

X Mill Memories

The Magazine of the Mills Archive Trust

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Past, Present and Future

Elizabeth Bartram

Welcome to this issue of Mill Memories, in which we explore endings and new beginnings.

Last month we bade farewell to Rachel Riddell, who has done a great job in running our Lottery-funded project, 'Reading emPOWERed', over the last couple of years (see pp. 8-11). We also said goodbye to our Development Officer Nathan Trill, who is relocating. Many of you will have heard from him during the last few years. We wish them both well and have no doubt that they will go on to do great things.

Design-savvy Iba Tony has joined us as our first Communications Officer. Iba is already doing a great job ensuring we tell more people about our work, from creating posters advertising volunteer opportunities in the local area – which has already led to three new volunteers – to sharing updates and information on our social media platforms. You can find out more about Iba and the various ways to hear from us on p. 34.

We hope you enjoy reflecting on recent activities and anticipating future milestones with us. A big thank you, as always, to our kind Friends and supporters, whose generosity enables us to keep saving, preserving and sharing milling history with as many people as possible.

One aspect of archives that I particularly enjoy is discovering predictions our predecessors made about the future. It is not difficult to find glimpses of people's hopes and dreams. Even when we favour different routes, ultimately we all hope for a better future in some form.

Much of what we do as an archive involves anticipating future interests and needs; which records should we collect for future historians? What will millwrights and other mill custodians need in order to keep caring for mills in the future? How will our archive and library grow and how will people expect to access the information contained therein? How will young people view the history and potential of renewable energy in a world affected by climate change? What will the nation's future milling industry look like, and how can we ensure we keep working to document and understand it?

As a small and independent charity, we have always had to be comfortable with change and uncertainty. One thing is certain: We will keep finding ways to ensure we have the funds necessary to provide a permanent, safe home for milling history and for free public access. And we will remain ever grateful to everyone who has supported us as we look ahead to our 24th year.





Discovering Renewable Energy Through Heritage

Between 2023 and 2025, The Mills Archive Trust ran the Reading emPOWERed project, supported by the National Lottery Heritage Fund. Our aim was to explore how the history of wind and water power could be made relevant to today's conversations about renewable energy and climate change. Over two years, the project involved hundreds of people in Reading and has resulted in new collections, resources, and experiences that will continue to be used long after the formal funding ends.

One of the most visible outcomes was the Reading's Milling Heritage walk linking twelve local sites, which you can read about on p. 33, and which has been very popular; one participant commented: "I walk past these places daily and never knew their history."

Work with schools was another important strand. In partnership with Jelly, a local community arts organisation, we ran creative workshops for over 150 children across four primary schools in some of Reading's most disadvantaged areas. Pupils linked windmills and waterwheels with modern turbines through art projects. Their paintings and models now form part of a Community Art Collection, displayed in the Archive and online. Teachers reported that the workshops helped bring geography and history lessons to life.

Opposite: Children's art workshops; Rachel putting together the community book loan collection.













Opposite: Facts and figures from our project evaluation report, compiled by Dr Louise Greenstock. Above: Reading Hydro volunteers handing over items.

Young people played a significant role through internships and placements. Interns worked on projects ranging from building a digital exhibition on renewable energy to creating teaching resources for schools. Two teenagers on work experience even produced a "climate anxiety" book and social media posts showing how local mills inspired modern renewables. Several interns have since chosen heritage and sustainability as career paths, underlining the longer-term value of these opportunities.

The project also supported a local community benefit scheme called Reading Hydro in creating its own archive, which we will care for and make publicly available. Reading Hydro CBS raised funds to install and operate a water turbine on the River Thames, not far from the centre of Reading. Based on the former site of an historic mill (Caversham Mill), the group's work provides an example of a community-based energy project established near an historic site. We are working with them to ensure that their work is preserved and accessible for generations to come.

