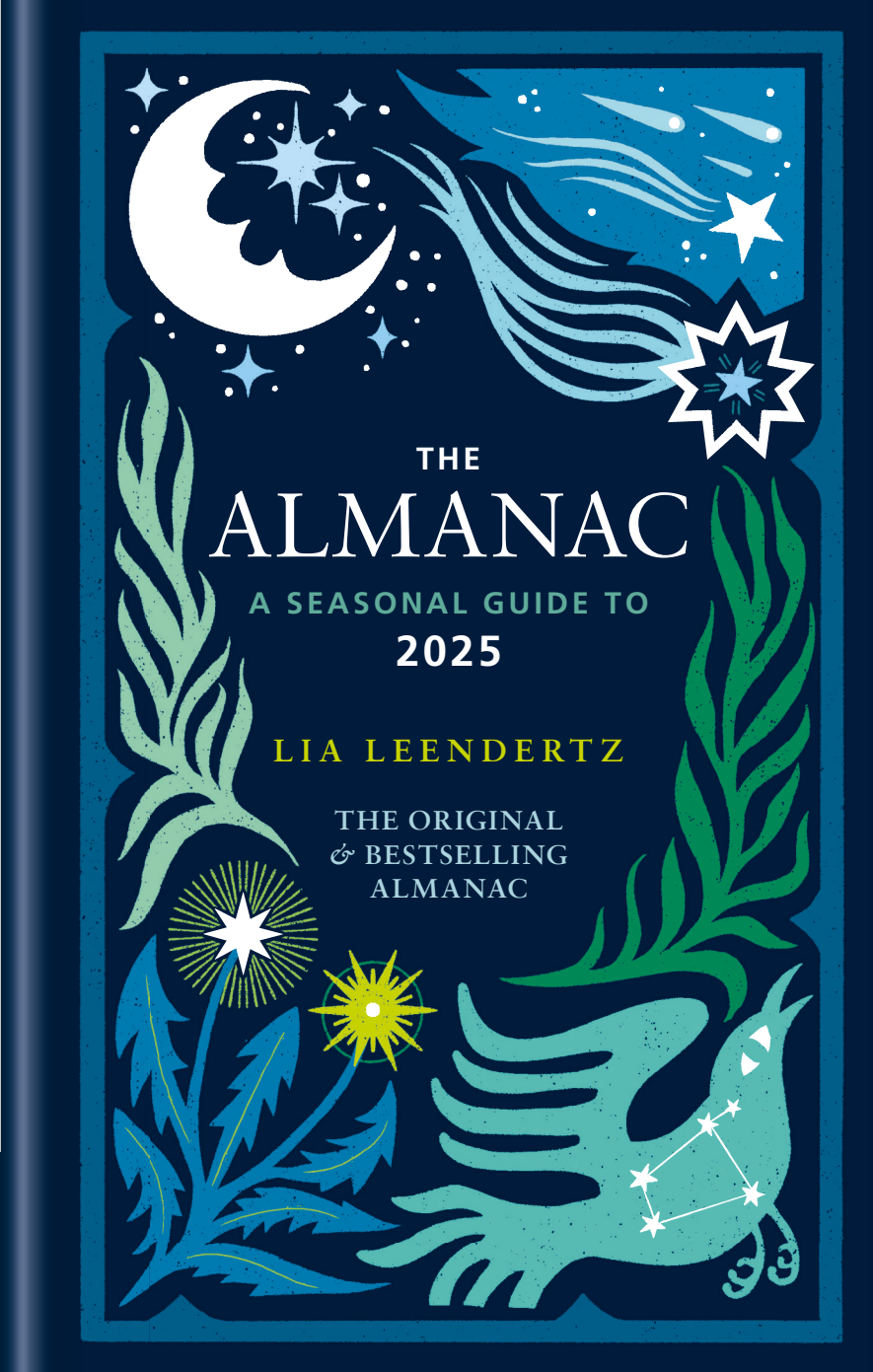
THE
ALMANAC
A SEASONAL GUIDE TO
2025
LIA LEENDERTZ
THE ORIGINAL
& BESTSELLING
ALMANAC

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A SEASONAL GUIDE TO 2025

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With illustrations by Sarah Abrehart

Gaia

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INTRODUCTION

Welcome to *The Almanac: A Seasonal Guide to 2025*! The year lies ahead of us, its full moons, equinoxes and solstices, meteor showers, flowers, cakes and festivities all to come, from the first scent of spring on the cold air to the blowsy breezes of summer, from the berries and golden bounty of autumn back down into the cosy and candlelit cave of winter. If you are new to this almanac, then welcome, and I hope you will enjoy following through the year with this almanac by your side. If you are a regular reader, then my warmest welcome back – I think you are going to love what I have in store for you this year.

Each year I choose a theme and this year's is ancient astronomy. Every culture around the world has looked up into infinity, gazing in awe as the stars wheel through our skies. There we have found our origin stories, gods and goddesses, compasses and maps, clocks – and, yes, our almanacs. We forget now to look up, but it is all still there for us.

