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The magazine of the Mineral Products Association

mineral

products today

Second nature
delivering on biodiversity



Pushing productivity
taking a lead

March of the makers
buoyant manufacturers

Wise on water
careful stewardship

WELCOME

I AM proud to have become MPA's fifth Chairman, and especially delighted to be the first to do so in a period of sustained growth.

A new Government brings with it new challenges and we will face those head-on and in a spirit of partnership. It is good news for our industry that there is continuity of economic policy as this reduces uncertainty. It is also helpful that the previous commitment to more housing and infrastructure continues, even though delivery is still an issue.

Demand is up and is likely to remain so. Conversely, there are supply issues that have to be tackled. Labour, skill and some material shortages exist and are unlikely to

ease. Responding to these issues will be a key part of MPA's longer term agenda as we look ahead over the next ten years. It is good that we are challenging ourselves and involving our young leaders in shaping where we want to be in 2025.

In the meantime, our members are improving productivity by making their assets work harder. Those assets will deliver all the more freely if we can persuade Government to cut away some of the red tape that has such a big cumulative impact on our operations. We will certainly play our part in the welcome review of mineral extraction regulation.

Simon Vivian
Chairman, MPA



It's a fact

THE essential role played by the mineral products industry in the UK economy and in the wider life of the nation comes clearly from a new MPA Facts at a Glance publication.

A key element of MPA's *Make the Link* toolbox, the new fact file makes the connection between the industry's quarries, plants and factories and the roads, schools, hospitals, housing and energy infrastructure they deliver.

The headlines include:

- **300mt** – production in Britain
- **£21bn** – annual industry turnover
- **£6.7bn** – total gross value added (GVA)
- **£445bn** – turnover of industries supplied
- **£135bn** – value of construction as the main customer
- **80,000** – people directly employed
- **3.3m** – jobs supported in the supply chain



Recycled aggregates account for 29% of the market

The publication drills in more closely on a geographic and product-specific basis. It shows, for example, that in 2014: 111mt of aggregates were produced in England, 25mt in Scotland, 20mt in Northern Ireland and 14mt in Wales. Sales are broken down to show crushed rock accounting for 45% of all aggregate sales across Britain, with recycled

aggregates running best in Europe at 29%, and sand & gravel 27%.

MPA chief executive Nigel Jackson said: "It comes with a crystal clear message: the more we look at the numbers, the more significant our industry's contribution to the economy and the UK becomes."

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Cover photo: Swallows nesting in a quarry shed at Tarmac Dry Rigg Quarry, North Yorkshire.

Taken by Michael Cardus, winner of the employees' category in the MPA Nature Photo Competition (see page 8)



Looking to 2025

MPA has evolved and grown greatly over its first six years. But what should its direction be over the next decade?

Keen to ensure that it shapes up in the right way to serve the industry to best effect, the association has mounted an intense review and is involving not just the leaders of today but the up and coming young leaders of tomorrow. It is also intent on taking on board the perspectives of the growing number of women now working in what has for long been a heavily male-dominated industry.

An initial workshop identified key drivers that are likely to have an impact on the industry in the next five to ten years. High priority strategic issues were highlighted across six broad categories:

- Workforce development – the need to ensure a skilled workforce to meet

growing demand, overcoming the need to replace an ageing workforce with skilled newcomers

- Political change – devolution of power to English regions
- The regulatory environment – achieving greater political and regulatory certainty
- Energy – ensuring steady and cost-effective supply of carbon-efficient energy
- Water – coping with increasing water stress
- Materials – long term decline in aggregates reserves

The initial workshop also identified a number of critical uncertainties covering: politics and regulation; demand and supply; energy costs; strategy and innovation.



Looking ahead

Further workshops were taking place as this issue went to press with the aim of reviewing progress and establishing a clear vision for 2025 and a route map to get there.

Blazing a trail

THE mineral products industry is at the forefront of a new Government initiative that aims to bring in a new generation of apprentices as a key element of the drive to ensure skills for the future.

Led by MP Futures as the industry's standard setting organisation, the project has won approval from the Department for Business, Innovation and Skills (BIS) under its *Trailblazers* initiative for a new apprenticeship standard for mineral processing mobile and static plant. Detailed work is now underway on assessment and implementation plans.

MP Futures general manager Anthony Elgey has been interfacing with BIS and working closely with employers. "This is a significant step in providing employer-driven apprenticeships for our sector," he said. "It

is the first of a number of apprenticeships our employers have identified as key to their businesses and to growing a young, enthusiastic and diverse workforce to help shape our future."

Hanson UK acted as the lead coordinating employer. Its learning and development manager, Karen Wright said: It has been a real team effort with employers working together to get the industry recognised. I am confident that with the help of MP Futures, further apprenticeship standards will be developed in the future to help our sector grow."

Smaller operators participating include the Myers Group. "We have always been fully committed to apprenticeships," said training and competency manager Andy Wade. "Having a direct entry apprenticeship to the extractives industry allows companies like ours to carry on with this tradition — planning ahead to ensure the correct level of competence for managers, supervisors and especially operatives of the future."

Closely connected with the Mineral Products Qualifications Council (MPQC), MP Futures also provides leadership in the development of National Occupational Standards and works to engage future generations with the extractives sector.



Bringing on a new generation

Consistency needed on concrete delivery

MPA has made renewed representations to Government to introduce harmonised regulation between volumetric concrete mixers and conventional ready-mixed trucks.

Currently a legal loophole allows volumetrics (trucks fitted with equipment to transport the materials required to make concrete and mix it at the customer site) to slip through the safety net, classified as engineering plant rather than HGVs. It means they: can operate above the 32-tonne weight limit applied to equivalent HGVs; are not subject to the European drivers' hours safety rules; and are not part of the operator licensing regime, leaving them unregulated by the traffic commissioners.

