

RURAL HISTORY TODAY

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Weathering the summer

John Martin and James Bowen reflect on the effects of the 2018 heatwave and compare them with those caused by the hot summer of 1976.



Image: Dominicus/Johannes Bergsma

The summer of 2018 saw an extraordinarily prolonged period of warm and dry weather centred not only on Britain, but also the key grain producing regions of north-west Europe and southern Russia. In Britain it tied with those of 1976, 2003 and 2006 as the hottest since detailed records began in 1910.

At the time, the heatwave featured extensively in the press, particularly in terms of its effects on agriculture and food production. Supermarkets warned of widespread shortages of fruit and vegetables like broccoli and cauliflowers, and salad crops such as lettuces. Reports raised long-term fears of food scarcities, since prolonged cold wet weather in the

spring had delayed the planting of crops and the excessive heat had inhibited their growth. Potatoes were particularly affected – raising the possibility of substantially higher prices. In the event these shortages were not as acute as earlier accounts had predicted. Under the circumstances, it is very tempting to conclude that British agriculture is now considerably more resilient and able to deal with the effects of prolonged periods of dry weather than in the past. However, such opinions may be misplaced, particularly given the challenges posed by a changing climate.

Rising temperatures

In its first major report on climate change since 2010, the Meteorological Office's UK Climate Projections 2018 study warned of the likelihood of significant temperature rises. In the 1990s, there was less than a 5 per cent chance of having a hot summer like that of 2018. It is now thought that by 2050 that chance rises to 50 per cent. Under the highest emissions scenario, the study predicts that by 2070 summer temperatures could be 5.4°C warmer than the average reached between 1981 and 2000 – and that those summers will be much drier too. According to the Meteorological Office, such conditions will prevail if emissions of carbon dioxide continue to increase. The 2018 heatwave inevitably invites comparisons with previous periods of hot dry weather. These include that of 1934, which significantly affected agricultural production and encouraged farmers to install pumps to improve their water supply. Reports in the *Farmers Weekly* in 1934 referred to arable crops being badly affected, while the growth of moisture dependent potatoes and sugar beet were severely retarded and turnip crops ruined. Livestock production was adversely affected by the shortage of forage, leading to a reduction in milk yields while calves even died in the Vale of Evesham due to a lack of water. The long hot summer of 1976 is widely considered as the benchmark against which more recent periods of prolonged hot dry weather have been compared.

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Image above:
National Parks are 70 –
Sprinkling Tarn, the Lake District



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Doncaster: an object lesson

Sarah Holland explores the way in which items from local museums and archives, as well as objects in the landscape, highlight the key themes of her new book *Communities in Contrast* – a case study of Doncaster and its surrounding villages.

One of the first objects acquired by Doncaster Museum, purchased for 10 shillings in 1912, was an agricultural labourer's smock. Although it is not rare to find such smocks in agricultural museums, its inclusion in Doncaster's collection is significant. It suggests that the curator recognised the historical value of the object at a time when Doncaster was becoming increasingly urbanised and industrialised, and such clothing was becoming obsolete. The smock was a utilitarian overall worn by some male agricultural workers in the nineteenth century, varying in material, colour and length. It remains a distinctive garment of the countryside.



Agricultural labourer's smock (Heritage Doncaster)

Behind the iconic smock lay a complex group of agricultural workers, with collective and individual identities. This workforce is featured throughout the book, which looks at everything from their social hierarchies to their living and working conditions. Agricultural workers exercised considerable collective agency in the labour market. As the chairman of a local agricultural society argued: 'the labouring classes were a class of the community neither landlords nor labourers could possibly do without'. The bargaining power of farm servants is revealed in local newspapers, the *Doncaster Chronicle* and *Doncaster Gazette* (both available at Doncaster Library) which provide details of wage demands and patterns of hiring at the Doncaster Statutes during the mid-nineteenth century. The reports demonstrate how social hierarchies emerged amongst agricultural workers, with the more skilled and more experienced able to command higher wages. The newspapers also provide detailed accounts of the moral campaign to reform hiring practices, and its economic undertones – with farmers and landowners seeking to curb the increasing wage demands.