This is a 'major lunar standstill' year, the height of the moon's 18.6-year cycle, marked in stone circles all over the UK and Ireland (see page 30). To this end I have hunted down a Megalith of the Month – a calendar of sorts in stone and shadow. I hope you will enjoy delving into this under-explored world of megaliths and their connections to the calendar as this year unfolds. In addition, I have sought out constellation stories from around the world, and looked at the ways in which the sun, moon and stars are tightly woven through our year, even now.

We also take a monthly visit to ancient meadows (much like those surrounding the ancient collections of stones), and we have moon guidance, a cake of the month(!) and a monthly guide to gardening by the moon, as well as tide times, spring tides, folk songs for every festivity, and even some seasonal crafts. My aim with this annual book is to provide some way for everyone to mark each moment of the year, and I hope you will find yours within. Have a wonderful 2025.

Lia Leendertz

THE YEAR AHEAD

The year

Gregorian year	2025, begins 1st January
Japanese year	2685, begins 1st January
Chinese year	Green Wood Snake, begins 29th January
Islamic year	1447, begins 27th June
Jewish year	5786, begins 22nd September

The sky at night in the year ahead

This year the moon is at a 'major lunar standstill', a phenomenon that occurs every 18.6 years. It will oscillate between being extremely high in the sky and extremely low – from northern latitudes it will barely skim the horizon at times, to dramatic effect as the moon always looks larger when it is near the horizon.

Venus starts the year as a bright and beautiful evening star, visible shortly after sunset in the southwest. It will be too close to the sun to see by mid-March but will reappear towards the end of June as a morning star in the east.

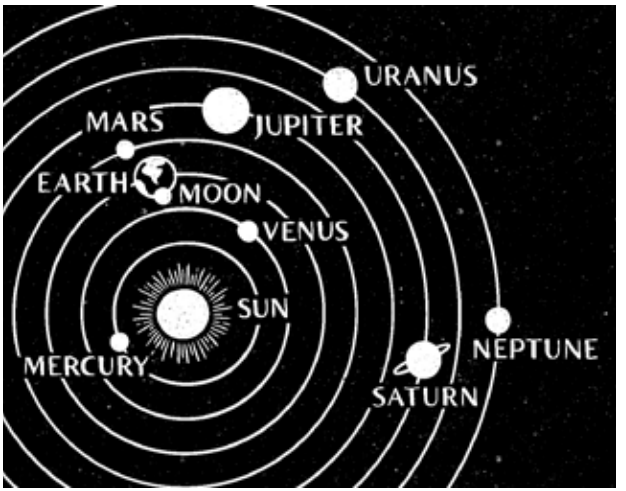
Mars will be at its full brightness in the middle of January but will grow dimmer by the end of February, becoming unobservable by August and for the rest of the year.

Jupiter starts the year shortly after opposition, so it will be at its brightest and visible all night. By the end of May it will become lost in the glare of the sun until August, when it will make brief appearances, as a morning star, before sunrise. By the end of the year it will be almost at opposition again.

Saturn's brightness depends on how open the rings appear to us, at a maximum when tilted towards or away from us. The rings are now edge-on so the planet will appear dim for most of the year but brighter at opposition in September. It will be visible at the beginning of the year and after June. By mid-September it will be visible all night long.

There will be a total lunar eclipse and a partial solar eclipse visible from the UK and Ireland in March and a total lunar eclipse visible briefly from the UK and Ireland in September, followed two weeks later by a partial solar eclipse

only visible around Polynesia, Melanesia, New Zealand and eastern Australia.



The position of the planets of the solar system on 1st January 2025.

Notes on using the tide times

The full tide timetable given each month is for Dover, because Dover is widely used as a standard port from which to work out all other tide times. Every port has a 'high water time difference on Dover' figure, which you can find on the internet. For instance, Bristol's high water time difference on Dover is –4h 10m, and so, looking at this almanac's visual tide timetable, you would just trace your finger back along it 4 hours and 10 minutes to see that a midday high tide at Dover would mean it will be high tide at Bristol at 07.50. London Bridge's is +2h 52m, so – tracing forwards – a midday high tide at Dover would see a high tide in London at 14.52. Once you know any local port's figure, you can just trace that amount of time backwards or forwards along the Dover tideline.

Here are a few ports and their high water time differences on Dover. Find your local one by searching the name of the port and the phrase 'high water time difference on Dover'.

Aberdeen	+2h 31m	Swansea	–4h 50m
Firth of Forth	+3h 50m	Bristol	–4h 10m
Port Glasgow	+1h 32m	London Bridge	+2h 52m
Newcastle upon Tyne	+4h 33m	Cowes	+0h 29m
Belfast Lough	+0h 7m	Lyme Regis	–4h 55m
Hull	–4h 52m	Newquay	–6h 4m
Liverpool	+0h 14m	St Helier, Jersey	–4h 55m
Cork	–5h 23m		

Do not use these where accuracy is critical; instead, you will need to buy a local tide timetable or subscribe to Easy Tide www.ukho.gov.uk/easytide. Also note that no timetable will take into account the effects of wind and barometric pressure.