MPA chief executive Nigel Jackson called for regulation as a matter of urgency. "It is absurd that similar types of vehicle, both delivering concrete on public roads, have such different regulatory requirements," he said. "This situation flies in the face of one of Government's key responsibilities – to improve road safety."

“TAKE THE BRAKES OFF”

Sajid Javid



MPA chief executive Nigel Jackson puts the case for a major re-think of a regulatory system that isn't delivering.

IN June, I said in this column that a new Government brought with it new opportunities and, in particular, a chance to cut some of the red tape that binds this industry. I admitted then that we were good at calling for it but less adept at specifying exactly what we need.



The good news is that the mineral extraction sector has now been included in a wide ranging review of “burdensome” regulation by the Department for Business Innovation and Skills and the Cabinet Office. We, along with energy, waste, agriculture and care homes, have been grouped in a first wave of sector reviews designed to save £10 billion over the next five years.

As Business Secretary Sajid Javid said in his announcement: ‘I am determined to take the brakes off British business and set them free from heavy-handed regulators.’ His sentiment strikes a resonant chord within this industry.

The opportunity is clearly a golden one and MPA is grasping it. Over recent weeks and months, we have been gathering evidence and feedback from our members and delivering a robust case to Government advisors. MPA members are responsible for 90% by tonnage of all non-energy mineral extraction so critical to the construction

industry and the economy.

Our response to BIS has been wide-ranging and has included a case for structural changes to both the Department for Communities and Local Government and the Department for Environment, Food and Rural Affairs and their environmental agencies. Beyond all else, we need them to become more ‘can do’ and less ‘can’t do’.

We also desperately want to see improvements to the plan-led system which can only be described as ‘questionable’ given that just 60% of mineral planning authorities have core strategies in place and only 25% have local plans. There is no point having a plan-led system without 100% coverage of up-to-date plans and, where they do exist, making decisions that ignore them.

Equally frustrating is the practice of approving applications only to have statutory agencies frustrate progress by dithering or endlessly seeking additional information they don’t understand. Currently it can take anything from five to 15 years to move from identifying an extraction site to getting it into operation. And the cost? Anything from £110,000 to approaching £1 million.

To clear the blockage, the planning system has to be given primacy over permitting. Too often, the current system seems to be about finding a reason to refuse rather than to enable. The combination of EU and UK-driven or embellished regulation has created a three-dimensional game of snakes and

ladders on a board that keeps growing. For the average mineral operator, this is a familiar battleground – but one that it is becoming ever more costly to inhabit.

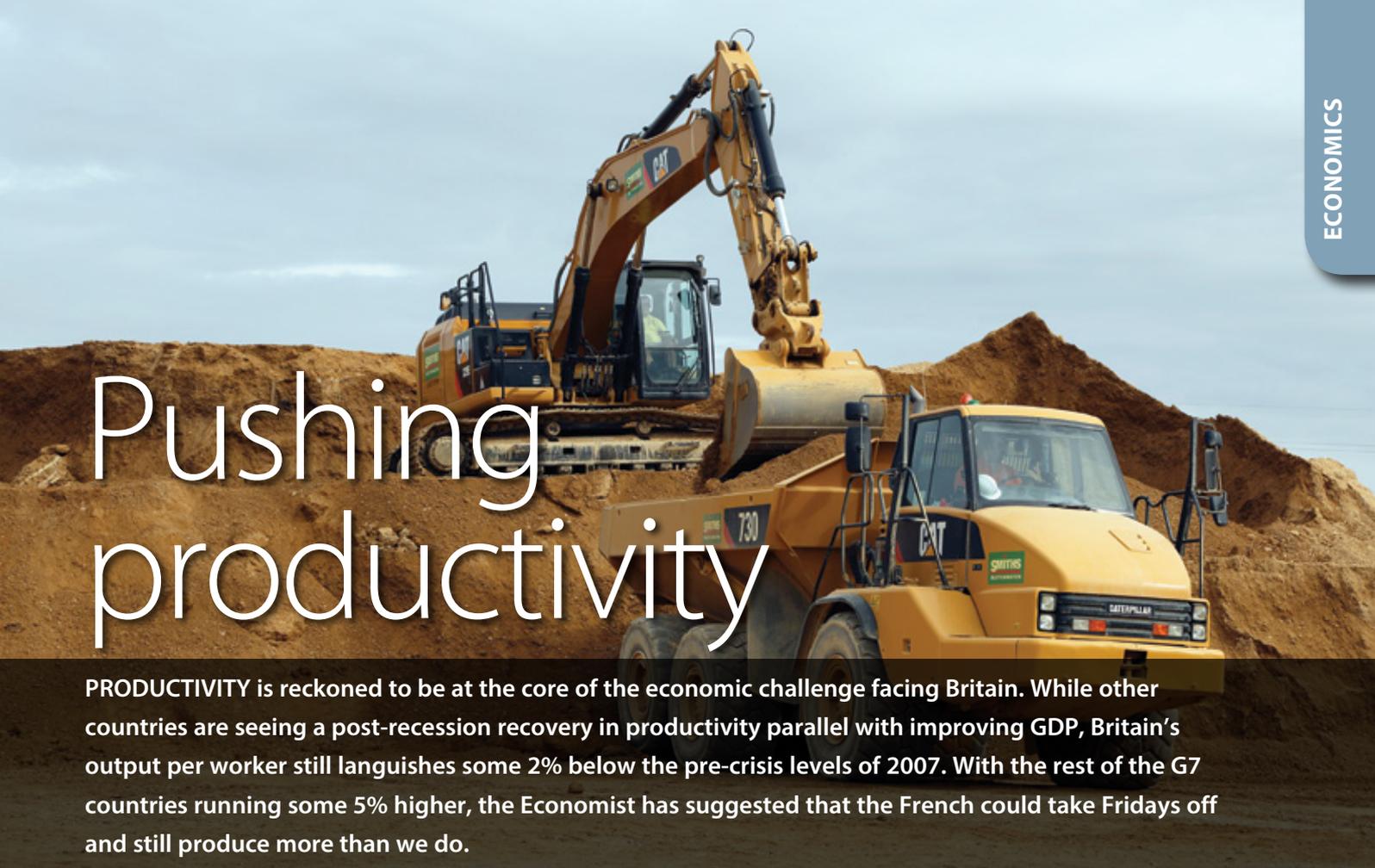
We are arguing that a major rethink is required. The plan-led system as currently operated should, we believe, be challenged. Surely, if we are ever to achieve an up-to-date plan-led system, plans should be shorter, more strategic and more consistently structured to enable quicker completion.

