

Blowing hot and cold can be positive

Time to introduce true energy integration, writes **Andy Yuill**

As the good weather settles across Scotland and temperatures rise, people start to think about ice cream and BBQs. With air-conditioning blasting out cool air into cars and offices, it's also an appropriate time to think about the oft-forgotten side of low-carbon heating: low-carbon cooling.

For some, the need to keep things cool is a year-round requirement. Keeping temperatures under control is a core issue for distribution centres and hospitals, computing data centres and manufacturing. But the heat removed is all too often lost to the atmosphere. We're missing a chance to recycle it.

It would therefore seem to be a logical step for support for low-carbon sources of cooling and reuse of waste heat to be included in a scheme designed to decarbonise the heat energy sector. Yet the Renewable Heat Incentive specifically excludes renewable energy delivered in the form of cooling from support and also excludes waste heat as a source of heat energy.

The technology for integrating waste heat and cooling loads already exists in a tried and tested form: the heat pump. Heat pumps take excess heat from one location and move it to another location which requires heat – hence the word “pump”.

The support mechanism to bring about integrated heating and cooling systems could be much simpler than the current Renewable Heat Incentive. Instead of picking and choosing preferred technologies and solutions, we would bring forward a cost effective and technically efficient low-carbon future for heat.

Excluding cooling and reuse of waste heat from the Renewable Heat Incentive misses the huge opportunity for low-carbon heating and cooling. To make a meaningful reduction to the emissions associated with heat, our largest single use of energy in Scotland, then all options which have the opportunity to reduce emissions must be on the table.

● **Andy Yuill** is senior biomass manager at naturalpower.com renewable energy consultants

Hatching a plan for family

Hands up if you were a member of YOC as a kid? I know I am not the only one out there that wore the badge of the RSPB's Young Ornithologist Club with pride. I say with pride, but I didn't actually tell many people about it in case I was labelled as the geeky birdy kid. I guess I enjoyed learning about wildlife so much that I didn't want anyone to spoil it for me. I always loved being part of that club, but I didn't realise just how much it had influenced my life until I left university and fell into my career with environmental charities. Just over a year ago I got a job as Visitor Experience Manager at RSPB Scotland and I have finally been able to fully embrace that nature geek on a full time basis!

I grew up in Yorkshire and we were extremely lucky to have a garden to play in. I have fond memories of watching birds on the feeder, picking blackberries to make crumble and squashing rose petals in water before trying to convince my sisters I had created a new perfume. My grandparents and parents encouraged my love of wildlife, because they shared the same interests. Even now my Nana, at the age of 93, keeps a garden bursting with plants, colour and life. We often went to the Lake District on holiday and I felt that I would never get a better place in the UK to see wildlife. Thirteen years ago I



There are activities and all the practical facilities you need for a fun day out at RSPB Scotland reserves, says **Anna Pugh**

moved to Scotland. RSPB Scotland manages 77 reserves stretching from the most southerly point at Mull of Galloway to Fetlar in Shetland. Within these reserves lives the most amazing array of flora and fauna from bustling seabird cliffs to the largest remnant of ancient Caledonian pine forest. The breadth of species to see in Scotland is astounding; you can catch a glimpse of red squirrels, otters and dolphins or go on the hunt for lesser known species such as pine hoverflies, twinflower or natterjack toads.

Despite a great variance in the needs of Scotland's wildlife and habitats, one thing unites them all. Increased human activity is putting them under growing pressure and in many cases is causing their decline. But issues like this are a far off concept for a lot of people; it is something that happens in remote parts of the world to elephants, rhinos and pandas.

Even though I am aware this is a real problem happening here as well, it is easy to forget the effect it has on my life. Something that brings it home to me is that within my lifetime (I am a child of the early 80's) around half

of Scotland's seabirds have disappeared. At the rate the decline is happening there is the potential that seabirds will no longer breed in Scotland during my lifetime.

The enormity of this can be overwhelming and downright depressing, but we all have our part to play. You will be aware of the little steps you can do to help - switching off your lights, recycling waste, walking or cycling and reusing wherever possible. But alongside these actions we should all be doing one more thing that's critically important too. We should be outside, enjoying nature.