General notes

All times in this almanac have been adjusted for British Summer Time/Irish Standard Time, when relevant. The times given for the moon phases are the exact moment when each moon phase occurs, for instance the moment that the moon is at its fullest.

Morecambe, Lancashire, was chosen for the sunrise and sunset tables because a point in the middle of Morecambe Bay is the 'centroid location' for the United Kingdom. If you made a cardboard cutout of a given area (with islands affixed in their exact position by imaginary weightless rigid wires), its 'centroid' is the point where that cardboard cutout would balance on the tip of a pencil.

On the sunrise and sunset tables, black represents night, grey twilight, and white day.

This year I have introduced 'lunation numbers', a number given to each lunar month, beginning at the new moon. The most commonly used system, and that used here, is the Brown Lunation Number system, created by Ernest W Brown, that began from the first new moon of 1923 (all lunations before that are negative). Find them alongside each new moon date.

January

- **1** New Year's Day – bank holiday in England, Wales, Scotland, Northern Ireland, Ireland
- **2** Bank holiday in Scotland
- **6** Epiphany/Three Kings' Day (Christian)
- **6** Nollaig na mBan/Women's Christmas/Little Christmas (Christian/Irish traditional)
- **7** Orthodox Christmas Day (Orthodox Christian)
- **13** Plough Monday (English traditional)
- **13** Lohri (Punjabi winter festival)
- **17** Old Twelfth Night (traditional)
- **24** 24th–26th: RSPB Big Garden Birdwatch
- **25** Burns Night (Scottish traditional)
- **29** Lunar New Year
- **29** Chinese New Year, Year of the Green Wood Snake begins

THE MONTH AHEAD

We find ourselves, as the year opens, in a moment of reckoning between the timetable kept by the sun, and that of the moon. The season, of course, always follows the calendar of the sun, marked this month in timidly unfurling catkins, frozen ground, pewter grey skies alternating with deep frosted blue ones. Through the year, the sun's rising point will shift along our horizon from its most southerly at midwinter to its most northerly at midsummer and back again. The place where the light falls at that midwinter moment has been laid down again and again by our ancestors, in stone circles, burial mound passages and megalith alignments: this is the darkest moment, now – where we end and start the year. The cycle takes 365 days.

The old name for this month's full moon is the Wolf Moon, a reminder that the moon has also been used to keep time. In one lunar month of 29.5 days the moon goes from invisible and new in the same part of the sky as the sun, to waxing half as it pulls away from it, to full moon when it is in the opposite part of the sky, lighting the frosted landscape, and then wanes all the way back down to new again. Twelve of these lunar months add up to 354 days.

And so we have a discrepancy, which came to a head in central France in the year 576. The early medieval church was grappling with the administrative nightmare of the eastern churches following the lunar calendar and the western churches following the Julian solar calendar. And so the Council of Tours, a gathering of scholars, bishops and clergy, inserted 12 days into the calendar, 12 holy days representing the time it took the Magi to travel to Bethlehem, 12 days of feasting and celebrating beginning on Christmas Day and ending on 5th January. These 'Twelve Days of Christmas' are followed by Epiphany on 6th January. As you take your decorations down on Twelfth Night, or bake a Galette des Rois ('King Cake') or a Twelfth Night cake, think about the ancient rhythms struck up by the sun and the moon and how they are still woven into our lives.

THE MOON

Moon phases

First quarter – 6th January, 23.56

Full moon – 13th January, 22.26

Last quarter – 21st January, 20.30

New moon – 29th January, 12.35
(start of lunation 1263)

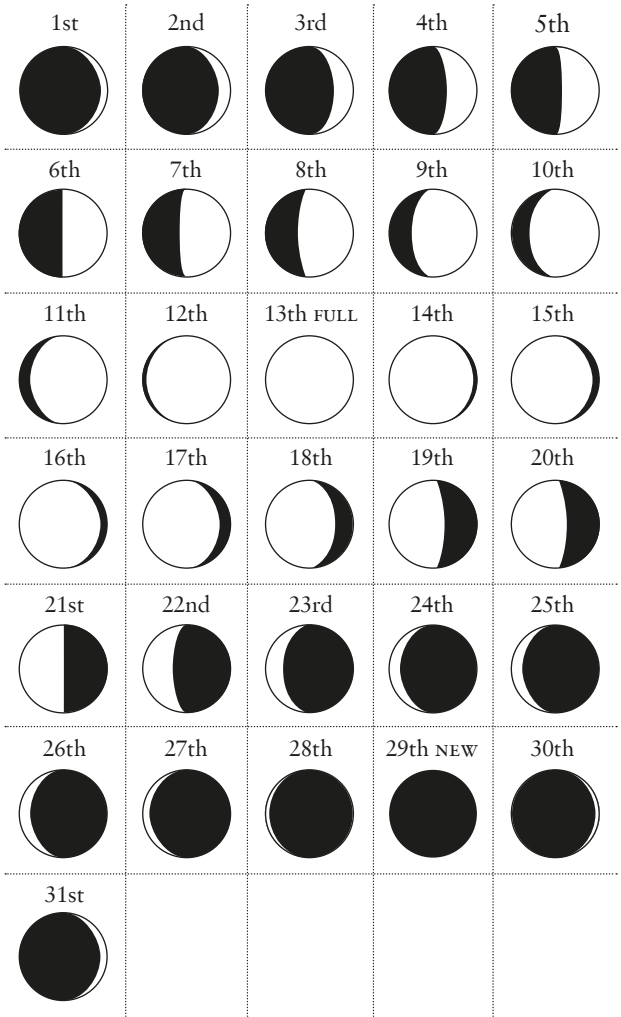
January's full moon is called the Cold Moon, Wolf Moon or Stay at Home Moon.