Behind the scenes, Reading emPOWERed enabled us to strengthen our own collections. We conserved and catalogued more of our collections

*************** REACH

66

Walkers took the guided Reading Renewables Route walk 1,453

New Mills Archive Trust social media followers*

*LinkedIn; Facebook; Instagram combined 1,386

New subscribers to the Mills Archive Trust enewsletter 150

Primary schoolaged children experienced Reading emPOWERed art workshops >525

People meaningfully engaged in the Reading emPOWERed Project





Increased preservation of wind and waterpower collections with local relevance Newly archived materials chosen by the local community and a new archive established

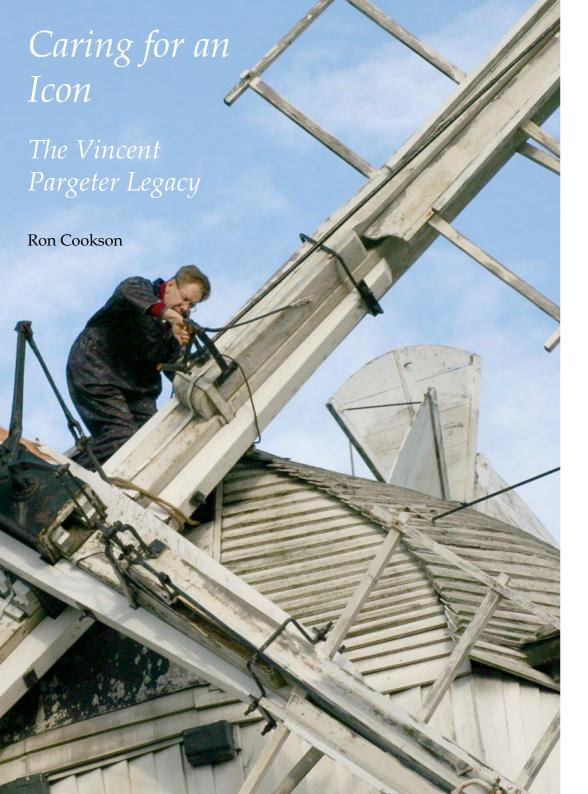
Increase in novel ways to generate interest in wind and waterpower

Increased visibility of the Trust and integration into the local heritage ecosystem

and received new ones, including the papers of Dr Peter Musgrove CBE, a pioneer of UK wind energy, and Professor David Elliott, a leading academic campaigner from the 1970s onwards (see pp. 14-15).

Not everything was straightforward. Delivering such a large project with a small team stretched our capacity, and we learned the importance of clearer planning with partners and more realistic budgeting for staff time. But the outcomes have been significant. New audiences discovered the Archive, heritage materials have been safeguarded, and we now have stronger links with schools, community groups, and environmental organisations.

Reading emPOWERed showed that the history of mills is not only about the past. For many participants, it was their first encounter with the idea that windmills and watermills are direct ancestors of today's renewable technologies. The project has helped place Reading's milling heritage into the wider conversation about climate change, and in doing so, has opened the door for future work connecting archives, communities, and sustainability.



I have become oddly attached to and fascinated with Vincent's work. His importance to the surviving mills in the UK has quickly dawned upon me, and I feel privileged to see his legacy first hand through his collection here at the archive.

Hayden Francis-Legg, trainee cataloguer

October 31st marks ten years since the sudden death of Vincent Pargeter, one of Britain's leading millwrights. His loss was widely felt, with windmills across the country saluting him on the day of his funeral. Yet the concern that preoccupied Vincent, how to safeguard millwrighting as the number of skilled practitioners dwindled, remains urgent today.

The Mills Archive Trust established Caring for an Icon both to honour his memory and to take decisive action. We are leading a comprehensive, nationwide needs analysis to map the state of this endangered craft. By engaging stakeholders across the sector, we aim to identify gaps in training, barriers to entry, and opportunities to build a sustainable skills pipeline. The results will form an authoritative report and development plan, shaping long-term investment in heritage craft skills.

Alongside this, we are cataloguing thousands of items entrusted to us by Vincent and other millwrights: drawings, tools, and project records that preserve knowledge for future apprenticeships and skills programmes. The need is pressing. Many of Vincent's contemporaries have already passed away, taking their expertise with them. By supporting this initiative, you can help preserve Britain's historic mills while creating new pathways for young people into skilled, sustainable work.

