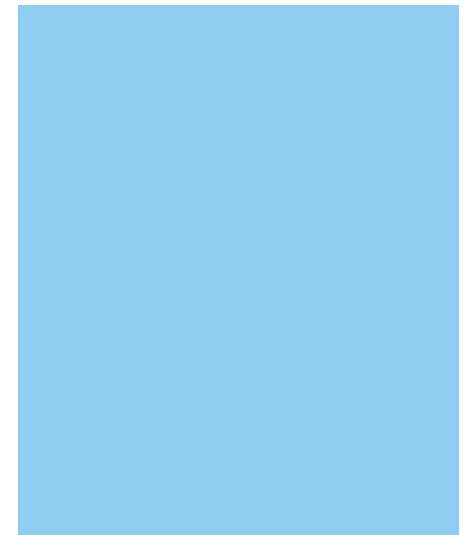


seasons' promise

an enjoyable way to tackle climate change

Sue Dibb, Joanna Collins and Ed Mayo



Summary

This briefing explores the fall and potential rise of seasonal food in Britain, in the context of action needed on climate change. Drawing on a range of sources of evidence, including the NCC's own research with consumers, our findings are that:

- ▶ The area of land planted for fruit and vegetables in the UK has declined by 20 per cent over the last 15 years.
- ▶ 75 per cent of young people, aged 18-24, do not know the seasons for classic British fruit and vegetables.
- ▶ 90 per cent of the fruit and 40 per cent of the vegetables we eat are now grown overseas.
- ▶ The food we eat accounts for 31 per cent of household impact on climate change.
- ▶ But there is a resurgence of interest in seasonal food, with two-thirds of people now taking steps to buy seasonally.
- ▶ Seasonal food is seen as positive because it has an element of anticipation, of 'looking forward' to the arrival of seasonal produce.
- ▶ The term 'seasonal' can be abused, with claims to be seasonal found on hot-house aubergines, pineapples, strawberries (in December) and even chocolate.
- ▶ Climate change is altering British seasons with spring coming two weeks earlier and autumn one week later than 50 years ago¹.
- ▶ Morrisons (71 per cent) and Asda (69 per cent) have the highest proportion of UK-sourced, in-season vegetables, and Waitrose the least.
- ▶ There are excellent examples of food outlets championing seasonal food, from the Royal Brompton Hospital in London to schools in Bradford and cafes at National Trust properties up and down the country.
- ▶ Initiatives to raise nutritional standards in schools and hospitals risk undermining seasonal food if they lead to more standard menus, or if caterers are not given assurance on how seasonal vegetables fit with standards.
- ▶ There is an opportunity, done right, to promote seasonal food as an effective and enjoyable way to tackle climate change.

The meaning of seasons

The flow of seasons through the year is perhaps the most elemental connection people have to nature around them. Light and dark, dry and wet, hot and cold... the sky, the landscape, the wildlife... all these change as seasons come and go.

Set alongside the rapid beat of modern life, seasons' great changes seem to come imperceptibly. Season's change may be when you realise that, all of a sudden, at 8 o'clock at night, it is dark, or that there is frost on the ground outside the bedroom window when you wake.

The flow of seasons brings new opportunities, new sounds, new foods and new surprises. The joy of seasons is the variety and the change they bring.

Britain shares the same four seasons of periodic weather change with all temperate regions of the world – spring, summer, autumn (fall) and winter. Even so, over long periods of time, seasons in Britain feel as if they

have moulded British identity and character in part in their wake. As a nation, we embrace change – for the cold to pass in mid-Winter, but also for heatwaves to move to more gentle weather in high summer. Each brings a new texture to life around, as Keats wrote of Autumn being a 'season of mists and mellow fruitfulness'².

Without really knowing it, though, we are losing our connection with the flow of seasons. Our food, in particular, has been cut off from the landscape around us. It all started, perhaps, with our love of change – discovering new foods from around the world on the aisles of our shops. But could it be that the pleasure is transitory? When first jetted in, the product might be something new. Now, with all food available at all times, it is about giving you something that is the same – a dull conformity.