Moonrise and set

Like the sun, the moon rises roughly in the east and sets roughly in the west. It rises about 50 minutes later each day. Use the following guide to work out approximate moonrise times.

Full moon: Rises around sunset time, but opposite the sun, so in the east as the sun sets in the west.
Last quarter: Rises around midnight, and is at its highest point as the sun rises.
New moon: Rises at sunrise, in the same part of the sky as the sun, and so cannot be seen.
First quarter: Rises around noon, and is at its highest point as the sun sets.

Moon phases for January



MOON GUIDANCE FOR JANUARY

Full moon in Cancer (13th January) – hibernate and dream

Just as we are being bombarded with urges to create resolutions, to self-improve and to set about finding the 'New Year, New You!' the wise full moon arrives in the astrological sign of Cancer to stop our heads from spinning and call us home to ourselves. This cardinal sign initiates action, perfect for the first full moon of the year…yet gently does it. We're in our wintering season, our dreamtime, and the energy of Cancer fully supports this. Ruled by the moon herself, she is at home here. Cancer helps to bring us down from our head and into our body. She calls attention away from our outward expression of how we see ourselves in the world and focuses on the heart. Cancer is all about feelings. Questions to ask ourselves at the dawn of 2025 are: What deeply nourishes me? How do I feed my soul? How do I want to feel as I step out into this new year?

New moon in Aquarius (29th January) – rejuvenate and innovate

Having spent time earlier in the month tuning into the life of our body, the new moon at the end of the month coaxes us from our shell and out into the community. We begin a new lunar cycle under the influence of Aquarius, a fixed sign that maintains equilibrium and welcomes in this new year with a breath of fresh air and sense of rejuvenation. Aquarius is a sign of service and invites us to practise tuning into our newly restored body wisdom and retrieve our gifts. These unique qualities, lovingly given, have the potential to fill our own cup as well as the shared cup of community. How we set out on a journey influences its course. This applies to the cycle of the seasons ahead and each lunar cycle within it. Be mindful and heart-centred as you cross each threshold into the new.

Louise Press

GARDENING BY THE MOON

The following is a guide to gardening with the phases of the moon, according to traditional practices. For moon gardening cynics, it also works as a guide to the month's gardening if you disregard the exact dates.

New moon to first quarter: 31st December 2024–6th January, and 29th January (after 12.35)–4th February
The waxing of the moon is associated with rising vitality and upward growth. Towards the end of this phase plant and sow anything that develops crops above ground. Prepare for growth.

- You could sow chillies and aubergines in a heated propagator. Sow broad beans, peas and sweet peas.
- Buy seeds and fill seed trays or plugs with compost.
- Place forcers over rhubarb plants to exclude light and draw up stems.

First quarter to full moon: 7th–13th January
This is the best time for sowing crops that develop above ground, but is bad for root crops. Pot up or plant out seedlings and young plants. Take cuttings and make grafts but avoid all other pruning. Fertilise.

- Sow chillies and aubergines indoors in a heated propagator.
- Sow broad beans straight into the ground if it is not frozen and cover them with cloches.
- Sow hardy peas and sweet peas in pots under cover.

Full moon to last quarter: 14th–21st January
A 'drawing down' energy. This phase is a good time for sowing and planting any crops that develop below ground: root crops, bulbs and perennials.

- Chit seed potatoes.
- Plant garlic and rhubarb crowns if the ground is not frozen.
- Sow onions and leeks in seed trays.
- Plant fruit trees and bushes, hedging and bare-root rose bushes.

Last quarter to new moon: 22nd–29th January (until 12.35)
A dormant period, with low sap and poor growth. Do not sow or plant. A good time though for pruning, while sap is slowed. Weeding now will check growth well. Harvest any crops for storage. Fertilise and mulch the soil. Garden maintenance.

- Prune apple, pear, medlar and quince trees. Prune autumn-fruited raspberries, red and white currants, and gooseberries.
- Clean and oil tools. Clean pots.
- Check your soil for its pH level. If it is low this would be a good time to add lime or calcified seaweed.
- Weed beds ahead of spring. Mulch areas that have not been recently limed with organic matter.

Note: Where no specific time for the change between phases is mentioned, this is because it happens outside of sensible gardening hours. For exact changeover times for any late-night or pre-dawn gardening, refer to the moon phase chart on page 14.