New research suggests that only 10% of children play outdoors in the UK these days, with increasing access to tablets and televisions and a reduction in green spaces given as some of the reasons.

The health and wellbeing benefits of play outdoors are well documented but the other side - what nature needs to get back from us - is seldom documented. Fundamentally, we need to allow children to have adventures outdoors; to feel, explore and smell nature, and to build emotional attachments to the natural world so that they feel a need to conserve it.

This is where my work at RSPB Scotland is focussed. We want families to head out together to discover and enjoy nature, while we provide all the practical facilities you need for a fun day out. There has been plenty of research done on what people want when they head out for a day, the basics being a loo, a brew and a view, but at our 'great for family' reserves we can offer so much more than that.

RSPB Scotland's Loch Leven and Lochwinnoch reserves are open all



year round and are an easy journey from Edinburgh or Glasgow. They offer drop in events, pond dipping, bug hunting, den building and natural play areas.

There are also bird hides and feeding stations where you can get fantastic close up views of wildlife. Meanwhile, our Loch Garten Osprey Centre is open from April to August and not only allows you to watch

time in the outdoors

the ospreys nesting, but gives you a great chance of seeing red squirrels and an array of forest birds. Our resident ospreys Odin and EJ have just hatched the second of their two chicks this year, so visitors can see them grow and watch their progress.

If you aren't close to these reserves though, we have plenty of other activities going on across the country, from events at Mersehead, to the new

kids Discover Zone at Loch Lomond and Dolphinwatch in Aberdeen. So if like me, you have fond memories of YOC or of playing outside as a child, embrace that inner wildlife explorer and get outside with the family to simply enjoy nature. For more information on RSPB Scotland's reserves head to: www.rspb.org.uk/reserves ● **Anna Pugh**, Visitor Experience Manager, RSPB Scotland.

↑ The health and wellbeing benefits of play outdoors are well documented



It's set Fair to be more than a Game with a chance to engage with the countryside

Trust's flagship event offers something for all the family says **Hugo Straker**

Now in its 28th year, the Game & Wildlife Conservation Trust (GWCT) Scottish Game Fair attracts more than 27,000 visitors over its three days from all across the UK. The Scotsman is headline sponsor of the event, which runs from 1-3 June at Scone Palace near Perth.

GWCT is an independent wildlife conservation charity and its Game Fair presents an excellent opportunity for visitors of all ages to engage with the countryside and discover more about the importance of conservation, Scotland's game and wildlife management and countryside sports.

This year, the GWCT stand highlights the trust's research and showcases how science can be translated into practical management advice for farmers and land managers, helping

to ensure a thriving countryside rich in game and wildlife.

Grass to Grouse is the theme for this year's central exhibit, and its various displays will promote how sympathetic management of a hill edge livestock farm can be efficient and carefully integrated with sporting enterprises without loss of biodiversity. This is especially relevant as GWCT now has a second demonstration farm (the first is in Leicestershire) at Auchnerran on Deeside, where it's 1200 acre sheep farm abuts 12,000 acres of leased grouse moor. At Auchnerran there will be work to assess how one land use can benefit and influence the other, and how both can derive gains from positive management and sharing of resources. Some of this will be mirrored in the central display at the Fair.

The Fair has important educational and conservation messages to deliver, but it also offers a lot for families and children, and the Wee Beasties Marquee is set to be a hive of activity, quite literally. Younger visitors will learn all there is to know about honeybees and pollination with experienced beekeepers on hand as well as a live observation hive. Wildlife sculptor Julian Jardine and the Royal Highland Education Trust will also be running a variety of free workshops offering children the chance to get their hands dirty with clay model making.

This year's Artist in Residence is Jonathan Pointer and visitors will have the opportunity to meet him and see him in action. Jonathan is inspired by Victorian art and his work, which has been exhibited

widely both nationally and internationally, covers wildlife and game.

This year's Fair programme includes the return of a number of favourites such as the Dog and Duck Show, the Sheep Show, the Tug o' War and the ever-popular Terrier Racing. There are also a number of competitions running throughout the event including fly casting, gnat and clay shooting, and the gundog tests and scurry. On Sunday, the Fred Taylor Memorial Trophy for Working Hill Ponies, which is expecting a record number of entries, takes place in the Main Ring, and new for 2016 is a display of horse logging, offering a wonderful insight into this environmentally sensitive method of timber extraction.