And, in a double disappointment, if the food that fills the aisles comes from a forced and industrial process, to meet

demand, then food itself becomes a manufactured product. And like all manufactured products, it is produced for what sells – more often its looks than its taste.

The clock will not be turned back. But if strawberries no longer feel as special as when you grew up, or have gone from promise to disappointment, then psychologists have a term for it, 'habituation'. It is, after all, the variety that makes the special things special. As Shakespeare wrote 'At Christmas I no more desire a rose than wish a snow in May's new-fangled mirth; But like of each thing that in season grows'³.

Seasons are too deep-grained to disappear as part of British society. Billion pound industries from fashion to football mimic seasons. Local food is being rediscovered, cooking celebrated and some talk of a new food culture in the making.

But the greatest opportunity of nature's seasons is, perhaps, how they can help people to address that most

urgent challenge to nature itself, which is the threat of climate change.

Standardised year-round eating habits depend on out-of-season imports or heated greenhouses, both energy-hungry. The largest review of the evidence yet shows that the food we eat is responsible for 31 per cent of the average European household's impact on climate change⁴.

In-season food is an alternative and there is evidence of untapped demand that, with marketing flair, could make a significant difference. Seasonal food is not just about Christmas puddings and BBQs. It is about embracing a changing diet through the year to reflect when fruit and veg suited to our UK climate – and even fish and lamb – are in their natural season. And it may be one of the most powerful and positive tools we have to engage people in the fight against climate change.

Why the National Consumer Council is taking up the cause of seasonal food

In our research, consumers tell us that they are ready and waiting to take action on climate change, but they need positive action to be made easier, and to feel that others will be acting too. For most people, climate change as an issue can seem far removed from their everyday lives and choices. In our report, *I will if you will*, launched in May 2006, the Sustainable Consumption Roundtable – co-hosted by the National Consumer Council with the Sustainable Development Commission – called on government to focus on practical catalysts that can bring climate change to life in people's daily lives. Seasonality is one such powerful proxy, which could catalyse widespread action to tackle climate change through food choices.

According to the Food and Climate Research Network, the best possible consumer response would be to opt more for in-season UK produce, which cuts out the bulk of the

greenhouse gas emissions associated with long-distance food transport, and avoids the need for heated greenhouses.

'The least greenhouse-gas intensive fruits and vegetables tend to be seasonal field-grown UK produce, cultivated without additional heating or protection.'⁵

Much debate occurs about whether it is better climate-wise to grow winter lettuce under glass or import it from unheated polytunnels in Spain. The best answer surely is to put something more seasonal in our sandwich, like coleslaw from winter carrots and cabbages, instead. Many of the trade-offs would disappear if we reconnected our national diet to the flow of seasons.

Meanwhile, climate change is altering seasons in the UK, with spring coming around two weeks earlier and autumn a week later than 50 years ago.

Consumer interest

There are big consumer benefits to be had from seasonal eating as well, as TV chefs like Nigel Slater, Hugh Fearnley Whittingstall and Gordon Ramsay are all lining up to tell us⁶. Eating food freshly harvested from the fields or lifted from the sea is the best way to maximise both taste and nutrition, as both can be lost in storage.

'Of course we can get many foods all year round. But it's a treat and a privilege to eat them in season, because for much of the year, many foods are far from being at their best. Take tomatoes. They like to grow in rich, well-composted soil and need good strong sun to ripen properly. So it should come as no surprise that 'fresh' tomatoes, planted in artificial substrate and grown out of season in an air-conditioned greenhouse, taste of nothing much at all.'

– Paul Waddington, Seasonal Food

Healthy eating experts are keen to encourage us to eat a diversity of fruit and vegetables for all-round nutrition. Following the seasons is an excellent way to ensure we don't just default to a handful of usual suspects. Knowing when produce is in season can also help consumers on a budget, with good price benefits to be had from taking advantage of seasonal gluts and avoiding the premium for produce that is scarcer or has had to be freighted from afar.