IN THE ANCIENT MEADOW

In January the ancient meadow sparkles with frost. The sward, cut in summer and grazed by cows, sheep or horses until the ground becomes too wet, sits close to the ground, with tufts of grass and tatty rosettes of wildflowers the only glimpse of its summer glory. Among them caterpillars, beetles and other invertebrates hunker down to avoid the worst of the weather. Lime green speckled wood butterfly chrysalises cling to the underside of stems, unnoticed by passing birds. Newts and toads share the space under logs with springtails, centipedes, woodlice and slugs. Beneath the surface bumblebees hibernate, tucked into a waterproof, wax-lined cell. Yet, on mild days, earthworms may rise from beneath the frost layer to take old leaves and other detritus into the soil, leaving behind their tell-tale casts on the surface. The meadow lives, if only sporadically.

The sun hangs low in the sky and generates long shadows across the land. In landscapes with stone circles, such as Stonehenge, the shadows are cast over stones, which stop the sun from melting any frost and snow on the surface. As the sun moves through the day, the patches of white gradually fade, although those closest to the stones may remain.

In the hoof-trodden mud, summer is a mere dream. Water pools in the prints left by grazing animals, and in these hoof prints seeds of yellow rattle stick to the wet, frost-encrusted soil. Also known as 'meadow maker', yellow rattle is an annual plant that attaches itself to the root systems of grasses and partially parasitises them, reducing their growth and making conditions easier for wildflowers to thrive. The meadow might look dead and cold, but yellow rattle needs a long period of winter cold and wet to germinate. Without winter the summer meadow is just not as pretty.

Kate Bradbury

MEGALITH OF THE MONTH

Stonehenge

Stonehenge is England's national monument, its megalithic cathedral. A vast and awe-inspiring collection of massive stones that dominate Salisbury Plain in Wiltshire, visible for miles around. Every month in this almanac we will be visiting a different megalith or stone circle, and Stonehenge is our January megalith because it is capable of tracking not just midsummer and midwinter, as is well known, but also the spring and summer equinoxes, and the cross-quarter festivals that fall in between them. The whole year ahead is here marked out in shadows and shafts of light.

The builders of Stonehenge must have been skilled architects with considerable mathematical and astronomical knowledge. They understood that the positions of the sunrise and sunset change through the course of the year, tracking along the horizon to their most northern rising and setting points at the summer solstice, and then to their most southern rising and setting points at the winter solstice. The Stonehenge builders set up alignments within the stones to frame the sun on those days, and today thousands of people still gather to mark these spectacular moments.

But Stonehenge also contains traces of a lunar calendar in its less showy features, including the Aubrey Holes, which we will visit again during eclipse season (see page 78), and the Station Stones, which mark the four corners of an imaginary rectangle stretched across Stonehenge and may also create equinox alignments. They create alignments to the most southerly and most northerly possible rising positions of the moon, both of which will only occur in a major standstill year such as this year. These lunar alignments were almost – though tellingly not quite – hidden by subsequent phases of development over the 1,500 years it took to build.

In fact, it seems likely that Stonehenge began as a lunar observatory, and only later evolved into a solar observatory. Stonehenge is a spectacular and perhaps unique example of a stone circle that works as a calendar for the whole year.

THE SKY

Stars, meteor showers and planets

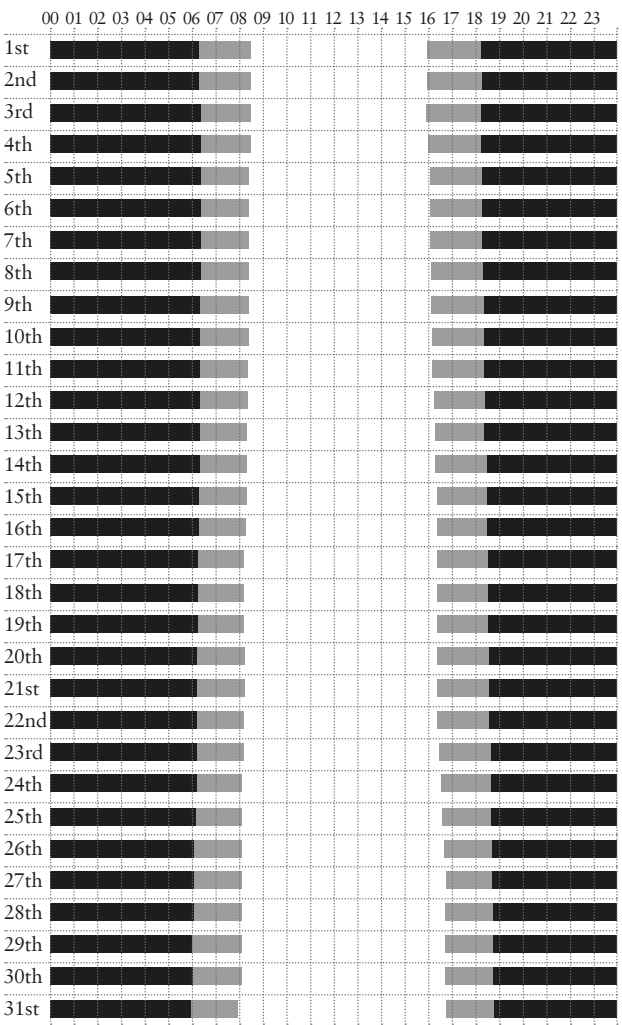
Clouds willing, January will be a brilliant month for meteor and planet spotting, with the Quadrantids meteor shower early in the month and a line-up of the four brightest planets plus the moon shortly after. We also have an occultation of Saturn by the moon (in which Saturn disappears behind the moon), and Mars at opposition – and so as bright as it can be.