Removing the log jam created by the plan-led system would not only boost the grant of much needed mineral permissions (particularly aggregates) but those for housing and other built development.

Not all red tape is bad – it does create certainties, levels playing fields and enables fair competition. But there is much that needs improvement, change or even removal. It is important to stand back and look at the overall framework that creates our ‘licence to operate’. Planning and permitting should be managed in a more integrated fashion, and environmental regulators should be consolidated under one coordinated management.

A review of red tape is very welcome but what we also need is a more strategic approach. Mineral supply is not an option but an essential. The planning system needs to establish where it will come from and when. With that in place, the permitting system should then confirm how it is to be achieved. This red tape review can make a really positive difference if the Government is bold. Let’s hope the opportunity is not missed.

“Beyond all else, we need them to become more ‘can do’ and less ‘can’t do’”



Pushing productivity

PRODUCTIVITY is reckoned to be at the core of the economic challenge facing Britain. While other countries are seeing a post-recession recovery in productivity parallel with improving GDP, Britain's output per worker still languishes some 2% below the pre-crisis levels of 2007. With the rest of the G7 countries running some 5% higher, the Economist has suggested that the French could take Fridays off and still produce more than we do.

Business leaders looking around for inspiration could do a lot worse than benchmark against mineral products which is already much more productive than most sectors – and has every intention of accelerating in the future.

New figures from MPA (see page 2) show that each worker in the industry produced about £81,000 in 2013, which is 1.6 times more value added than the national average. With £21bn worth of annual turnover from 80,000 direct jobs, mineral products has a gross added value of £6.7bn and also supports £445bn of turnover and 3.3m jobs in the industries it supplies.

While MPA's director of economics and public affairs, Jerry McLaughlin, believes the industry deserves due recognition, he is in no doubt that it can do better still. "There is little general recognition that the minerals products sector is one of the more productive in the UK," he says. "This success comes because the industry has historically used its resources very efficiently. If improvements are made to the operation and efficiency of the regulatory process that is the focus for the ongoing BIS and Cabinet Office review, and if industry renews investment in plant and people, we should see further improvements."

He is insistent that the industry has a great opportunity to work with the Government to achieve positive action on the long promised cutting of red tape. "We have highlighted and costed the cumulative burden of regulation for several years. Regulations almost always have a positive intent but the implementation can become inflexible and inconsistent.

"Issues which should be part of the mineral planning process are duplicated and complicated by additional permitting requirements. The interpretation of waste regulations can be extremely frustrating, particularly where the supply of sub-soils and clays to enable quarry restoration is unnecessarily constrained; and our more energy-intensive industries struggle with policies imposing higher energy costs than overseas competitors. It should be entirely compatible to combine high operating and sustainability standards with more consistent and proportionate regulation."

MPA accepts nonetheless that progress on productivity also depends upon the industry

Each worker in the industry produced on average £81,000 in value added – 1.6 times more than the national average

now demonstrating its growing confidence through investment in plant and people and in pursuing costly planning applications for new reserves. There is also a big skills issue that has to be addressed to ensure that an industry still heavily populated by loyal long servers who will retire in a few years, has a good proportion of newcomers coming through its ranks.

Says Jerry McLaughlin: "It would be unreasonable for industry to complain about inefficient examples of regulation unless it is prepared to take action to improve productivity and to help ensure customers' needs continue to be met."

For the long term success of the nation as a whole, the mineral products industry will have to satisfy major customers such as Highways England and HS2 that it has the capacity to cope with their specific demands. Britain's drive in the future will depend heavily upon transport and other infrastructure projects – and on the materials and skills that make them happen.

Quarries & Nature 2015

Mute swans at the RSPB Langford Lowfields reserve, Notts. Taken by Roger Bennett, runner-up in the volunteers' category of the MPA Nature Photo Competition (page 8)

SECOND NATURE

Biodiversity and restoration are not just a high priority at quarries and other industry plants across the UK – they have become second nature. This year's independently judged MPA Biodiversity Awards (run in association with Natural England) and the long running MPA Restoration Awards demonstrate a huge level of achievement.

Biodiversity: landscape scale restoration

The category has been won in partnership by **Hanson UK** (Batts Combe Quarry) and **Aggregate Industries** (Callow Rock Quarry) with a 20-year series of initiatives that has effectively joined up neighbouring landholdings in the Mendips in a prime example of nature connectivity. A combination of restoration and land management has made it possible to increase the extent, quality and connectivity of habitats such as woodland and calcareous grassland.

The two companies have also shared information and worked together to introduce a grazing programme to deal with major scrub invasion of a jointly-owned SSSI known as The Perch. Other initiatives have included reconnecting the previously fragmented dormice population with a programme of corridor planting and managing existing scrub. The project has gained hugely from the practical support of the Somerset Wildlife Trust and Natural England.