Seasonality can help a largely urban UK population form a more emotional connection with farming and the countryside, which is vital to the future of UK farming and rural affairs. The seasonal arrival of produce on our shelves can be aesthetically linked to colourful rituals like apple picking and cider making, the first new potatoes, and lambing time, in the same way that Beaujolais Nouveau in France or the Fall in New England have become major cultural events.

It is this element of anticipation, of 'looking forward' to the arrival of seasonal produce that resonates most with consumers, according to the Institute for Grocery Distribution (IGD). Their recent research indicates that two-thirds of people are trying to buy seasonally, and they conclude that seasonality offers the best hook to promote buying British.

But our awareness of what indigenous produce is in season at any one time is now very low, particularly in younger age groups. In a recent survey, for instance, only a quarter of 18-24 year olds knew the seasons for classic British fruit and vegetables, compared to 70 per cent of those aged 60 and over⁷. This uncertainty was echoed widely at a large Consumer Forum event in Manchester, hosted by the Sustainable Consumption Roundtable⁸.

'I think I don't know enough about when things are in season because I'm so used to it all year around. I don't know when strawberries come.'

– Participant, Consumer Forum

'Seasonality remains an unexploited area,' as Sir Stuart Hampson puts it in his new report for the Royal Agricultural Society of England. Already, according to a survey commissioned through YouGov, a third of us say we want more information on whether products are in season or not⁹.

The decline of seasonality

Current trends in the shops are all in the opposite direction. Our awareness of the seasons has declined with the rise in year-round imports. Over the last decade fruit imports grew by 38 per cent and vegetable imports by 65 per cent, while the planted area for fruit and vegetables in the UK has declined by more than 20 per cent over the last 15 years¹⁰. Around 90 per cent of the fruit and 40 per cent of the vegetables we eat are now grown overseas.

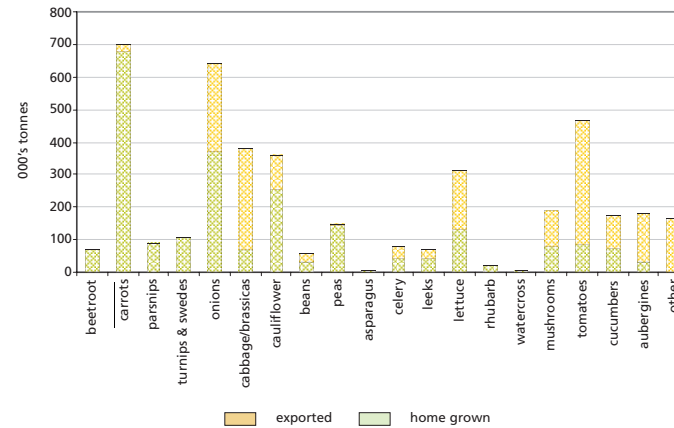
There are two components to the decline in seasonality.

First, even during their natural season, UK produce like apples are being displaced by imports. Over 84 per cent of fruit like apples, pears and plums that can be grown domestically are now imported. UK apple production almost halved between 1989 and 2003¹¹. Kent, once known as the Garden of England, has seen 85 per cent of its apple orchards and 95 per cent of its cherry orchards disappear in the last 50 years¹².

Second, people are losing their sense of when produce is likely to be in its UK season, because retailers and restaurants make the full range of fruit and vegetables available on the shelves and menus all year round. Lettuce, for instance, is now consumed right through the winter on the back of heated greenhouses and imports.