3rd: Close approach of Venus to the moon, from 17.00.
3rd: Perihelion. At 13.28 the earth will be at its nearest to the sun in its imperfect orbit, at 147,103,686 km away (compare with aphelion on 3rd July, page 158).
3rd–4th: The Quadrantids meteor shower. The crescent moon sets around 20.00, leaving dark skies for the rest of the night.
4th: Occultation of a dim Saturn by the moon. Saturn will approach the moon from the east at 17.21 and reappear on the other side at 18.30. Steady binoculars will aid observation.
5th: Mars, Jupiter, the moon, Saturn and Venus will all be above the horizon at about 18.40, spread out between the northeast and the southwest. Saturn will be quite dim and will be positioned between the moon and Venus.
10th: Close approach of Jupiter to the moon. They first appear in the dusk at around 17.00.
14th: Very close approach of Mars to the moon, visible all night long. Closest approach is at around 04.00 on the 15th.
16th: Mars at opposition, at its highest and brightest all year.
18th: Close approach of a dim Saturn to Venus, separated by just 2 degrees. They will first appear in the dusk from 17.00.

Approximate sunrise position on the horizon in January.

Sunrise and set

Morecambe, Lancashire



STAR STORY OF THE MONTH

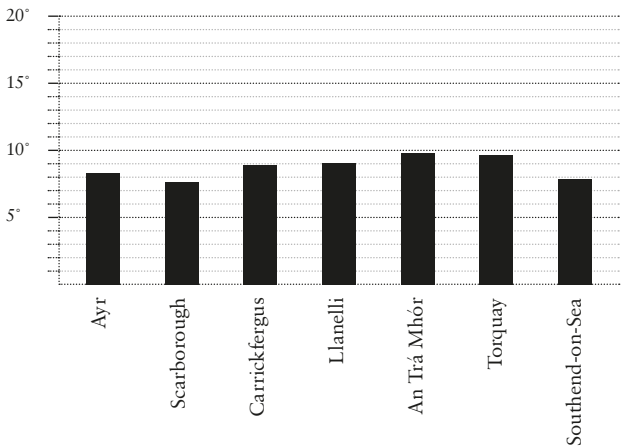
Nanurjuk and Ullaktut

You would imagine that the Inuit of the Canadian far north would have a spectacular view of the stars during the long polar night, but oddly this is not the case. Even when there are no clouds, the view of the stars is limited by blowing snow, the light of the full moon, reflections of the snow and ice, the aurora borealis and the ice fog. Nevertheless the Inuit have traditionally made use of the stars, with peepholes cut in igloos to monitor the stars circling the Pole Star. Midnight was when the Tukturjuit ('caribou') constellation – our Big Dipper – reared up on its hind legs. The Inuit traditionally only named 33 stars and 16 constellations, and here is a story about two of them, found in the constellations of Taurus and Orion, both of which are high in the sky in winter.

A mighty polar bear, Nanurjuk, was on the ice one day when it was spotted by hunters. They set their dogs to chasing it, following it for miles. Despite Nanurjuk running faster and faster, the dogs were always gaining on him. Eventually he reached the edge of the world and – rather than allowing himself to be caught by the dogs – he leaped up into the sky. There he remains, glittering in the dark all through winter. Many moons later, four hunters spotted him and decided to follow him up there and continue the hunt. Up and up they climbed, spears at the ready. One of them realised he had dropped his mittens and so clambered back down to earth to find them, but the other three hunters remained among the stars. They are known as Ullaktut, the three stars of Orion's belt, and can still be seen chasing Nanurjuk through the night sky.

THE SEA

Average sea temperature in Celsius



Spring and neap tides

Spring tides are the most extreme tides of the month, with the highest rises and the lowest falls, and they follow a couple of days after a full and a new moon, the result of the moon and sun's combined gravitational pull. The low tide of a spring tide is the time to go rock-pooling, mudlarking or coastal fossil hunting, when the most shoreline is revealed, while the high tides may bring an increased chance of flooding. Neap tides are the least extreme, with the smallest movements, and they fall in between the spring tides.