At Hillhead Quarry in Derbyshire, **Tarmac** is commended for its commitment to enhancing peripheral areas, which are managed for grazing or conservation and include several woodlands and some new trees. As part of the programme it has commissioned the building of a one-mile long dry stone wall that not only helps to screen the quarry but enhances the landscape and creates valuable wildlife habitats and shelter for grazing animals.



WINNER: Dormice were amongst the beneficiaries at Batts Combe and Callow Rock quarries

Biodiversity: innovation

A category won by **CEMEX UK** in partnership with the RSPB for two projects that aim to create much needed habitat for birds whose presence in the UK is at risk. Dove Holes Quarry in Derbyshire is one of the last bastions of the tiny twite. Areas of bare ground have been sown with plants that produce seed at key stages in the season. Meanwhile, as part of an international migration routes effort, several sites across central England are being sown with a special seed mix to produce weeds that are loved by the similarly threatened turtle dove.

Other entries were all commended including **Hanson UK's Repton Quarry** in Derbyshire which was highly commended for the way in which it responded to a big change of its restoration plans as a result of the loss of pulverised fuel ash as fill. The deep and regularly shaped cells left for fill were re-modelled to create a nature reserve with an intricate mosaic of habitats from meadows through to wet woodland and from reed beds through to open water. The Derbyshire Wildlife Trust then took on the further development and management of the reserve.

The need to remove two mature oaks ahead of quarrying was not taken lightly at **Tarmac's Scorton Quarry** in North Yorkshire. Recognising that dead wood has a biodiversity value, the Scorton team re-positioned the trunks of the felled trees as monoliths and enhanced their potential for bats in particular by cutting tears, cavities and slots. Wood from the branches was spread around the parkland site to further boost the overall habitat benefit.

Facing the need to restore a listed farmhouse, at **Halecombe Quarry** in Somerset, Tarmac used imagination to create lodgings for horseshoe bats. A bat loft with access gable and landing area were built in the renovated farmhouse. An earth bank planted with shrubs and trees provided a commuting route between the roost and feeding areas.

Determined to do their bit for the threatened honey bee, the team at **Aggregate Industries' Greystone Quarry**, in Cornwall set up their own hives and used a restored tip to establish species-rich neutral grassland as a source of pollen and nectar. They have also sown nectar-rich wildflower seeds and translocated wild primroses from a new working area. Quarry manager Anthony Allday has trained as a beekeeper to look after them.



Photo: Tim Melling

Biodiversity: individual achievement

Chris Pennock reckons that jobs don't come any more varied than the one he does for **Tarmac** at its **Nosterfield Quarry in North Yorkshire**. His devotion to the biodiversity element of his multi-faceted role makes him MPA's biodiversity champion for 2015. In a typical day, Chris might be repairing a breakdown, driving mobile plant, or working with archaeologists as they undertake their excavations ahead of quarrying.

But he might also be planting reeds, maintaining some of the extensive woodland, hosting a school party or running the visitor centre which closes only on Christmas Day. Chris doesn't just appreciate the birds, animals and plant life at Nosterfield – he loves enhancing their habitats and really enjoys

sharing them with others.

Chris took on the job of managing the site's biodiversity management plan in 2008 and fed that into the biodiversity benchmark certification which it has held ever since.

He deserves particular credit for his efforts to establish the black poplar at Nosterfield. After discovering one large specimen on site, he became aware of its rarity, with only two others known to

be growing in North Yorkshire. He grew and nurtured cuttings of the male variety but then managed to source female cuttings and is now growing on seeds from them at home.



Quarries & Nature 2015

Biodiversity: planned restoration

Smith & Sons (Bletchington) wins this category with the plans for a new phase of its Gill Mill sand and gravel operation near Witney that include 61 hectares of reed beds and 66 hectares of other priority habitats. Amongst priority species it hopes to attract are bittern, barn owl, water vole, bats and otter. The project will also result in a further big increase in public access to the Lower Windrush Valley. The plans even include lakeside "eco lodges" to help fund the long-term biodiversity. They will in turn be powered by a renewable energy plant fed with biomass from the reedbeds and woodland. Once complete, the

restoration will deliver one of the largest areas of connected priority wildlife habitats in Southern England.

Other entries were all commended, **Brett Aggregates** for a project at Cliffe in Kent that involves two large lakes that are the focus for a project that aims to greatly enhance their wildlife potential by making them shallower. In doing so, the project will help to solve one of London's great challenges of the moment by using spoil brought in by river and rail from major construction projects as the fill medium.

Brett is working closely with the RSPB which has already used the same process to enhance its own neighbouring reserve, not just making the lake shallower but creating scrapes and islands.

Aggregate Industries used the process known as ecosystem valuation to demonstrate that wetland created at its Ripon City quarry in North Yorkshire will deliver net benefits to the

community of some £1.1 million. The benefits of biodiversity, recreation and increased flood storage far outweigh the alternative benefits from agriculture. Progressive restoration of the area worked since the 1950s has resulted in the development of a superb reed bed habitat. In wildlife terms, the site has great potential for birds, bats and otters and it also has the potential to attract the bittern back to the area.

In planning a new phase of its Newbold Quarry near Burton-upon-Trent, **Aggregate Industries** has been particularly conscious of the imperative to achieve restoration that contributes to the bigger picture in an area with extensive quarries. The new 160-hectare phase will build on progressive restoration that has already returned land to farming, woodland and wetland. While new planting will join up existing areas of woodland, a permissive footpath and bridleway will form a circular route covering both the new and existing site, and there will be a visitor centre as a focus for long-term public enjoyment.