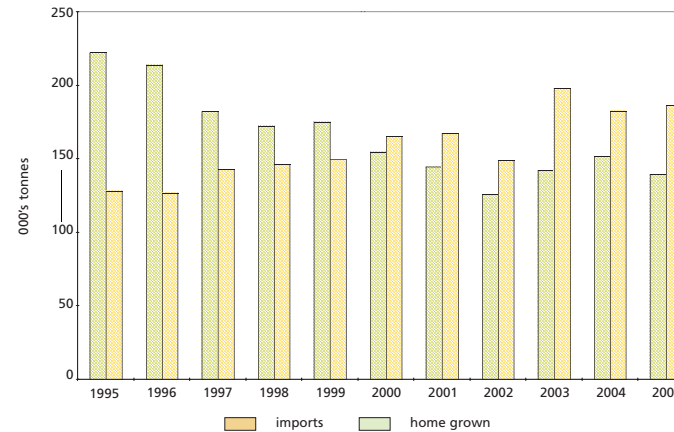
Industry marketing strategies also play a role: the Winter Berries campaign, for instance, funded by nine soft fruit importers, won re:fresh Marketing Campaign of the Year 2006 for its success in promoting year-round berry consumption to sustain imports¹³. Airfreight of non-EU produce like winter soft fruit already accounts for around half of all emissions associated with fruit and vegetable transport, and is growing at 6 per cent a year¹⁴. Consumers get the choice of being able to buy strawberries in winter, but would they still want to buy them if they knew about the price being paid by the climate?

Volume of vegetables (exc. potatoes) marketed to the UK, 2004



Source: Food and Climate Research Network

Lettuce: imports rise as homegrown declines



Source: Defra

In some cases, people have acquired longstanding preferences for fruits that have no growing season in the UK. Bananas, for instance, now rank as Britain's most popular fruit, and where would we be without lemon meringue pie? Such traditional

imports have often played a key role in supplementing our diets at times of dearth in our native fruits, like early spring. Sea-freight keeps their food miles impact down relative to the air freighted winter berries.

Seasonal availability of UK produce

As the chart in the appendix shows, many staple vegetables, like potatoes and carrots, are available from the UK year-round, although in the case of potatoes particular varieties come into their own at different times, and spring supply will be dependent on storage. A huge variety of popular vegetables are grown in the UK, but many do have a distinct season, outside of which demand can only be met by imports. Salad leaves like lettuce, for instance, cannot be grown in winter in the UK outside of heated greenhouses.

UK fruit production is seasonal without exception: even the staple apple becomes unavailable at the limits of storage in April, until fresh pickings in August. The variety of UK produce on offer is most limited in April – often referred to as ‘the hungry gap’ – and most abundant from June to December.

Who is putting seasonality on the menu?

...in the supermarkets

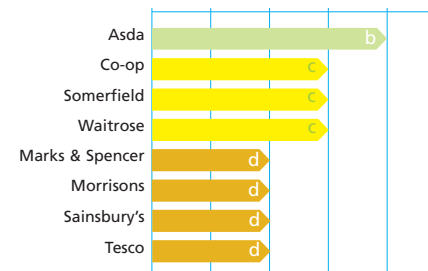
Supermarkets have a real opportunity to promote in-season produce and enhance consumer interest in seasonality. As part of our *Greening supermarkets* survey, published in September 2006, we rated the supermarkets on the availability of a range of in-season fresh vegetables that could reasonably be expected to be of UK origin at the time of our survey (March)¹⁵. Our ten were purple sprouting broccoli, cabbage, carrots, cauliflower, leeks, parsnips, radishes, spinach, swede and watercress.

We also looked whether these vegetables were specially promoted – for example, by being prominently displayed, or with a special offer or price promotion. We particularly looked whether supermarkets were promoting the seasonality aspect of the products in any way, such as through poster or recipe cards. In addition we

conducted a ‘mystery shopper’ survey of supermarket’s telephone helplines – asking if they could provide any information on seasonal fruit or vegetables.

We found the term ‘seasonal’ used to describe in-season produce, but also found it referring to hot-house aubergines, pineapples and even chocolate.

Retailer ratings for seasonality



We rated supermarkets using an A-E rating system.

