific and educational contest. Researchers, students and citizens are invited to develop a biodiversity project in one of HeidelbergCement participating quarries and to share their findings with the scientific community, NGOs, authorities, local communities and our operating units.

Since the beginning of the QLA competition, BirdLife International has been an integral part of the International Jury, offering expertise and insight into the biological importance of projects. At a national level, BirdLife local partners have also taken a similar role within the National Juries. Through these roles, BirdLife staff have visited many of HeidelbergCement's sites, guiding QLA participants, and supporting operations to achieve the Group's goal to maximise biodiversity.

BirdLife local partners sit on

1/3

of national juries





The Quarry Life Award is an exciting initiative of our partner HeidelbergCement to harvest the creativity of approaches to quarry restoration all over the world. We have witnessed an amazing diversity of ideas, from scientific to educational, from classical to more out-of-the-box. Some of the best projects have been implemented by BirdLife partners"

Angelo Caserta, Regional Director BirdLife Europe and Central Asia





A practical sustainable partnership

The best parts of our partnership with HeidelbergCement, from my personal perspective, are the practical simple actions on the ground that bring real benefits for nature. Take a simple example in a quarry: a simple scoop or two by an excavator at the end of the winter will create a pond. Soon after, thousands of amphibian eggs will miraculously appear. A new generation of toads, newts and frogs will soon be finding their way to life! Isn't this amazing?

This business has enormous potential to contribute to stopping biodiversity loss while still doing their job: feeding the economy with raw materials and making a profit. Yes, this is amazing!"

Boris Barov, Conservation Partnership Manager BirdLife Europe and Central Asia

HEIDELBERGCEMENT

HeidelbergCement AG

Berliner Straße 6 69120 Heidelberg Germany sustainability@heidelbergcement.com



BirdLife Europe and Central Asia

Avenue de la Toison d'Or 67 B-1060 Brussels Belgium europe@birdlife.org Mapped

885

mining sites' proximity to priority biodiversity sites

ldentified

230
mining sites
of high biodiversity
value

Facilitated local dialogue with **NGOs**

Participated in

4

international scientific

conferences on
ecological
restoration

Benchmarked the company's biodiversity performance Implemented over 25 practical conservation projects

Improved trust between environmentalists and business