WINNER: Gill Mill will increasingly open access to countryside

Photo competition

From birds nesting in unusual places to rare orchids and amphibians galore – MPA's

first Nature Photo Competition attracted some stunning entries.

Both MPA members' employees and volunteers from wildlife groups associated with quarries were invited to enter. The winner of the members' category is shown on the front cover and the runner-up in the volunteers' category at the top of page 6. Three other shortlisted shots for a new MPA calendar are shown here. More info shortly from www.mineralproducts.org.



RESTORATION AWARDS 2015



Photo: RSPB

WINNER: Middleton Hall Quarry

The coveted Cooper-Heyman Cup goes to **Hanson UK** in partnership with land owner Geoffrey Hemus, the RSPB, Aston Villa FC and the Middleton Hall Trust. The project at the 470-hectare **Middleton Hall Quarry near Tamworth** has produced a mix of football pitches, reed beds, woodland, pasture and fishing. Hanson worked closely with the Environment Agency on experimental extraction of gravel from the river bank which created islands, gravel bars and other features to enhance the habitat value and help alleviate flooding in the wider area.

CEMEX's Powburn Quarry in Northumberland is highly commended. Restoration work in partnership with land owner John Carr Ellison has created a place that is loved by both wildlife and the community, not least the local primary school which has its own direct access. The site has



HIGHLY COMMENDED: Powburn Quarry

two lakes, one for fishermen as well as nature conservation. Facilities include a bird hide, interpretation boards, a dipping pond and disabled access.

Also highly commended is **Gallagher Aggregates** for its **Workhouse Quarry, near Maidstone**. The company didn't work the aggregates but it did handle the filling and restoration. Its sister company now farms the land. The site was filled with inert construction waste that could not be recycled. Today, the completed landform includes a wildlife corridor with hedgerows linking two older woodlands, and there's also a drainage pond as another valuable habitat.

CEMEX has returned the long closed **Goddards Quarry in Derbyshire** to picturesque grassland. Having previously been hydroseeded with grass and trees, the original rock faces were then blasted to reduce their



HIGHLY COMMENDED: Workhouse Quarry

height and ensure safety while retaining fascinating fossil beds. There is a pond for newts, and a permissive path makes it possible to enjoy a route around the former quarry.

At **Hanson UK's Livox Quarry in Monmouthshire** (owned by The Crown Estate), working left steep faces and a level floor. Successful restoration depended upon making best use of limited long-stored soils and quarry waste. Amongst the emerging tree saplings you can now find bluebells, celandine, wood anemone, dog's mercury and even the rare herb paris. A commercial wild flower mix has been sown on a calcareous grassland area which is emerging on the old quarry waste and scalplings.

It is only six years since mineral was dug at **Tarmac's Woolhampton Quarry in Berkshire**. But it has already become a beauty spot, loved by fishermen and by the wider community. The land-owning Wasing Estate worked closely with Tarmac on a site that includes not just well stocked fishing lakes but land for grazing and wet woodland plus the growing of miscanthus, a high energy crop for biomass.

While work continues apace at **CEMEX's Willington Quarry in Derbyshire**, there is perfect peace for wildlife in a restored phase which is dominated by open water but which also has areas of wet grassland, tree planting and aquatic margins. What used to be modest agricultural land, now offers considerable wildlife benefits alongside the Trent and Mersey Canal.

While quarry working is ongoing at **Sibelco's Dingle Bank Quarry in Cheshire**, the restoration of 30 hectares known as Lapwing Hall creates a large lake which occupies about half the total site. Ultimately, there will be two more lakes in the wider site and there are plans for low key sailing and other uses on those areas. A programme of planting native trees was undertaken in 2011 as the final element of a restoration which is much appreciated by the local community and by dog walkers in particular.



The makers are ma

It was four years ago that Chancellor George Osborne first called for a “march of the makers” when he identified manufacturing as the key growth sector for the economy. We asked two MPA British Precast members whether they feel they are indeed now marching.

MAIN IMAGES

Above: Another Longley Concrete floor goes into place

Above, right: Plasmor has invested £5m in energy-efficient curing systems since 2010

THEY may not be universally recognised as a barometer of the economy but concrete blocks are probably as fine an indicator as you can get. When the housing market in particular is booming, the companies that provide much of the essential fabric with which to build them will similarly tend to be busy.

That certainly seems to be the case for Plasmor, a privately-owned block and block paving manufacturer which supplies a range of over 1,000 concrete products. It has recovered from a 30% plummet in sales in 2008-9, when its workforce went on short-time, to a point where it is now hitting a £60m turnover on the back of 7.5m square metres of concrete blocks. Its workforce of 350 is now up by 30 on 2010.

Meanwhile, flooring specialist Longley Concrete saw its sales drop 25% in 2009 but then managed to bounce back such that turnover has grown from £12 million to £21 million and it has come out of the recession stronger than it went in.

At present, manufacturing represents just a tenth of Britain's economic output but experts agree that it is punching above its weight and

well on its way to rebalancing the economy and reducing dependence on the service sector.

The fact that latest quarterly NHBC figures show a 14% increase in new homes being started is welcome news for the precast sector. Operators take particular heart from the fact that public sector housing is at last on the up, with a 17% increase compared with the same time last year.

Significantly, both the ambitious West Yorkshire based Plasmor and Longley were prepared to invest their way out of trouble and both have now achieved high levels of automation and energy efficiency. These are definitely manufacturers looking to the future with a confidence that bears out George Osborne's 2011 budget vision of a new Britain “carried aloft by the march of the makers”.

For Julian Slater, managing director of the Plasmor Group, short-time working for a year was a big worry. “But we had anticipated a downturn and were in a financially strong position, so a programme of major plant refurbishment projects was carried out in the period 2010 – 2013,” he says. “We also anticipated a shortage of haulage post-

rching



New technology on Plasmor's block production line



New Dewsbury batching plant for Longley Concrete

recession so invested heavily in our own haulage company."