A = excellent
B = good
C = showing potential
D = room for improvement
E = poor

Morrison’s (71 per cent) and Asda (69 per cent) had the highest proportion of UK-sourced, in-season vegetables, and Waitrose (53 per cent) the least. This leaves a significant proportion of vegetables being imported that could be sourced in the UK.

The majority of our ten seasonal vegetables were sourced either from the UK or within Europe, but we also found the following examples of long-distance sourcing of produce:

- ▶ Kenyan leeks (Morrisons, Sainsbury’s and Somerfield)
- ▶ South African carrots (Morrisons and Waitrose), cabbage (Sainsbury’s) and leeks (Waitrose)
- ▶ US watercress (Sainsbury’s and Tesco)
- ▶ Egyptian carrots (Tesco)

What was particularly disappointing was the low level of ‘signposting’ for the seasonality of UK produce. Asda was doing the most to highlight and promote British vegetables – justifying it’s top ranking – though with limited reference to seasonality.

Furthermore, none of the supermarkets were able to easily provide lists or any information about what produce was in season in our telephone helpline survey.

...in the alternative food retail sector

Organic box schemes and farmers markets are commanding a rapidly expanding market, growing 11 per cent to be worth £125 million in 2005¹⁶. Seasonality is central to such schemes. Abel & Cole is one of the UK’s fastest growing organic retailers, supplying 10,000 households every week with seasonal fresh produce, supplemented only with sea freighted

imports where necessary. Riverford Organic Vegetables operates a strictly seasonal policy, working with the South Devon Organic Producer group to grow 85 different varieties of vegetables that keep the boxes interesting all year.

...in our schools and hospitals

The School Meals Review Panel recognised the desirability of seasonal menus in their recommendation to government that:

Schools should aspire to achieve the highest quality of provision, which is a hot meal, cooked on-site, from fresh and seasonal ingredients...¹⁷

Perhaps understandably, however, most school caterers are concentrating on changing menus to comply with new statutory nutrition standards, without wider attention to seasonality. But this

is a missed opportunity, because seasonal menus could take advantage of cheap gluts and do much to educate children about food origins.

A number of school caterers are leading the way. Suffolk County Catering specifies ‘seasonal vegetables’ twice a week on its county-wide menu for primary schools, working with the global fresh produce firm, Fyffes, to agree a set price for a range of seasonal vegetables over each 6-week period. Devon County Council has delivered new and upgraded kitchens to schools across the county so that all food can be cooked from fresh. In-house caterer Devon Direct Services specifies seasonal vegetables twice a week and the Council has been working to train school cooks in new seasonal recipes, and educate parents about the benefits of local, seasonal food.

Bradford’s meals are among the cheapest in the country, and Bradford Education Catering Service has

improved affordability by establishing local supply chains for all of its potatoes, fresh vegetables and salads when in season.

‘It was clear, very early in our research, that where we could cut extended supply chains we could ‘repatriate’ budget into local food spending that has previously been lost to intermediaries and wholesalers. What’s more, we soon realised that this also created the opportunity to take advantage of things like seasonality.’

– Roger Sheard, Bradford Education Catering Service

Most hospitals now have regeneration kitchens, or none at all, making them dependent on big suppliers like 3663 or Anglia Crown, which develop standard menus for hospitals country-wide. Catering firms tend to be reluctant to vary menus by season, even when this could reduce costs. For instance, Eostre Organics began supplying organic food to the

Norwich and Norfolk University Hospital, but catering firm Serco insisted on out-of-season salads and Mediterranean produce through the winter, making import costs prohibitive. Cornwall NHS Trust has established its own central production unit so that it can take advantage of local and seasonal supply chains to produce its own cook-chill food for hospitals across the county, and South London and Maudsley NHS Trust is planning to follow suit.

The Royal Brompton Hospital – which has its own kitchen suitable for fresh food preparation – now buys in-season UK fruit and vegetables by preference from Bank Farm in Kent, which sources from over 60 local suppliers and supplies produce peeled for quick preparation. Previously the hospital was getting spring onions from Egypt, asparagus from Peru, and tomatoes from Spain.