Imprints on the land

The Victorian countryside was undoubtedly hierarchical, where the ownership of land conferred power, and the role of landownership and landowners in the development of rural communities is considered towards the beginning of the book. The Doncaster district was considered an attractive proposition for landowners during the nineteenth century, and these included industrialists investing in landed estates. The Brown family, industrialists from Leeds, purchased the Rossington estate from Doncaster Corporation in 1838. Over the next half century, they put their imprint

on the estate. The parish church was substantially rebuilt, and the iconography adorning it is indicative of the landowners' passion for fox hunting. They also erected model cottages that combined aesthetic qualities with practical considerations, and were described as 'attractive and well built'. Each had three bedrooms, at a time when the norm was still only one or two. That is not to say all the cottages at Rossington lived up to this ideal, and the quality of cottage accommodation in the Doncaster district was examined by Royal Commissions and discussed at length by local clergy.

The chapter on living and working conditions uses parliamentary reports and local newspapers to examine the variation between and within rural communities. At Warmsworth, the Revd. CE Thomas noted that although some improvements had been made, many cottages were still inadequate, with poor drainage and ventilation and only one or two bedrooms – compelling parents and children to share rooms and use kitchens as additional sleeping quarters. Another key concern was the lack of cottage accommodation and the long distances labourers had to walk before starting work.

The material culture of agricultural knowledge is embodied in a medal awarded by the Doncaster Agricultural Society to Mr J Allison for the category of 'best sheep – extra stock'.

The Doncaster Agricultural Society, first established in 1845 and re-established in 1872, was an important town-based organisation that connected various rural communities in the district. It is discussed in great detail in the chapter on rural economies, which examines agriculture, industry and micro-commerce. The agricultural shows held in the market town were the pinnacle of the Society's calendar and were always a hive of activity. The iconography of their medals

The Revd Surtees of Sprotbrough, giving evidence to a Royal Commission on agricultural employment noted that: “The main grievance of the agricultural labourer in this part of the world is that he has to walk often so far to his work, as many villages have not sufficient cottage accommodation in proportion to their acreage, and if he has to walk three miles to his work, still he has to be on the spot at 6am with the others”.

is particularly striking: a sheaf of wheat, livestock and agricultural implements are all symbolic representations of agricultural practices in the Doncaster district. This medal, often on display at Cusworth Hall, reflected both the type of farming and the pride taken in livestock.

School log books

School log books contain a wealth of information and anecdotes about life in rural communities, and are used in the second half of the chapter on religion and education. The intertwined nature of education and child employment in agriculture were at the fore of many entries in local log books, providing an insight into how agriculture affected school attendance. For example, an entry from the Warmsworth school log book in August 1871 noted several children were away from school ‘thinning turnips’. On 18th August 1871, it was noted: ‘Closed the school for 1 month for harvest holidays. School reopens September 17th’ but on Monday 17 September ‘Obliged to give another fortnight holidays as the gleaning has only just about begun’.

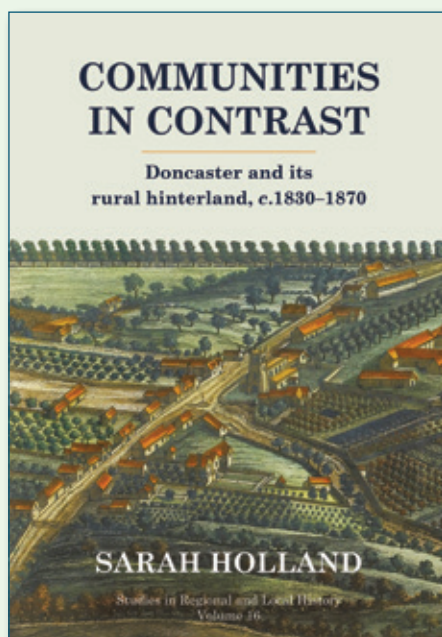
Through October, children were



Model cottages in Rossington (author's image)

gathering potatoes and the school master was prompted to write that ‘no great result can ever be looked for in this school without compulsory attendance’. Debates about the education of children in rural communities paid close attention to their employment in agriculture. It was argued that legislation compelling attendance would impact negatively on farmers and farming; and yet without limitations attendance at school was hard to enforce. Even after the 1880 Education Act, the rhythm of the

agricultural calendar and the demands of farm work continued to disrupt attendance at village schools. On 3rd October 1892, when Warmsworth school reopened, it was noted that: ‘owing to the lateness of the harvest and the wet weather of the week ending September 24 most of the children were still in the fields’ and on 29 June 1893: ‘Several boys absent – turnip singling. Half day holiday to go to the Doncaster Agricultural Society’s Show’.