Feedback from major housing customers is, he says, positive. "Bearing in mind that we are well used to a market which is very sensitive to economic ups and downs, progress over the last two years has been very good. It is encouraging, although general construction industry problems recruiting skilled tradesmen is a recurring theme. The current turmoil in the world stock markets is a new concern – it doesn't take much to dent confidence."

Established in 1959 by Julian's father, Antony, with a small "egg-laying" block machine, Plasmor now distributes from state-of-the-art manufacturing plants in its native West Yorkshire plus Nottinghamshire, Cheshire and County Durham. Customers in the south are serviced from two depots which receive daily stock deliveries by a unique railfreight system utilising the company's own specially converted railway wagons which form daily dedicated block delivery trains.

The company has a policy of "growing its

own" skilled staff – its current production director started as an apprentice draughtsman aged 16. Engineering skills are a key part of its success and it has recruited five new apprentices in the last 18 months with plans for more.

While believing the construction sector has enjoyed useful Government support in recent years, Julian would still like to see delivery on the long promised reduction in red tape which he insists is still worsening. Not surprisingly, he is a big supporter of the "Northern Powerhouse" initiative.

Longley Concrete was started by current MD Michael Longley's grandfather, Charles, at Dewsbury in 1947. The business has constantly adapted to market changes and progressed from local blocks to coal bunkers, lintels and agricultural products before arriving in floor beams in 1980. It currently employs 120 people over three locations at Dewsbury, Country Antrim and London. It supplies sufficient floor beams annually for between 80,000 and 100,000 homes.

"The current turmoil in the world stock markets is a new concern – it doesn't take much to dent confidence."

"We have had to constantly look at how the world around us has changed and adapt," says Michael. "If you are financially stable then a recession can actually create opportunities. We managed to keep cash in the business and, after an initial hit in 2008, we actually grew our turnover through the recession – as competitors were falling away we gained market share and came out of the recession stronger than we went in. We went into the recession with one operation and came out with three. You have got to be brave but you have also got to be sensible and we knew we had the cash reserves to get through it."

Investing in new technology has been crucial in keeping the business lean, as has the drive to reduce energy use. The company is looking at further heavy investment at Dewsbury to enable it to develop new product lines. The company invests in its own skilled operatives from an early age.

So is Longley now marching? "The election was a challenging period because developers were cautious and house-building had a three or four month lull," says Michael. "We are now definitely on the march but it can change from month to month. Confidence is a fragile commodity."

WISE ON WATER

WATER is one of life's precious essentials. While we tend to take it for granted, it is an integral part of the natural environment, giving life to plants, animals and the human race. But it is also vital to the economy – critical to agriculture, energy production and a host of industrial processes.

The mineral products industry is a heavy consumer. Water is critical to the processing of aggregates and the whole range of downline products that come from them. The industry also moves vast quantities of water to enable dry extraction of sand and gravel located beneath the water table. Discharge has to be licensed and carefully managed to prevent impacting local water ecosystems.

Both working and restored quarries are increasingly recognised as vital flood water holding areas and the lakes that are left can in themselves provide back-up water reservoirs.

Recognising the need to support the sustainability of the UK's water resources for future generations, MPA launched an initiative to better understand how much is

used. The association's new first-stage water policy sets out the operators' responsibility to minimise consumption and suggests an order of priority for sources:

- 1 **Harvested rainwater**
- 2 **Recycled water from manufacturing processes**
- 3 **Water derived from dewatering of quarries**
- 4 **Primary abstracted water from ground or surface water sources**
- 5 **Mains water from the public supply.**

A typical modern sand and gravel plant uses 500m³ of water per hour, but as much as 95% of it will be recirculated through the water management system, with most of the remainder retained in the product. Silt picked up in the washing process settles in a series of ponds and finally passes to a clean water lagoon for the process to begin again.

At the Smiths Bletchington plant near Witney (shown above), water pumped out of the quarrying area is used to re-charge ground water in the sensitive areas around an SSSI which is nationally famous for its beautiful snakeshead fritillaries.

Any excess then goes into the River Windrush to protect its levels. Other sites working dry, terrace gravels will often rely on boreholes or even mains water to top up their recirculating supply.



Water management protects an SSSI at this site in Oxfordshire

Like Smiths, CEMEX has installed water flow meters to quantify the use and transfer of water, helping identify where efficiency improvements and cost savings can be made. At its Berkswell sand and gravel quarry near Coventry, the dewatering pumps move 50,000 litres per hour. While most is recycled for washing, some 3,800m³ are used each year in the production of ready-mixed concrete.

"Energy costs can be significant when dewatering," explains principal hydrogeologist Chris Pointer. "But the new discharge system has enabled us to achieve payback of its construction costs (£2,600) in less than four months as well as ongoing savings of £8,000 per year."

MPA's policy will be reviewed in 2018, by which time it is hoped that baseline data on water usage will be available so that targets can be set to reduce consumption and best practice established and shared across the industry.

ANNIVERSARY

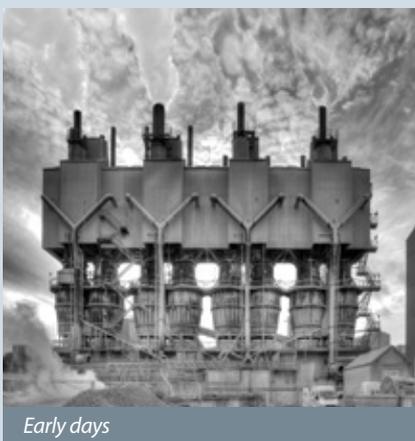
A tale of two centuries

NORTH Lincolnshire lime specialist Singleton Birch has included schools and the general public in the wider celebration of its 200th anniversary, with events and open days.