There are also a number of "have a go" activities including archery, fly

tying and casting, clay shooting and much more.

Three Sisters Bake return to the Cookery Theatre to showcase their fantastic bakery skills throughout the Fair while Christopher Trotter will focus this year on forgotten foods and be creating some innovative recipes to share. The Food Hall showcases Scotland's finest food and drink producers including baked goods, meats, chocolate, seafood, condiments and whisky and much more.

There will be more than 450 traders retailing crafts, clothing, equipment and sporting goods. There has been an unprecedented level of trader applications for 2016 and visitors can expect lots of great shopping and bargains.

Another development for 2016 is the new Forestry Section. Represented

within this section will be some of the leading woodland management and service companies, tree growers, chippers, harvesters, ATVs, saw milling, tree surgery and equipment suppliers.

All in all the Fair makes for a great family day out. ● **Hugo Straker** is chairman, GWCT Scottish Game Fair. Please visit www.scottishfair.com for more information on ticket prices, advance tickets and fast track entry.



The 'big house' is part of a wider community in a changing rural landscape

And changing perceptions is a vital job for landowners argues **David Johnstone**

Ask the general public about their perception of Scottish estates and it is likely that the Monarch of the Glen image will feature prominently.

The image of the big country house may be the stereotype picture for some but it doesn't accurately reflect the diverse face of modern landownership in Scotland.

In the last month I have been fortunate enough to visit Craigengillan Estate in Ayrshire. A well-maintained house does lie on the estate - but it is the people and community who cherish Craigengillan that are its heart.

The estate was purchased by Mark Gibson in 1999 and over that period, he has transformed the local perception of Craigengillan.

Lying close to Dalmellington and the nearby village of Bellsbank, Craigengillan is in an area whose economy has been hard-hit over recent decades.

When Mark took over the running of the estate, it was very much separate from the people of the local area. Fences and wiring ensured that private areas were kept private.

However, removing this unwelcome and unnecessary security was the first change - and a thriving stable yard, a healthy farming enterprise and work on forestry and conservation are just some of the areas where Craigengillan has partnered with local people to not only create employment but also chances and opportunities.

Yet it is not just about business. The estate encourages people to walk, learn and care for the land, whilst a stream of local school-

children from the nearby primary school recognise Craigengillan as their outdoor classroom, with the estate owner and staff always on hand to help teachers ensure their pupils have opportunities that many other schools would envy.

One of Mark's major achievements in this regard was the opening of the Scottish Dark Sky Observatory in 2012. With the area recognised for its low levels of light pollution, the observatory not only provides a learning resource for children but brings tourists from both home and abroad.

Why is this important? What Mark has created at Craigengillan may not be exactly replicated on every estate across Scotland - but what is achievable is a recognition that landowners should be as inclusive and as engaging

as they can be. At our recent spring conference, addressed by the new cabinet secretary for environment, climate change and land reform, Roseanna Cunningham, there was a clear acknowledgment by us that we are in a new era of landownership.

What landowners do and the wide range of businesses they operate are shaped by the political landscape - and how eventual has that landscape proved to be in recent years. After an intensive two-year land reform debate we now have a Community Empowerment Act and a Land Reform Act that have very significant implications for rural Scotland as a whole and the land business sector in particular.

The question now is how land-based businesses choose to respond.

There are those who characterise landowners and estates as arrogant dinosaurs implacably opposed to change and hopelessly out of touch. It is a very easy if not accurate caricature but we do need to ask ourselves how much do we occasionally contribute to that stereotyped image.

However, we also need recognition for when we do get things right. Now the dust is settling on the recent Land Reform Act, there is a very compelling case to be made for a rural concord - a fresh start in which government, community bodies and landowners work together in a spirit of renewed co-operation.

A better climate of co-operation could bring about a host of benefits for communities across Scotland. If we are able to achieve this then I hope land businesses will be in a better position to have their contribution recognised in future years. We know that land reform is likely to be an ongoing conversation - the challenge for landowners is to ensure that the work of people like Mark Gibson is just as synonymous with landownership as tweed and country houses.

● **David Johnstone**, chairman of Scottish Land & Estates