Please send a cheque to the Mills Archive Trust or donate online: https://new.millsarchive.org/vincent-pargeter-legacy-appeal/



Article about turbine built on Costa Head in the Orkneys, 1952

Mills to Megawatts

Elizabeth Bartram

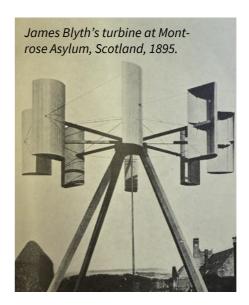
Last year we received €10,000 from the Council of Europe and the European Commission through their European Heritage Days initiative.

The story of wind energy across Europe

Working with the World Wind Energy Association and an energy archives expert, we focussed on shedding light on the history of wind energy and the pioneers involved, looking most closely at the UK, Germany and Denmark. With suggestions from the public, and using our archival and library materials, we created a digital map which is navigable by country. This map records and illustrates key moments in the historical developments of wind energy, connecting the early appearance of windmills in the twelfth century with the electric megawatt-generating wind turbines of today.

Discovering other wind energy archives

We also embarked on an initial survey to identify wind energy archives in other repositories across Europe, to understand their contents, identify





potential archives at risk, and to explore how we might signpost researchers to other archives as well as our own. If you would like to receive an overview report of the survey results, please get in touch with us by emailing me at director@millsarchive.org

Looking forward

This project is in many ways a pilot; there is much more to the story and many more historical events worth documenting and sharing. Subject to securing additional funding, we plan to scale up our activities and uncover the interconnected histories of wind energy across many countries, and in the fullness of time it is our intention to establish an international network for archives with wind power records along with researchers interested in accessing such archives. We have certainly not forgotten water power, and we envisage a similar project with a water power focus in the future. We would welcome views and suggestions about developing such a project.

Visit this URL to view the map: https://new.millsarchive.org/mills-to-megawatts/



Renewable Energy Collections

Nathanael Hodge

One of the key areas of growth at the Mills Archive over the past few years has been our work in the area of renewable energy. While our foundation collections focussed on the traditional uses of wind and water power, we have begun to build up a new set of library and archive material which tells the story of the development of technology to use wind and water power for electricity generation.

Our approach to developing our collections begins with research and relationship building with key individuals and organisations in the field. One of the most significant is the World Wind Energy Association. The WWEA collaborated with us in publishing an article in the 2022 International Council on Archives' peer-reviewed journal, 'Comma'. We have also taken part in live webinars together, most recently presenting on the history and development of wind energy – the video is available on YouTube.

To discover what other archives are collecting in this area we conducted a survey, funded by the European Union and Council of Europe as part of 'European Heritage Days'. This funding also allowed us to develop an interactive map highlighting some of the wind energy developments and pioneers in countries including the UK, Germany and Denmark, available through our website (see p. 4), as well as to arrange a meeting at the German Windpower Museum with delegates from the Trust, the WWEA and the Museum (see photo overleaf), for the purposes of relationship building, and to identify from what other archival support the renewable energy area might benefit.

Alongside organisations we have built connections with individuals who have offered us their archives. Peter Musgrove was a pioneering researcher at the University of Reading, who designed vertical-axis wind turbines and was one of the founders of the British Wind Energy Association (now RenewableUK). His collection was donated to us in 2023 and has been catalogued by Elizabeth Bartram, with additional work from volunteers Rebecca and Amelia, and more material yet to be donated. Peter's donations have also substantially enriched our library collection.

David Elliott was Professor of Technology Policy at the Open University whose research interests included the development of sustainable energy technologies and renewable energy systems. He has also made significant contributions to our library, including the first 50 books in Palgrave's "Energy, Climate and Environment" series, for which he was editor (2007-2023). Perhaps most interesting however is his donation of pioneering alternative technology publications "NATTA Renew" (1979-2009) and





Above: Peter Musgrove explores items from his archive with volunteer Rebecca.

"Undercurrents" (1972-1984). Our volunteers and interns have frequently been fascinated by the stories and details these contain, which we hope to share more widely.

In addition to these two collections, we are in the processing of acquiring and cataloguing archival material from renewable energy author and advocate Paul Gipe, who runs the 'Wind Works' website, and from renewable energy pioneer Peter Fraenkel, whose photographs document his work with renewable energy in developing countries throughout the world.

We are keen to expand our collections further, so if you are aware of any renewable energy related archival material looking for a home, we would love to hear from you.