...and in our restaurants?

A number of leading restaurant chains are embracing seasonality, sometimes as part of a responsible purchasing policy, but more often as a selling point.

The National Trust has 145 catering outlets nationwide, and state as a matter of policy that they ‘encourage the marketing and consumption of seasonal produce and favour ‘in season’ ingredients for our own catering outlets.’ Fourteen exemplar properties now source UK ingredients almost exclusively, supplementing with sea-freighted traditional imported items like lemons in early spring. Contracts with regional greengrocers require them to notify the caterers if any non-UK produce is sourced.

Leon, a new healthy fast food chain – ‘to take away or to take here’ – with four outlets in London, sees seasonality as a key to their commercial success. Their menu promotes the fact that ‘Leon changes with the seasons’, and

the ingredients in the ‘wraps’, ‘big dishes’ and ‘superfoods salads’ vary through the year. In winter, for instance they use sun dried tomatoes in place of fresh. ‘The Specials’, their seasonal soups and stews, change daily. They rate seasonality for cutting down food miles, supplying food with maximum flavour and nutrition, and helping them prioritise affordability. Targets have been set to source 70 per cent of ingredients from the UK, and 90 per cent from within Europe. They won *The Observer Food Monthly* Best Newcomer Award in 2005.

Moshi Moshi, a Japanese sushi chain with five outlets in London and Brighton, plans three-monthly menus around the seasonality of the staple ingredient, fish, which is often sourced direct from Cornish fishermen. Menu entries are generic to permit recipes to be adapted to a range of species, and waiting staff are then briefed to inform customers about the catch of the day.

Seasonal availability of UK produce

Some challenges being encountered

- ▶ Menus need to accommodate seasonal change.
- ▶ Early spring is a 'hungry gap' for UK-grown fruit and vegetables.
- ▶ Self-sufficiency in UK fruit is hard to achieve year-round.
- ▶ Seasons do not necessarily correspond to school terms.
- ▶ School caterers need reassurance that generic 'seasonal vegetable' specifications comply with the prescriptive new nutritional standards.
- ▶ The NHS Better Hospital Food Initiative may lead to further menu standardisation, making it difficult for catering departments to respond to the seasonal availability of good quality, local ingredients.
- ▶ Training is needed for catering staff to increase seasonal awareness and confidence in using seasonal produce.

Five steps to seasonality?

1. Maximise the proportion of in-season produce sourced from the UK, rather than imported.
2. Promote greater awareness and consumption of UK in-season produce, relative to imports, in support of health, climate change and rural economic objectives.
3. Work with UK horticulture industry to source extended-season UK produce from polytunnels as necessary, but avoid hothouse production.
4. Avoid procurement or promotion of unseasonal produce, like winter salads and berries, especially if it has to be air freighted from outside the EU.
5. Supplement with traditional sea-freighted imports to meet longstanding demand, especially in the early spring.

Questions for discussion

- ▶ How receptive are consumers to seasonality?
- ▶ How easy would it be to meet demand for seasonal produce?
- ▶ How can consumer demand for seasonality be further enhanced?
- ▶ To what extent is it desirable to extend UK seasons?
- ▶ Is policy change needed to promote seasonality?