► *Communities in Contrast* (University of Hertfordshire Press (£35 h/b) www.herts.ac.uk/uhpress/uh-press demonstrates what a case study of a northern market town can tell us about village differentiation. It explores how and why rural communities developed in what was chiefly an industrial region, and notably how the relationship between town and country influence this development. It highlights the multi-faceted nature of rural communities and explores the concept of agency.

A. Suggested National Parks

1. The Lake District
2. Snowdonia
3. Dartmoor
4. The Peak District and Dovedale
5. Pembroke Coast
6. Cornish Coast (selected parts)
7. Craven Pennines
8. Black Mountains and Brecon Beacons
9. Exmoor and the North Devon Coast
10. The Roman Wall

B. Reserves for possible future National Parks

1. The Broads
2. North York Moors and Coast
3. Dorset Coast and Heaths
4. Berkshire and Marlborough Downs
5. North-East Cheviots (Till and Coquet)
6. North Pennines (South Tyne, Wear and Tees)
7. Swaledale Pennines (with part of Wensleydale)
8. Howgill Fells (upper Lune)
9. Merioneth Coast and Mountains (incl. Berwyns)
10. Plynlimon
11. Radnor and Clun Forests
12. Elenith Mountains (Elan, Towy and Cothi)

C. Other amenity areas

Northern:

- Northumberland Coast (part)
- South-west Cheviots
- Bowland Fells
- Nidderdale Pennines
- Industrial Pennines
- Charnwood Forest
- Cannock Chase
- Delamere Forest

South-western

- The Cotswolds
- The Mendips
- The Quantocks
- Cornish Coast (remaining parts)
- South Devon Coast
- Blackdown Hills
- Dorset Downs

Western (Wales and the Welsh Marches)

- Anglesey Coast
- Lleyn Coast
- Denbigh Moors
- Clwydian Range
- Cardigan Coast
- Gower
- The Epyynt
- South Shopshire Hills
- Malvern Hills
- Forest of Dean and Lower Wye

Southern and Eastern

- The New Forest
- Hampshire Downs and Hindhead
- South Downs
- Forest Ridges (Horsham to Battle)
- North Downs
- The Chilterns
- Breckland
- Suffolk Heaths and Coast
- North Norfolk Coast

This year sees the seventieth anniversary of the National Parks and Access to the Countryside Act, write Catherine Glover and Richard Hoyle.

The Act received the royal assent on 16 December 1949 and laid down the mechanism by which national parks could be 'designated'. By 1957, ten national parks had been established in England and Wales.

The 1949 Act did not come out of a blue sky. Its immediate prehistory is well known: the Dower Report (1945) and the Hobhouse Report (1947). Less attention is paid to the earlier debates over national parks and the lobbying campaigns that they spawned, and the changing idea of what a national park should be.

American inspiration

People in England used the phrase 'national park' from the 1870s onwards, especially of the New Forest. There was an awareness of national parks in other countries, especially the designation of undeveloped wilderness areas as national parks in the United States from 1872. In England and Wales, movements to protect particular places emerged in the second half of the nineteenth century: the New Forest, Epping Forest, and Thirlmere in the Lake District.

A number of factors came together in the 1920s. Chief amongst them was the new mobility allowed by motor transport which allowed industry and housing to spread into the countryside. The implications of this, and the rapid landscape change that it engendered, was the subject of an influential essay by Patrick Abercrombie published in *The Town Planning Review* in 1926, 'The preservation of rural England'. But there were also local grievances which attracted national attention.

In 1927 there was agitation in the New Forest as a result of the Forestry Commission cutting some of its ancient and ornamental timber: there were calls for the area to be treated as a 'national park dedicated to the enjoyment of the public'. A couple of years later, Lord Bledisloe started making the argument for another state-owned area, the Forest of Dean. Bledisloe had visited national parks in Canada and the USA and recommended "several excellent sites for 'camps' (after the American model), with plenty of space for canvas hutments,



Vaughn Cornish: *The Leafy Elm, Sandhurst*

recreation halls, open-air swimming baths, parking accommodation for cars, availability of good drinking water, and no serious lack of roads radiating therefrom to places of national interest or exceptional beauty". His motive was to offer the benefits he and other privileged aristocrats derived from owning country houses to his less fortunate fellow countrymen. At Malham in Yorkshire, the erection of a bungalow constructed from wood below the Cove in 1929 generated letters to the papers and discussions as to how to prevent such despoliation happening again. There seems to have been a public desire for preservation of the countryside.