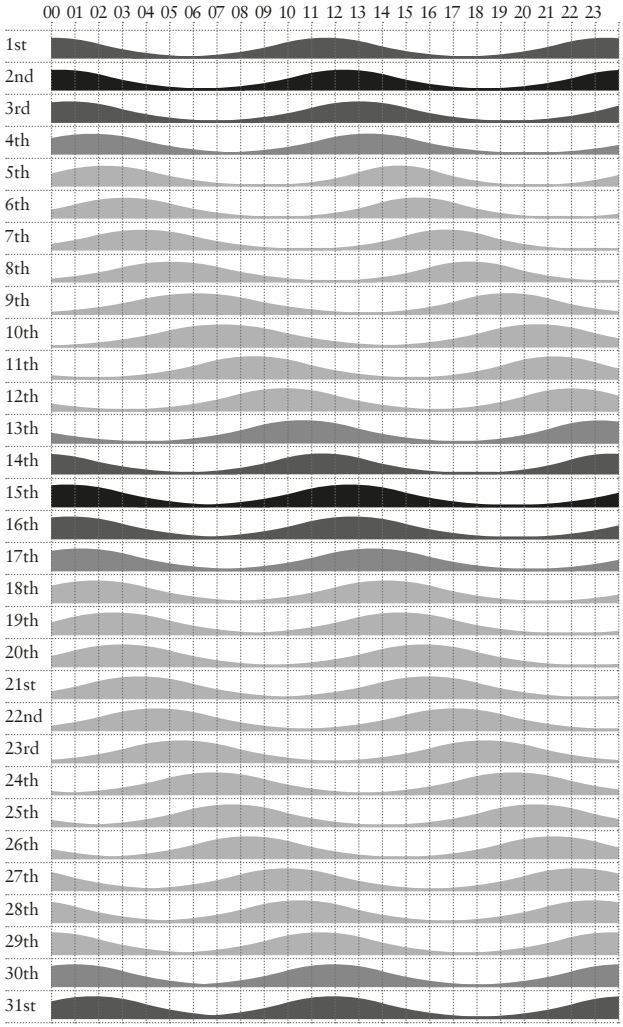
Spring tides: 1st–2nd, 14th–16th and 31st–2nd Feb

Neap tides: 6th–7th and 21st–22nd

Spring tides are shaded in black in the chart opposite.

January tide timetable for Dover

For guidance on how to convert this for your local area, see page 8.



CAKE OF THE MONTH

Twelfth Night Pudding Cake

Twelfth Night on 5th January was once widely celebrated as the last blast of the Christmas season, and one of the key festivities was the election of the 'Lord of Misrule'. A dried bean was baked inside the Twelfth Night cake, and whoever was served it became the Lord and ruled over the rest of the household for the evening. Sometimes a dried pea was added too, and the recipient was crowned 'Queen of the Pea'.

By the 1860s, Twelfth Night cakes were elaborate affairs decorated with marzipan and sugar sculptures, but earlier versions were much simpler and closer to Christmas cakes. Most of us have had enough Christmas cake by this moment in the year, so this is a puddingy cake with a sauce and takes its cue from a sticky toffee pudding.

A 1777 treatise entitled *Observations on Popular Antiquities* mentions honey, ginger and pepper as traditional Twelfth Night cake ingredients, so this recipe is based on these flavours. The pepper seems like an odd addition, but it was widely used in traditional sweet baking and adds a welcome warmth among the other spices.

Serves 6

100g dried figs, with the hard stalk at the top snipped off

100g pitted dates

300ml milk

100g runny honey

1 teaspoon bicarbonate of soda

150g unsalted butter

150g dark muscovado sugar

100g crystallised ginger

1 teaspoon ground cinnamon

1 teaspoon pepper

200g self-raising flour

pinch of salt

For the sauce

150g unsalted butter

150g dark muscovado sugar

100g golden syrup

pinch of salt and pepper

grated zest of 1 lemon (or ask at your local grocers for one of the unusual citruses just coming into season such as bergamot)

250ml double cream

Method

Preheat the oven to 180°C, Gas Mark 4 and butter a 25cm square ovenproof dish.

Put the figs, dates, milk and honey in a pan on a low heat and bring to a simmer for 5 minutes, stirring occasionally. Remove pan from the heat, add the bicarbonate of soda and leave to cool for 10 minutes before blitzing to a smooth paste using a stick blender.

In a bowl, cream together the butter and sugar using an electric whisk until light and fluffy. Switching to a hand whisk, combine the fig and date mixture with the butter and sugar until smooth. Whisk in the ginger, cinnamon, pepper, flour and salt until combined then pour the mixture into the prepared tin. Bake in the middle of the oven for 40–45 minutes.

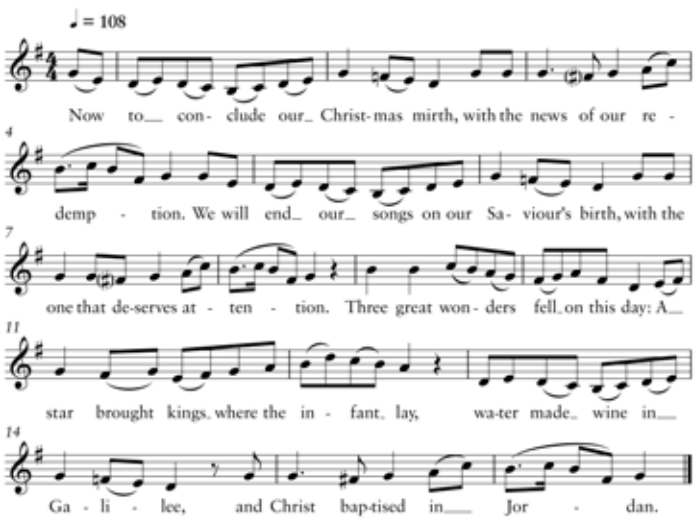
To make the sauce, put the butter, sugar and golden syrup into a large heavy-based pan and slowly bring to a simmer, resisting the temptation to stir it. Once it has been simmering for 10 minutes, remove from the heat and add the salt, pepper and zest, then add the cream slowly, stirring well to combine.