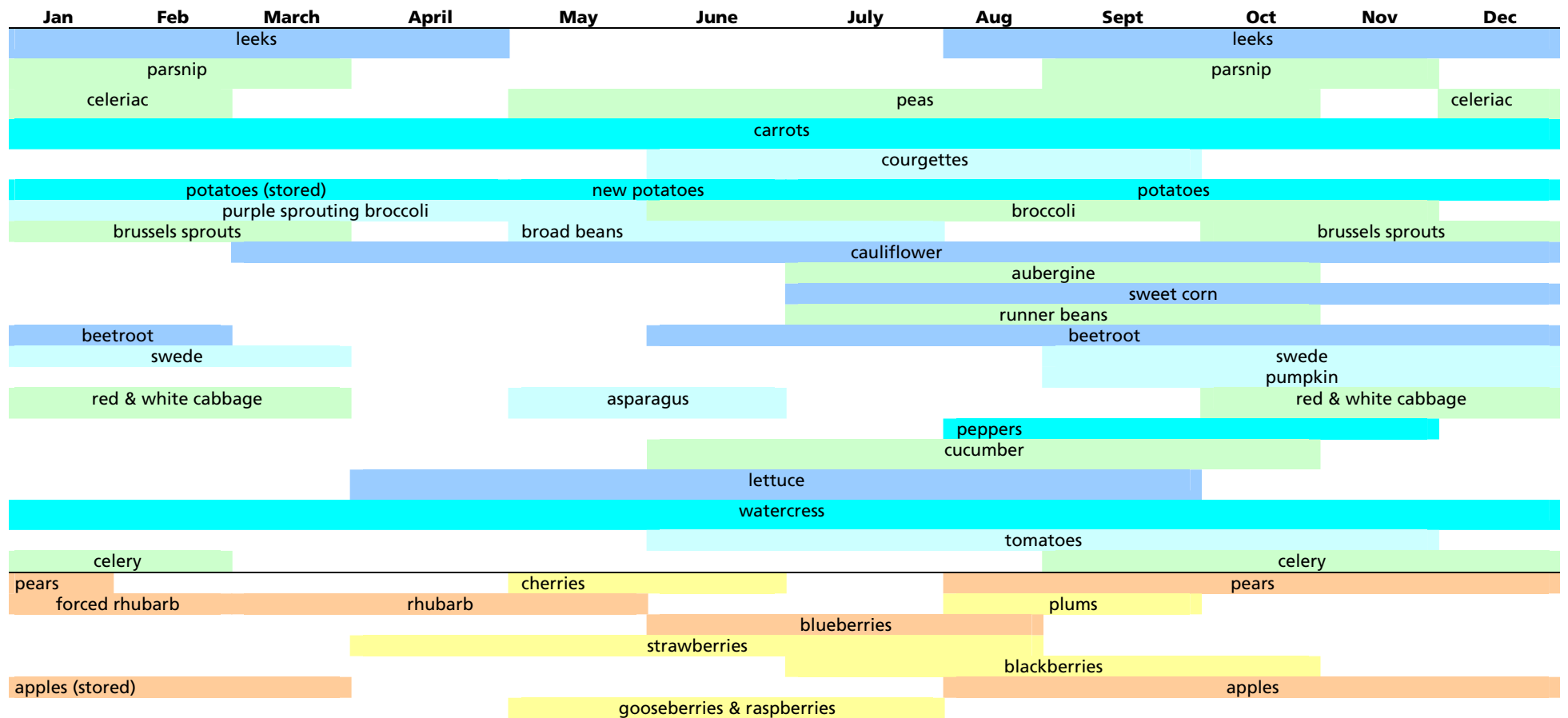
Good seasonal marketing... and bad

The Rivington Grills in London, part of the Caprice Group, use seasonality as a powerful selling point:

'...the fabulous sweet English asparagus from Evesham, now in the height of its season, has appeared on its own special seasonal menu served five ways (steamed with hollandaise, cold with vinaigrette, as soldiers with a boiled duck's egg, on toast with Mrs Kirkham's Lancashire, or with a wild herb salad) giving you five different reasons to drop in for lunch or dinner next week – before the season is all over!'

There are also some rather loose uses of the term 'seasonal' out there. The 'award winning' Edgemoor Restaurant in Devon, which prides itself on its use of local produce, is advertising its December Seasonal Menu 2006, which will feature 'Slices of goats cheese layered with fresh strawberries warmed in the oven and served with a sweet chilli dressing'¹⁸.

Appendix: seasonal availability of UK produce



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