Elizabeth Bartram

Archives are alive: they can grow, and they have the power to shape how we see and experience the world. Our team has explored how to support individuals and groups to create archives of their own, to contribute to a growing archive, and to draw creative inspiration from archives.

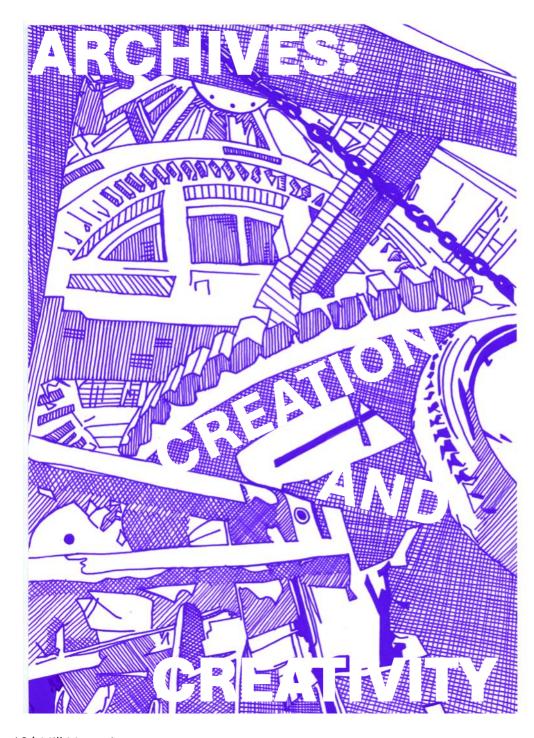
We have seen people wield pens, paper, metal, cameras, collages, and canes to produce sculptures, pictures and poems inspired by wind and watermills.

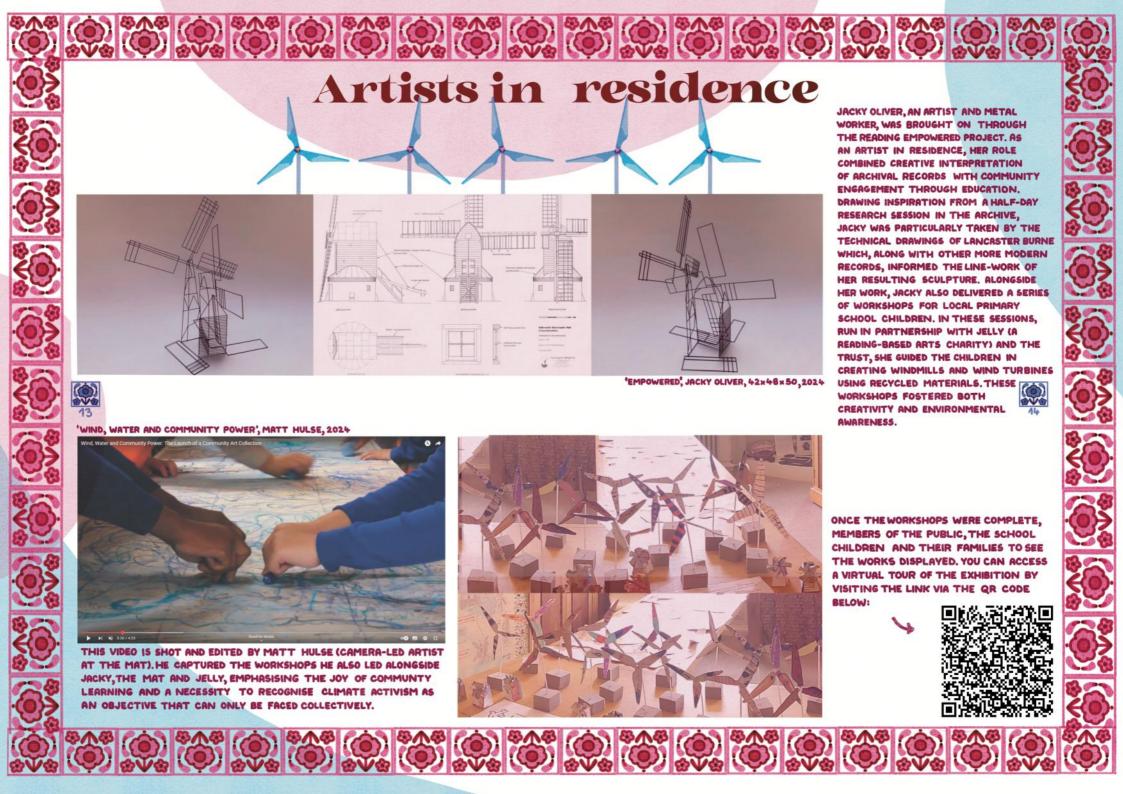
We have reached out to people young and old, expert and novice, and have collected donated art pieces from local people to establish our first 'community art collection'. The following pages explore some of the pieces that have been created, and some of the people who have gotten involved. We hope that these inspire you. It's never too late to get creative!