Named after William Singleton Birch, the family business started in Manchester in 1815, selling whiting which was mined at Melton Ross in North Lincolnshire and shipped out of Grimsby. It later moved its HQ to Melton Ross, where it remains to this day.

In the early 1900s, the majority shareholder was W Singleton Birch's grandson, Lionel Martin, who used his dividends to fund his passion for fast cars and founded Aston Martin. His second wife Katherine left most of her shares in trust for the benefit of the NSPCC, RSPCA and Barnados and her trust remains the largest shareholder today, with the charities receiving over £5m in dividends over the past 50 years.

The company has grown steadily, investing in the latest technology and now supplies lime products and services to customers world-wide, primarily in the steel, construction, chemical and water industries. The company has also diversified into landfill and renewable energy. A new anaerobic digester now provides 40% of



Early days

the power at Melton Ross. Non-hazardous landfill has restored 65 acres of quarried land to agriculture.

Managing director, Richard Stansfield credits the company's success to a strong partnership between the owners and employees. "We are extremely proud of our heritage and the significant contribution the company makes to national charities," he says. "Katherine Martin's altruism has permeated the company's governance through generations, particularly in the way it looks after its people. This in return is reflected by the loyalty and dedication of our workforce which has ensured that the company has remained strong and successful through even the most difficult economic times."



Today's plant

AWARDS

Winning precasters

THIS year's MPA British Precast annual dinner brought the industry together at the Leicester Marriott Hotel for presentation of the prestigious Best Practice Awards.



All British Precast members who had submitted entries were congratulated and the winners announced during the evening. This year's Health & Safety Award went to Aggregate Industries for Load Security; the Innovation Award was won by HAVSco for their Hand/Arm Vibration Monitoring entry; the 2015 Sustainability Award went to H+H for their Energy Management System & Reduction initiative and Thorp Precast took the Project Award for the new headquarters building for insurance giant, Admiral in the centre of Cardiff (shown above).

Winners of the award for Outstanding Contribution to Health & Safety were named as Wayne Smith from Stanton Bonna Concrete, the Cebastone Workforce at Forticrete and Nick Moore and Chris Dane, both from Brett Landscaping and Building Products. Nick's award was in recognition of his role in the design and implementation of an improved traffic system at Brett's Barrow-upon-Soar site while Chris's contribution to the company's Faversham site achieving over 2,000 lost time incident free days was celebrated.

FUND

Safeguarding restoration

THE MPA Restoration Guarantee Fund has been relaunched, providing a valuable public safeguard to ensure that if an MPA member is unable to meet its restoration obligations due to insolvency, the work can be completed.

Lynda Chase-Gardener, newly-appointed chairman of the fund said: "It gives communities, landowners and planning authorities the confidence that even when an operator goes bankrupt, quarrying will not leave a legacy that they will be left to clean up. It is an essential pledge that we are very pleased we can make.

"MPA members are proud of their record on restoration. They know that unless worked-out sites are not only left safe and tidy, but also carefully designed to maximise their value to local communities, landowners and

the wider environment, the industry can never claim to be truly sustainable."

First introduced by the Sand and Gravel Association (SAGA) in 1975, the fund, which covers England, Scotland and Wales, has

been strengthened by successive mergers to become what it is today. It now has over 70 members, covering sand and gravel, crushed rock aggregates, industrial sands, lime and dimension stone. Cement operations have their own arrangements.



MPA fund guarantees restoration

WILDLIFE

Nest protection for quarry birds

TWO pairs of rare bee-eaters have set up home and are raising chicks among a colony of nesting sand martins at Hanson UK's Low Gelt Quarry in the North Pennines. The unusual visitors have built nests by burrowing in the quarry banks.

The RSPB has set up a 24-hour nest protection programme and a viewpoint from where visitors can get a good look at the birds. Since bee-eaters are a schedule 1 species, intentional or reckless disturbance of their nests is a criminal offence.

RSPB, said: "Bee-eater sightings have really been on the increase in recent springs and we're delighted to confirm they are breeding in the UK for the second consecutive summer. Pushed northwards by climate change, it is highly likely that these exotic birds will soon become regular visitors to our shores."

Hanson UK's senior sustainability manager Martin Crow said: "We often have to cordon off areas in our quarries where sand martins and little ringed plovers are breeding, but a bee-eater sighting was a surprise to us all. Great credit goes to the employees at Low Gelt for recognising and protecting these birds."

While bee-eaters are a very rare breeding bird in the UK, increased sightings in recent years have prompted speculation of colonisation.



Photo: Mark Thomas (RSPB)

With their kaleidoscopic plumage, bee-eaters are one of Europe's most striking and beautiful birds. Normally found nesting in southern Europe, this is only the fifth record of them breeding in the UK in the last century.

Mark Thomas from the

MARINE

Coastline facts

THE British Marine Aggregate Producers Association (BMAPA) and The Crown Estate have produced a series of regional brochures designed to help overcome misconceptions about the impact of dredging.

Brochures specific to Norfolk, Suffolk and Humber describe the geological evolution of each coastline, the origins of offshore sand and gravel resources and the influence of waves and tides on the mineral deposits.

The aim is to provide an understanding of how and why coastline erosion occurs and information on the scale of dredging activity in each region as well as how it is assessed, regulated and monitored.

“Dredging takes place in licensed areas well offshore and there are no physical processes that link it to the natural erosion of the coastline that has been occurring since prehistory,” explains BMAPA director Mark Russell.

“Rather than representing a threat to coastlines, the marine aggregates sector plays a key strategic role in responding to the challenges of natural coastal change by supplying sand and gravel to large scale coast defence and beach replenishment projects.”