Saving scenery

In September 1929 the Labour government established a committee under the chairmanship of Dr Christopher Addison to look at the need for national parks. His committee (and the letters column of *The Times*) was inundated with suggestions as to the areas which should be declared to be national parks. Bledisloe, and many correspondents to *The Times*, recommended the Forest of Dean. George Bernard Shaw joined the fray, advocating the Malvern Hills as a national park, to protect them from being 'blasted away' by quarrying: 'England is delivered over to such a sect of Levellers as Cromwell never had to face'.

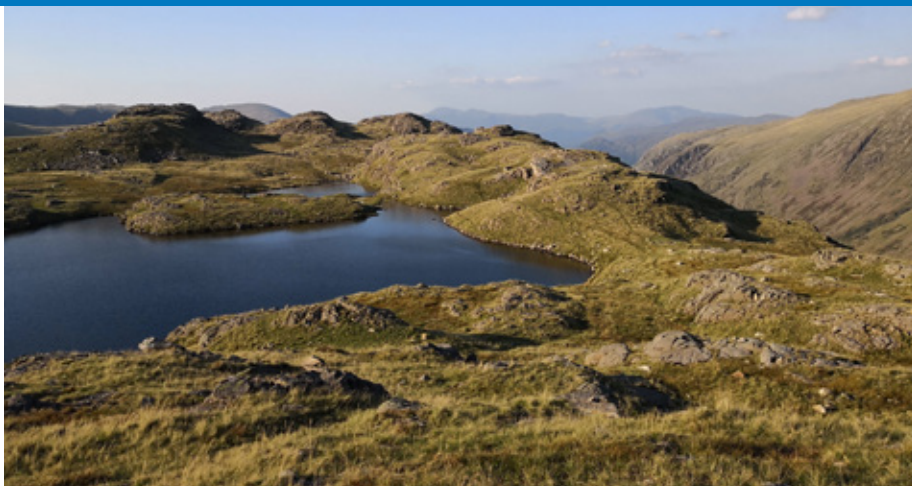
PARKS ARE 70

The geographer Vaughan Cornish elaborated the principle of including at least one supreme example of each principal type of scenery – coast, mountain, moorland, river gorge, woodland and fenland – among the areas to be designated national parks. The Addison Report recommended areas following Cornish's principle but also acknowledged the need to take into consideration 'which areas stand in the greatest danger of disfigurement'. To avoid 'undesirable speculation', the report hesitated to name specific areas that should be designated 'National Reserves'. Instead it published a four-page list of the suggestions it had received.

Many of the places named there never achieved national park status. So, the Forest of Bowland, Cannock Chase, the Forest of Dean, the Malvern Hills, parts of the Cotswolds, the western extremities of Cornwall, were all recommended to the committee as national parks, but none of them came to pass. And, whereas Addison included Scottish recommendations, the 1949 Act did not apply in Scotland and no Scottish national parks were established until 2002 when Loch Lomond and the Trossachs was designated. Another feature of this list is that it is striking how many early suggestions related to discrete areas, such as Dovedale, Malham and even a single Wiltshire estate.

In a sense the Addison report led nowhere for, while interest in national parks never went away, there was no government will to advance the national park agenda in the 1930s. There were other developments which have passed largely unnoticed, especially the development of the national forest parks by the Forestry Commission. Instead, the worst features of rural change identified by Abercrombie were restrained by the 1932

A review, commissioned by Environment Secretary Michael Gove in May 2018, and led by writer Julian Glover, is exploring how access to national parks can be improved, how those who live and work in them can be better supported, and their role in growing the rural economy. It is due to report this year.



Sprinkling Tarn, Lake District National Park

Image: Christian Leigh

Town and Country Planning Act. When national parks forced themselves onto the agenda again in wartime, the concern was not only to restrain unwelcome development, but also to give access for walkers. The preliminary work of John Dower and the recommendations of the Hobhouse Report led directly to the 1949 Act, which contains in its very title the conflation of two different approaches to the countryside.