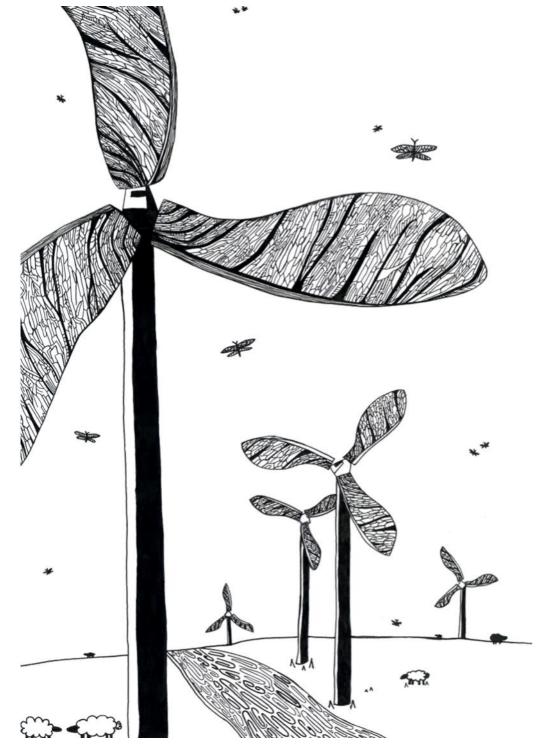


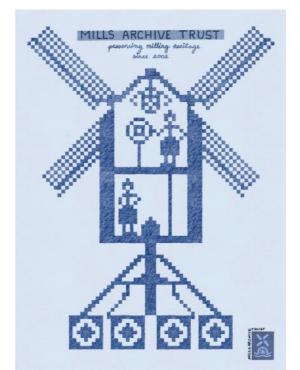
Above: Making a rubbing from a flour bag stencil at one of our art workshops.

Opposite: Interior of Haddenham Mill, Cambs, by Nyah Addicott. Overleaf: Pages from our 'Alternate Currents' magazine, designed by Catalina Iliuta.









Artworks by Catalina Iliuta (above), Polly Bodgener (right), Sofia Pantsjoha (below) and Nyah Addicott (opposite).







The Mill as Muse

Nyah Addicott

This summer I have been carrying out an internship at the Mills Archive Trust as a digital storyteller. My goal was to create an online exhibition which, through a theme of my choosing, would unite mills across time. Within my first week, I researched different ideas ranging from mills in wartime, the destruction and restoration of mills, and mill art through time.

With support from Elizabeth, Ron, Mildred, and Nathanael, I decided that the exhibition would look at mill art, exploring anything from traditional artworks, like paintings and drawings, to art found in advertising, technical diagrams, and medieval manuscripts. Throughout my second week, I refined the topics that I wanted to include in the exhibition, and it was during this time that I became aware of the art of Karl Wood.

In the archive, we hold 1,400 sketches that he completed of windmills during his lifetime. I was aspirational and decided I wanted to include all



of these artworks in the exhibition using a map tour. To do so, I worked with the archivist Nathanael to organise the data about each sketch by date and location. From here, I learned how to use the map-creating software on Arcgis to link each drawing to a coordinate on the map. This was quite challenging to begin with, as there were many technical difficulties faced, but eventually I had created nine maps that covered over 30 years of his life.

During my research into Karl Wood, I learnt that he completed a painting of every windmill he visited as well as the sketch. In the archive, we don't have any of these paintings, so I reached out to multiple sources that might know where I could acquire some. Through this, I came into contact with the Gainsborough Heritage Association, who sent me scans of 13 Karl



Sketch of Thornton le Clay mill by Karl Wood, 13 April 1933.