RAILWAYS

Keeping upgrade on track

A NEW high-performance concrete developed specifically for railways has been used for the first time as part of an innovative track-laying system in the Winchburgh Tunnel on the busy mainline link between Glasgow and Edinburgh.

HOPEFlow Rail is a bespoke mix developed by Hope Construction Materials to complement a pre-cast concrete rail system, used widely for high-speed rail links

across Europe. To meet the specifications of the project, Hope's technical team designed a high-performance, self-compacting concrete with extended workability and high early strength.

The project is expected to make a significant difference to travellers, allowing the network to carry 30% more passengers between Scotland's two largest cities, as well as stimulating economic growth and unlocking investment opportunities.

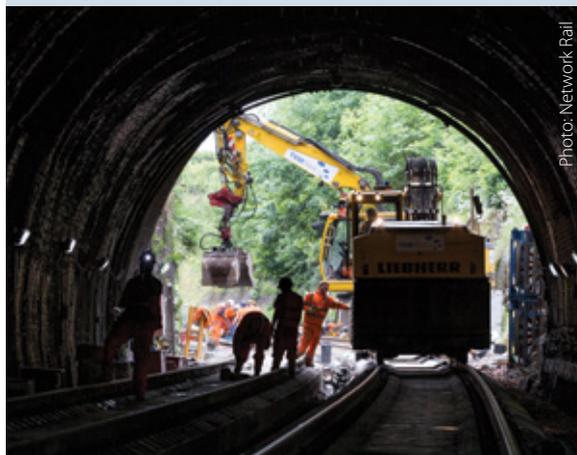


Photo: Network Rail

Hope's business manager for Scotland, David Morrow, is proud the new concrete has been used to develop the first Scottish high-speed mainline. “We believe it will be the first of many projects to use the product and that it will make a difference to rail improvements throughout the UK,” he said.

READY-MIX

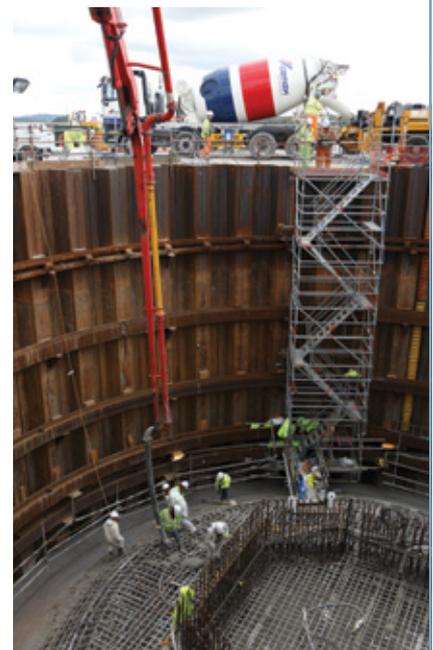
Across the Mersey

CONTINUOUS concrete pours are a key feature of the project which is putting a £2bn six-lane toll bridge across the Mersey between Runcorn and Widnes.

materials were available at the plants for batching the concrete,” he said.

CEMEX has built dedicated ready-mixed concrete plants either side of the river and in recent weeks has handled two 24-hour plus pours for construction of the north and south pylons. A total of 375 loads and 2,600 cubic metres of concrete went into those key stages alone. A total of some 120,000 cubic metres of technically complex mixes will be supplied over a 29-month period ahead of the new landmark bridge opening in 2017.

CEMEX regional director Craig Williamson was delighted with the long pours. “They were a challenge and directly involved a total of 65 colleagues with input from other areas of the business to ensure the



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Mineral Products Association

Products
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Safer by sharing

FROM dealing with workplace stress to minimising the risk from crystalline silica, MPA Safety Days have become an invaluable part of the industry's drive towards "Zero Harm".

Over recent years, MPA has run such events all over the country, bringing together operators, health and safety experts and machinery manufacturers to share best practice and highlight on-site safety with quarry workers. One recent event hosted by JCB in Staffordshire (pictured) attracted 110 delegates from 18 companies across the Midlands.

A North Safety Day was hosted by Singleton Birch at Melton Ross Quarry in July. Grundon hosted a South East event in September organised by SEQLG.

JCB quarry manager, Mick Brookes was delighted with the level of interest. "It was great to see such a mix of companies represented," he said. "We divided the delegates into six groups enabling everyone to participate in all the workshops."

The programme included a session on haulier safety which covered the need to safeguard vulnerable road users, coupling and uncoupling of artic trailers, overturns,

loading and offloading mobile plant, and working at height.

BOC led a workshop on gas safety, demonstrating the correct start-up procedure when working with oxy-propane. A hazard perception competition had delegates competing to spot the most hazards. Babcocks provided a session on contractor safety, while Spillards and Mentor Training covered mobile plant safety.

The hot topic of mitigating the health risks posed by crystalline silica was discussed in a workshop led by Hanson. Meanwhile, Dawn Collins from Mental Health First Aid delivered a session on stress in the workplace and offered practical solutions.

"The workshops helped those who attended to realise that at times, stress can affect all of us, and that mental ill health can affect any one of them," says Dawn. "But crucially, that there are ways of reducing stress levels and building individual resilience daily."



Other companies offered advice and information outside the workshops. Corgin demonstrated their MistCannons in the quarry; Checkpoint showed the importance of wheel nut movement indicators; and Brammer advised on the latest PPE and hand and power tools.

MPA health and safety manager, Kevin Stevens believes such events are a key element in working towards zero harm. "They provide a practical opportunity for members of all sizes to share information on key industry risks, to learn from other people's experiences and to take what they have learned back to the workplace," he said.

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