The national parks which were designated in the early 1950s were often much more extensive areas than had been envisaged by Addison. Some, of course, were bound to be selected – the Lake District, Snowdonia, Dartmoor, Exmoor – but others were more a matter of taste, preference and practicality. The Hobhouse committee rejected the Cornish Coast – which Dower had had on his 'A list' – as impractical, but recommended the Broads and the North York Moors from his 'B list' and the South Downs from his 'C list'. Eventually, all three received national recognition, although the Broads Authority is a quasi-national park with a unique system of governance, and the South Downs had to wait until 2010 for designation. The New Forest, too, had a long wait. Together with the Forest of Dean and Kielder Forest, it was removed from John Dower's draft 'A list' made in 1943, and its National Park status was not confirmed until 2006. Dean and Kielder have never achieved national park status.

Reports on National Parks

Addison Report (1931)

The Report of the National Park Committee, the work of the committee chaired by the Rt Hon. Christopher Addison, was presented to Parliament by the Financial Secretary to the Treasury.

Dower Report (1945)

The report entitled National Parks in England and Wales, by John Dower, was presented to Parliament by the Minister of Town and Country Planning. It indicated that further preliminary work was needed.

Hobhouse Report (1947)

The work was continued by a committee under the chairmanship of Sir Arthur Hobhouse, and of which John Dower was a member. Their report was entitled Report of the National Parks Committee (England and Wales).

Document access

LIBRAL will be adding many of the key documents for the history of the national parks to its holdings over the next few months.

Agricultural History Review news

After twenty years at the helm, Richard Hoyle will be standing down as editor of the Review at the end of the year. The Society has appointed Professor Paul Warde as his successor. From a date to be arranged in the summer, Paul will take over the refereeing of papers. For the moment, submissions can be sent to Richard Hoyle as before. An announcement about handover arrangements will be made on our website.

The making of the English nurseryman

Originally associated with physicians and medicine, the first botanical garden in the modern tradition was established in Pisa in 1543, writes Liz Scott.

Botanists began to go into the countryside to collect and note plants identifying, comparing and recording their botanical findings in floras.

Floras and herbals had a strong classical pedigree, but an interest in horticulture expanded in the early modern period. This can in part be contributed to an overriding interest in collecting among the elite, but was also driven by the political and economic agenda espoused by Elizabeth I's Chief Adviser, William Cecil. In 1558, a small book with a long title *A most briefe and pleasante treatise, teaching how to dresse, sowe and set a garden* by Thomas Hill (Hyll) was dedicated to gardening. Later edited and republished by Henry Dethick as *The Gardener's Labyrinth* (1577) it was dedicated to Cecil. Gardening was to Dethick a model project, where the wealth of the country could be 'augmented by the diligent care and vigilanspaines of the wise observed and skilfull Gardeners'.

Vegetative propagation

From the late sixteenth century, the impact of the print press led to a burgeoning of treatises, often described as to-do books, or gardening books. However, a different reading of these publications reveals an alternative interpretation. To a large extent they mirrored the format of herbals and floras by classifying and categorizing, but there was also a developing scientific narrative between authors about the nature, and botanical structure, of plants and seeds.

Vegetative methods of propagation were well established by the sixteenth century. Bulbs, corms, offsets, rhizomes, runners, suckers, and tubers were all recognized methods of vegetative propagation, and produced plants that were genetically identical to the parent plant. Grafting was one method used for improving fruits, vines and roses in particular. But writing in *The Spirituall Use of an Orchard; or Garden of Frvit-Trees* (1653) the experience of propagating plants from seeds of grafted stock were apt to produce what Ralph Austen described as 'mongrell' plants. Vegetative methods were well recorded and practised, however seeds were unreliable.

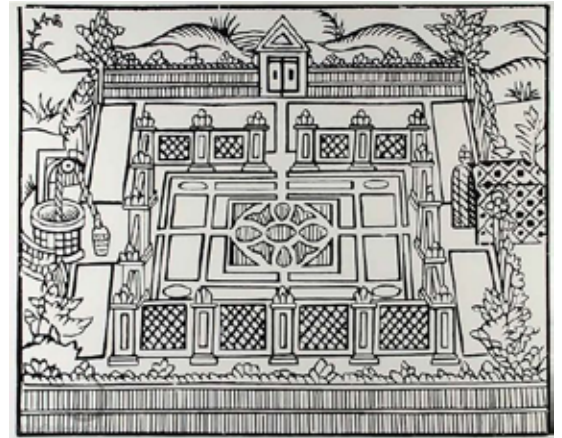


Illustration above and right from *The Gardener's Labyrinth*

'He that knows a thing well must know what it was, is, and shall be.'