Wood paintings and showed interest in featuring my complete exhibition in their tea rooms. This helped me gain communicational skills in a professional manner and also allowed for the Mills Archive Trust to grow their connections further.

During the creation of this exhibition, I stumbled upon many hurdles, one of which was copyright. I completed a section about mill artworks in

books, and one of these books was Windmills by Sir William Frank Brangwyn and Hayter Preston. After learning that art becomes available in the public domain after 70 years of the artist's passing, I became aware that the art in this book was not yet in public domain, and I would have to obtain permission to use them or not use them at all. I was determined to use these artworks, so I reached out to the copyright owners and was granted permission to use them. This was really exciting as it helped me further develop professional interpersonal skills, as well as teaching me about copyright.

After having presented the exhibition in its early stages to the team, Ron suggested that it would also make for a great book. The concept of creating a book enticed me, and I instantly started researching software that could be used to do this. I landed on Adobe InDesign and spent the next few weeks copying the exhibition over to a book format. Having never used InDesign before, this was a new challenge that I was keen to face. With the help of Iba, our communications officer, and Google, I grew familiar with the software and created a book which I thought was as captivating as the exhibition. During the designing of the book, I also researched printing and costs and realised that it would cost a significant amount of money to produce the book. Through meetings with the team, we decided that crowdfunding would be necessary in order to publish the book, which is something that I hope to work on with the Mills Archive Trust beyond this internship, as a volunteer.

Taking a break from the exhibition, I was asked to be on the editorial team of a magazine that was being created by another intern. The magazine has a focus on renewable energy and its links to traditional milling, and it is formatted in an artsy style (see pp. 24-25). We had meetings to discuss the content of the magazine, as well as what it would be called and the audience that we wanted it to reach. These meetings provided me with the opportunity to share and grow ideas in a team. Whilst this wasn't part

of my job role, this was a really fantastic opportunity, and I am grateful that I got to be a part of this team.

For the digital exhibition, I believed it was important to inspire a new generation of people to create art of mills, philosophising that anyone can make art. As an art student myself, I frequently create artworks for my degree, and I decided to use some of these skills in this internship. I began to draw different mill-themed artworks, which captured both the modern roller mill and more traditional mills. I thoroughly enjoyed creating these, and hope that some of these drawings may inspire others to create art. I also collected artworks from people who worked, volunteered or interned at the Mills Archive Trust, emphasising that you don't have to be an artist to produce wonderful artworks.

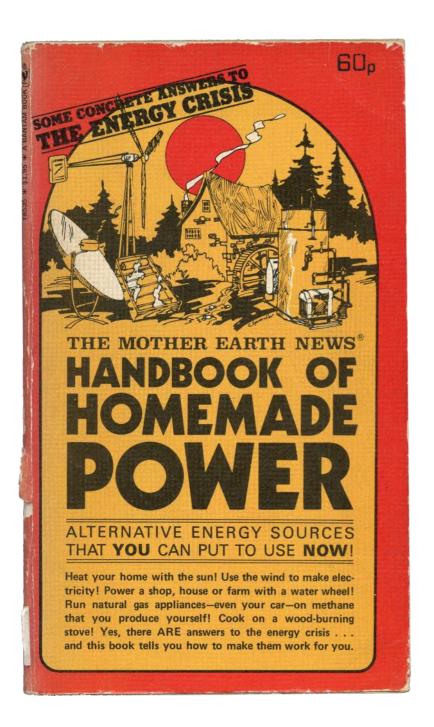
When researching specific mills in this exhibition, I needed to access some physical archival information. This taught me valuable skills about handling archives and ensuring that these are correctly preserved. It also allowed me to further my research abilities in finding information from books and records that are not digitised.

This internship has been a fantastic experience, and it has been amazing to work in a team of such amazing people. The Mills Archive Trust has helped me develop new skills and learn about a whole new area of information—mills. When I started here, I was unaware about the influx of information and artworks that surrounded mills, and how important they are to society. Recording the history of mills through artwork has been both challenging and enthralling. I have discovered artworks that I didn't know existed, and I hope this exhibition will educate others about the mightiness of mills and their significance in culture.