When the pudding comes out of the oven, skewer it all over and pour over about a quarter of the sauce. Cover and leave to rest for 20–30 minutes then serve at the table with the rest of the sauce and some vanilla ice cream or cream.

A SONG FOR JANUARY

'A Carol for Twelfth Day'
Traditional, arr. Richard Barnard

At the end of the Twelve Days of Christmas, Epiphany is celebrated on the 6th January. It marks three major events in Jesus' life: the arrival of the Magi in Bethlehem; his baptism by John the Baptist 30 years later; and the Feast at Cana at which Jesus turned water into wine shortly after, all mentioned in this song. Because Twelfth Night, the night before Epiphany, was the end of the Christmas period, it offered the chance for a last feast with songs, celebrations and a Twelfth Night cake.



Now to conclude our Christmas mirth, with the news of our redemption.
We will end our songs on our Saviour's birth, with the one that deserves attention.
Three great wonders fell on this day: A star brought kings where the Infant lay,
Water made wine in Galilee, and Christ baptised in Jordan.

Those kings might have known what Balaam said of a star that would arise there
In Jacob's land, when he foretold the coming of the Messiah.
Casper, Melchior and Balthazar set out when they saw the new bright star,
Leaving their eastern kingdoms far to find the new-born Jesus.

Amazed to see the cottage poor, and the stall where He was born,
They left their retinue at the door, though so great, they showed no scorn;
Blessed Babe and Mother found, they laid their crowns and sceptres down,
Knelt to adore Him on the ground and might have spoke as follows:

'Here's gold and myrrh and frankincense, we have brought not to enrich Thee,
But to honour Thee, O Heavenly Prince, as Man and God so Kingly.
Frankincense as God is due, the gold shows kingly power too,
Myrrh keeps corpse long sweet and new; we've heard how you must suffer.'

What else might have passed, you may conceive, in this fond conversation;
They bade farewell then, taking their leave, travelling home to their habitation.
Farewell Christians, fare you well too, many Happy Christmases I wish for you;
Blessed end for to ensue, through merits of Sweet Jesus.

ANCIENT ASTRONOMY

Major lunar standstill

As mentioned on page 6, this year the moon is at a 'major lunar standstill'. This phenomenon, which occurs every 18.6 years, may have been tracked by our Neolithic ancestors in many stone circles. All of this year the moon will oscillate between being extremely high in the sky and extremely low: from northern latitudes it will barely skim the horizon at times, to dramatic effect as it always looks larger when it is near the horizon. We will see this in June at Callanish Stones on Lewis (see page 136).

As we are considering how ancient people observed the goings-on in the sky, it makes sense to look at this from an earthbound perspective (admittedly, it is fiendishly difficult to describe from a cosmic one). The moon's rising and setting points on the horizon change through each month as well as through the seasons just like those of the sun, except the full moon rises and sets at its most southerly positions on the horizon in midsummer (and so is low in our sky while the sun is high), and at its most northerly positions in midwinter (and so is high in our sky while the sun is low). This would have been easy for our ancestors to track by – for instance – choosing a viewing point with a wide vista and revisiting it at moonrise and set, placing a stake into the ground to mark the position on the horizon.

But there is a further cycle. Due to a combination of the offset angle of the moon's orbital plane (5.145 degrees) and the angle of the axial tilt of the earth (23.7 degrees), over 18.6 years these rising and setting extremes stretch further north and south until the ultimate extreme positions are reached, and they are at their furthest-apart points on the horizon – and so the moon reaches its very highest and very lowest in our skies. It is called a 'standstill' not because the moon itself stands still in any sense but because these extreme positions will remain in place over many months of a standstill year. This is similar to the sun's solstices, the name of which comes from *solstitium*, or 'sun standing still', except the sun only does it for a matter of weeks. Both cases are about them remaining at their most extreme positions on the horizon for a while before heading back to their least extreme positions. (Halfway through the moon's cycle, 9.3 years later, is the 'minor lunar standstill', when these extreme positions are at their least extreme and closest together).

The archaeologist Alexander Thom coined the expression 'major lunar standstill' in his 1971 book *Megalithic Lunar Observatories*. He theorised that a great many of the standing stones and stone circles of Britain and Ireland tracked this cycle, perhaps using the stake method, and eventually replacing the stakes with standing stones. An understanding of the timing of major lunar standstills is essential for eclipse prediction, an ability that would have provided reassurance – eclipses have been sources of terror and the subjects of folklore the world over. It would also have imbued the priest–astronomers who made such predictions with a great deal of authority and power. The theory goes that this might provide the reason behind many of these mysterious stone circles in our landscape.