Moses Cook (bap.1665–d.1715)

Seeds of change

While it is likely that horticultural produce was sold or traded at markets, it is unlikely there were sufficient garden seeds produced on household plots to release any quantity for sale. Seeds were acquired from itinerant travellers, at fairs and local markets, and cheaply from seeds-men in London. Reliance on household or small-scale seed production was unsustainable at a national level, and by the 1600's large numbers of seeds were being imported from the Netherlands, Germany, France and Spain and sold by London seeds-men. Authors lamented the lack of good quality, locally produced seeds.

Herbals and floras held little information about the botany of seeds, but this changed as authors of horticultural treatises sought a different kind of knowledge. How did a seed know what it was required to become? Did it hold a miniature replica of itself within its core? How to recognise a 'good' seed? What was the influence of environmental factors? Importantly, could

men influence and improve a seed's performance?

Early almanacs and astrological readings merged with the influence of Aristotle's elemental, and Galen's humoral, theories on seed performance. What caused a seed to germinate and how could biological inertia be broken? How were plants fertilized and could fertility be influenced? What were the criteria for selection, collection and storage of seeds? Colour, taste, weight, sound and the feel of seeds were important predictors of their health and viability prior to collection. Through observations, trials and detailed study, authors searched for a botanical framework – a 'model' seed.

Growing knowledge

Francis Bacon believed nature to be malleable and, with the intervention of man, plants could be encouraged to transmute altering their shape, colour and taste. Moses Cook refuted this: 'I do verily believe, that to sow Seeds in a way that can be devised by Man, will not in the least cause them to be quite another kind of Plant ... [F]or if you find any alteration, in any Plant that is, it is from the Conception and Nativity of the Seed; for there is no real alteration but by Seed'. Held within this explanation from Cook and others, was a notion that the seed had a 'type-plan' or *blueprint* that was immutable and species specific.

With developing botanical knowledge, horticultural improvers and specialist growers honed their skills. The specialized care of certain plants is demonstrated by the construction of hotbeds and hot houses, as well as nurseries for the cultivation of seeds. While discussions



of seed nurseries in the horticultural literature illustrates a growing knowledge of the best methods for cultivation, there remained the thorny problem of mutation. While some seeds responded to 'nursery' care, others continued to produce mutations described in John Gerard's *Herbal* (1597) as nature 'playing and sporting', and by Francis Bacon in *Sylva Sylvarum* (1627) as nature's 'wantonings'.

One plant could produce many thousands of seeds and therefore potentially thousands of plants. But how to understand nature's 'wantonings' when so much of a community's wealth and wellbeing, and a specialist grower's reputation, was invested in the simple act of sowing a seed? As Ralph Austen noted in *Observations*

In the 1650's, Moses Cook walked the forest floor collecting and examining tree seeds. In *The Manner of Raising, Ordering and Improving Forest and Fruit-Trees* (1676) he writes: 'the very Form and Shape of Seeds hath instructed me how to set them ... how best to set them by their Form and Weight'.

upon some part of Sr Francis Bacon's Naturall history as it concernes fruit-trees, fruits, and flowers (1658): 'It is true, that Gilly-flowerseede of one kind sowed, will bring up severall kinds some double some single' and continued by arguing, 'May it (the mutation) not rather be said, it is from a Law in Nature, which God...hath put into it'.

However, mutations encouraged plant breeder Samuel Gilbert in his search to raise 'new varieties' from plants that presented with variegation in leaves and flowers. Writing in *Florist's Vademecum and Gardener's Almanack* (1683) he argued: 'Nay, a particular Flower among many other of one Plant, shall bring more double ones, than twenty others that are not qualified'. It was the 'art' of the plant breeder to breed out or exploit mutations.

Nursery trade

Horticultural and husbandry publications became important transmitters of scientific investigation. A rise in specialist subjects covering forestry, orchards, vegetables and flowers heralded authors as purveyors of improved, specialised knowledge. In *The Anatomy of Plants* (1682) Nehemia Grew wrote of being 'Furnished with a good stock of Seeds, in order to raise a nursery of Plants'. In 1699 Leonard Meager's *The English Gardener* described a Captain Leonard Gurle as 'a very Eminent and Ingenious Nursery-man'.