You can view Nyah's exhibition in full here: new.millsarchive.org/ grains-of-inspiration-the-mill-as-muse/

Opposite: 'The Bewitched Mill', Franz Marc, 1913





Self-Sufficiency, Participatory Energy, and the DIY Wind Turbine

Iba Tony

The DIY windmill has long represented more than energy. It embodies autonomy, creativity, and the refusal to accept that power – electrical or political – should always flow from top down. From 1930's American homesteads, to nomadic camps in Inner Mongolia, to Welsh valleys and Danish farms, small turbines have powered experiments in living differently.

These experiments range from meticulously engineered wind turbines scaled for industry, to a bicycle wheel and a few salvaged parts becoming a modest source of electricity. The accessibility of its design allows many to iterate and innovate on a smaller scale – to take energy into their own hands. As the climate crisis accelerates, the call for large-scale renewables grows louder, but so does the need to preserve participation, intimacy, and imagination in how we produce and use energy.

In the 1930s United States, before rural electrification, hundreds of thousands of small turbines, known as "home light plants", powered farmhouses across the Great Plains where the grid didn't reach. These systems were tools of self-sufficiency and survival.

Their designs travelled. By the 1980s, China had become a leader in microturbines, with over 110,000 installed. Many produced just 50 to 200 watts, small enough to be carried on horseback across Inner Mongolia, where one in five nomadic herders relied on them for radios and lights. These systems thrived because they were simple, repairable, and adapted to local needs.

Decades later, the same spirit re-emerged in rural Malawi. 14 year old William Kamkwamba, unable to attend school during a famine, built a windmill using a library book called *Using Energy*. With tree poles, a

bicycle wheel, and scrapyard parts, he generated power for his family's home, and later pumping water for irrigation. His story, told in *The Boy Who Harnessed the Wind* (2019), shows how knowledge and determination can transform scarcity into innovation.

By the 1970s, many in the UK were questioning centralised energy not only for its inefficiency but for what it represented: dependency. In Appropriate Technology:
Technology with a Human Face,
P.D. Dunn argued that technology should serve people, not alienate them. Appropriate technology (AT) was designed for local conditions, built from accessible materials, and simple enough to maintain yourself.

HOMEMADE POWER: WIND WIND: HOMEMADE POWER FIGURE 4 nected at any time and there is a certain loss of power in the capacity (it produces 20 to 30 kilowatt-hrs. of energy per inverter (typical efficiency being 80 to 90%). month and charges a 12-volt battery at rates up to 14 If you're looking for a windmill which will serve needs up amperes), the unit is very reliable and has been produced for many years. A 7 mph breeze is sufficient to start charging, and to a few kilowatts, you must consider larger machines. One source for them is Elektro gmbH of Winterthur, Switzerland. full output is reached in a 23 mph wind. For a cabin, campsite, This manufacturer's units employ three-bladed propellers trailer, camper or boat the Wincharger would be adequate to ranging from 3.5 to 5.0 meters in diameter with output ratings serve the electrical needs of 12-volt lighting, radio, shaver and from 2,000 to 5,000 watts. The equipment produces 110-volt DC and, as usual, is employed in conjunction with a bank of It should be noted that when 120-volt AC appliances are to be accommodated, an electrical device called an inverter must The Elektro units are of sophisticated design with blades be used to convert a wind generator's 12-volt DC to the higher which may be adjusted or "feathered" to compensate for vary-AC. The size and cost of this stationary converter depends on ing wind speeds. The propeller shaft is coupled to the generthe maximum wattage of the various loads which may be con-

Magazines like *Undercurrents*, *Mother Earth News*, and *The Whole Earth Catalog* circulated sketches, manuals, and stories from experimenters who saw renewable energy as a political act. One issue asked directly: "How can I build a small windmill that's simple and cheap, yet delivers a useful amount of energy?"

It was a question of both practicality and philosophy - how ordinary people could take control of their power, quite literally.

Within the AT movement, debates soon emerged. Some argued for complete personal autonomy: your own house, your own turbine, your own future.

Others, like Godfrey Boyle, called for community-scale solutions. He warned that while small may be beautiful, systems that are too small risk fragility, while those that are too large risk alienation.

This tension is still with us. Large scale renewable projects are essential, but they can reduce us to passive consumers. DIY systems may empower, but they demand time, tools, and security that not everyone can access. The challenge is finding a middle ground where technology remains participatory while meeting real needs.

Building a windmill requires more than curiosity; it takes land, skills,

and stability. True off-grid living often assumes freedoms from rent, wage dependency, or urban constraints – out of reach for many. This raises an uncomfortable question: who gets to opt out of centralised systems?

Above: Pages from the 'Handbook of

Homemade Power', published by

Mother Earth News, 1974.



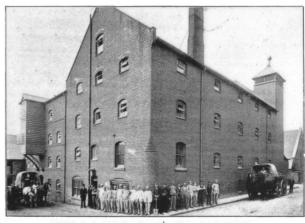
Commercial small wind products provide a bridge, opening renewable energy to those unable to build from scratch. But while they democratise access, they also risk turning sustainability into just another consumer choice, stripping away the creativity and intimacy of grassroots innovation.

The challenge is to extend the spirit of DIY innovation—openness, repairability, and creativity—into systems that are accessible to everyone. It keeps technology human. A homemade windmill won't save the world, but it teaches skills, sparks imagination, and builds resilience. It keeps alive the principles of the right to repair and local autonomy in an era when sustainable technologies are increasingly locked behind patents and proprietary systems.

The way forward isn't either/or. It's both. We need offshore wind farms and community repair café's or makerspaces (e.g Reading's rLabs). Without large-scale reform, we won't decarbonise quickly enough. Without grassroots experimentation, we risk building a renewable future that feels as alienating as the one it replaces.

Sustainable futures aren't handed down. They're built, adapted, and practiced. By you, and me.

Left: William Kamkwamba's windmill in Wimbe. Malawi. Photographed by Tom Reilly, 2007.



Mildred Cookson

Reading's Milling Heritage Walk

The walk featuring the story of the mills in Reading was an initiative of our trustee Margaret Simons who offered to do a 'mill walk' for Heritage Open Days. These walks were all sold out last year and this year they are already fully booked. We have produced a fold-out illustrated leaflet with images of the 11 mill sites and it includes a map. The small pocket leaflet has been distributed around Reading and so anyone can do the walk on their own if they wish.

Margaret's walk takes in most of the sites and lasts around 2 hours. It starts at the front of Watlington House with everyone being given the leaflet, then an introduction to the Trust. On specific days an exhibition is on display inside the house with artifacts, images etc. of the mills—sadly all but a few have now gone. The history for most of the sites though is fascinating and there will be a more comprehensive talk on the sites on our web site.

The sites include the Abbey mill, the Corn Stores and Corn Exchange, Reading Prison which had a fully productive flour mill powered by a treadwheel, the Oracle, once the site of St Giles Mill where the 12th century wooden pit wheel was unearthed in the excavations. It is now on display at Blakes Lock Museum which itself has an exhibition of the history of the water turbine.

Keeping in Touch

Iba Tony

Hi! I am Iba, a designer who stumbled across the Mills Archive Trust almost by accident. I first joined as a volunteer, cataloguing books for the shop and researching DIY energy. Not long after, Liz kindly offered me the role of Communications Officer. In just a few short months, I've learned so much about the incredible collections here, and my hope is to share this wonderful resource with a wider audience.

Become a Friend - Help Save our Shared Heritage

Our millions of records and thousands of publications reveal the milling past that has shaped everything from the food we eat to the energy we use. In preserving our past, we also gain the tools to help shape the future. The regular support of our Friends ensures that:

- traditional millwrights have access to the plans, repair notes and records they need to preserve the UK's mills.
- aspiring craftspeople can discover the knowledge to hone their

skills



 we can preserve the history and culture of milling, and importantly, make it accessible to you.

If you are interested in safeguarding our shared milling heritage, join the Friends of the Mills Archive Trust. Visit millsarchive.org/friends to find out more or scan the QR code.

So, where else can you hear from us?

We regularly post articles, updates, and event news on our Facebook and Instagram pages, with occasional updates on LinkedIn too. These platforms are a great way to keep up with stories from our library and archive catalogue.



For more fascinating articles and weekly updates about our work, you can join our newsletter at millsarchive.org/newsletter or scan the QR code. If you would like to keep receiving Mill Memories, let us know at