More than a gardener, the nurseryman was an individual who was reliable and authentic, with special knowledge and skills. He used his nursery to propagate plants for trade and was a key contributor to seed improvement, and the quest for the model seed. The early modern treatises provided a growing readership with the science of the seed, the botany of the plants, and finally, examples of the specimen it would become. They set the foundation for the specialist trader: the nurseryman.



Image: Rasbak

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Articles for the next issue should be sent by 20 December 2019 to Dr Rebecca Ford: rebecca.ford@btinternet.com

Membership of the BAHS is open to all who support its aim of promoting the study of agricultural history and the history of rural economy and society. Details of membership are available on the website: www.bahs.org.uk/membership.html

Enquiries about other aspects of the Society's work should be directed to the Secretary, Dr Sarah Holland: sarah.holland@nottingham.ac.uk

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Testing conditions

It is important to appreciate that weather conditions prior to the heatwave of 2018 were significantly different from those of 1976. The June of 2018 was actually drier than that of 1976. According to the Meteorological Office, June 2018 had an average rainfall of 15 mm, compared with an average of 17.2mm for the same month in 1976. In the case of the former, the hot dry spell followed a cold, wet and late spring which reached its nadir with the weather system named the 'Beast from the East', which brought with it snow and exceptionally low temperatures. This combined with storm 'Emma' to create some of the most testing conditions experienced in the UK for many years.

However, more importantly, the hot dry spell of 2018 was not as prolonged as that of 1976. In the latter case, the summer drought followed an unusually dry winter and even drier summer, as 1975 was itself a drought year. This meant there was already a serious water deficit. During the period from June 1975 to the end of August 1976, 756 mm of rainfall were recorded for England and Wales, as compared to the long term average of 1203mm.

While both the 2018 and 1975–6 droughts clearly affected crop yields and prices in general, there were a number of subtle differences. The decline in world grain production in 1972 (induced by El Niño) coincided with the collapse of the Anchoveta harvest – one of the main sources of fishmeal used in animal feed. This meant that agricultural costs were showing a strong upward trend prior to 1975. These factors were more significant in causing the high food prices of the mid 1970s than the drought.

Potato harvests

However potatoes were an exception: their growth was adversely affected by the lack of water, while the hot dry weather – which continued virtually unabated through May, June and July – further reduced yields. The onset of rain in late August arrived too late to bulk up most of the potato crop. The continuation of wet weather in September and October hampered harvesting – 55 per cent of the main crop was still in the ground at the end of October, compared with 25 per cent the previous year. Storage problems occurred with those potatoes which had been harvested, so growers tried to sell them as soon as possible. This led to a short-term overloading of the

Under the highest emissions scenario, the study predicts that by 2070 summer temperatures could be 5.4°C warmer than the average reached between 1981 and 2000 – and that those summers will be much drier too.

market, thus exacerbating later shortages. By the spring of 1977, potato prices were 6–7 times higher than normal.

In 2018, potatoes were less affected. Despite having been planted several weeks after the mid-April optimum, and having had their growth constrained by the cold and exceptionally wet spring, prices have so far risen less sharply than in 1976. This is partly because the rain in August 2018 came just in time to benefit the crop, and also reflects the fact that irrigation is now more common.

Lack of fodder

In both 1976 and 2018, livestock farmers were particularly affected by shortages of winter food: grass growth was depressed by the dry weather, so they were forced to feed additional fodder to their animals in the summer. Hay production was also affected. However, the situation was considerably worse in 1976, as the exceptionally dry summer of 1975 had already depleted fodder reserves. Today, the popularity of silage in lieu of hay and the increased acreage of maize, which is used as a livestock feed, has meant that farmers are slightly better prepared to cope with summer drought.

British agriculture might be more resilient today than it was in the 1970s, and farmers better able to deal with the impact of exceptionally hot and dry summers. The fact that the 2018 drought was not as bad as 1976 should not encourage farmers and consumers to be complacent, as the challenges remain profound given the increasing likelihood of droughts in the future. It is important for policy makers, as well as all other stakeholders involved in food production and consumption, to learn lessons from the past and be more proactive in seeking ways to mitigate the effects of our changing climate.