

SATURDAY 25 MAY 2019

SAT 19:00 Natural World (b08w61m6)
2017-2018

Supercharged Otters

Otters are playful, adaptable and champion swimmers - they've captivated cameraman Charlie Hamilton James for the last 25 years. He's filmed them more than anyone else and now, through the eyes of three orphaned river otters, a set of groundbreaking experiments and some incredible wild encounters, Charlie wants to reveal their survival secrets and exactly why he believes they're so special.

SAT 20:00 Japan: Earth's Enchanted Islands (p02n9v33)
Honshu

The central island of Honshu is home to over 100 million people, and its biggest city, Tokyo, is one of the largest urban metropolises on earth. But it has a wild heart - most of Honshu is mountainous.

This wilderness is home to an astonishing range of wildlife - black bears, monkeys, exquisite fireflies and even cow demons. But all across this island, from the mountains to the edge of the sea, people and nature are drawn together in the most unexpected ways.

SAT 21:00 Cardinal (m0005hh8)
Series 3

Mama

Delorme goes to Toronto on Cardinal's behalf to look into the validity of his theories about his wife's death. Meanwhile, the fugitive gang get ever closer to their ultimate goal.

SAT 21:40 Cardinal (m0005hhb)
Series 3

Helen

The police close in on Sharlene 'Mama' Winston and her accomplices as they prepare to take off with their hostage. Meanwhile, Cardinal gets closer to establishing the truth about his wife's death.

SAT 22:25 One-Hit Wonders at the BBC (b05r7nxx)
Compilation of some indelible hits by artists we hardly heard from again, at least in a chart sense. Featuring Peter Sarstedt's Where Do You Go To (My Lovely)? - a number one in 1969 and a hit he never really matched, Trio's 1982 smash Da Da Da, Phyllis Nelson's 1985 lovers rock-style classic Move Closer, and The New Radicals' 1999 hit You Get What You Give.

We travel through the years selecting some of your favourite number ones and a few others that came close, revealing what's happened to the one-off hitmakers since and exploring the unwritten laws that help make sense of the one-hit wonder phenomenon.

SAT 23:25 Top of the Pops (m00059bc)

Simon Bates and Gary Davies present the pop chart programme, first broadcast on 26 November 1987 and featuring Blue Mercedes, Boy George, The Communards, Shakin' Stevens, The Hooters, Paul McCartney, The Housemartins, TPau and George Harrison.

SAT 23:55 Top of the Pops (m00059dc)

Janice Long and Gary Davies present the pop chart programme, first broadcast on 3 December 1987 and featuring The Hooters, Alexander O'Neal, The Proclaimers, Def Leppard, Cutting Crew, Jellybean ft Elisa Fiorillo, Michael Jackson, Paul McCartney, TPau and Maxi Priest.

SAT 00:25 Gregory Porter's Popular Voices (p05d3p0d)
Series 1

Showstoppers

Gregory Porter explores 100 years of voices on the brink, those that go one note higher, turn it up to eleven and make the hairs on the back of your neck stand on end.

Starting with the world's first pop star, the legendary Italian tenor Enrico Caruso, Gregory explores the sound and work of his favourite vocal showstoppers - the genius of Ella Fitzgerald, the soul of Mahalia Jackson, the power and stagecraft of Freddie Mercury, the artistry and extravagance of Prince, and the modern melisma of Whitney Houston and Mariah Carey. With Dave Grohl, Beck, Adam Lambert, Wendy & Lisa.

SAT 01:30 Japan: Earth's Enchanted Islands (p02n9v33)
[Repeat of broadcast at 20:00 today]

SAT 02:30 Natural World (b08w61m6)
[Repeat of broadcast at 19:00 today]

SUNDAY 26 MAY 2019

SUN 19:00 Secret Agent Selection: WW2 (b0b2s8pq)
Series 1

Episode 5

By episode five, eight of the original 14 students have fallen by the wayside, leaving just six survivors to undertake SOE's final scheme - a 24-hour practice mission bringing together all the skills they have learned during training.

SUN 20:00 A Year in an English Garden: Flicker and Pulse (b09bdyrh)

A striking and poignant portrayal of time passing in a beautiful Sussex walled garden. Using real-time and time-lapse footage, the film explores the relationship between the seasons and the plants and people who work within the walls of the garden. Locked into the clock of the solar system, the garden performs its annual display, guided by those passionately engaged with its soil.

SUN 21:00 The Mayflower Pilgrims: Behind the Myth (b084fmgq)

Documentary exploring the Pilgrims' journey west across the Atlantic in the early 17th century. The voyage of the Mayflower in 1620 has come to define the founding moment of America, celebrated each year at Thanksgiving. This drama documentary, based on governor William Bradford's extraordinary eye-witness account, reveals the grim truth behind their voyage across the Atlantic.

The Pilgrims' story has come to define the founding moment of America and all it stands for. It is remembered as a pious crusade aimed at founding a Puritan paradise. However, their journey from a harsh, often violent part of England to a colony assured of survival less than ten years later is also one of wealth, cruelty and entrepreneurial genius.

SUN 22:00 The Mystery of Murder: A Horizon Guide (b0555v7v)

There are about 600 murders each year in the UK. So, what drives people to kill? Are some people born to kill or are they driven to it by circumstances?

Michael Mosley delves into the BBC archives to chart scientists' progress as they probed the mind of the murderer to try to understand why people kill, and to find out whether by understanding murder we can prevent it.

SUN 23:00 Cardinal (b08bphs2)
Series 1

Cardinal

Demoted for a hunch about a case that he wouldn't let go, Cardinal is brought back to the homicide unit when the body of missing 13-year-old Katie Pine is discovered, proving his instincts correct. Back on the case, his search for her murderer soon becomes an all-consuming race to stay ahead of a serial killer.

SUN 23:40 Cardinal (b08cfcggs)
Series 1

Delorme

The Algonquin Bay Police Department attempts to make amends with the community for the botched investigation into Katie Pine's disappearance. Detective Lise Delorme risks exposure of her investigation in an attempt to catch Detective John Cardinal in the act of a crime. Meanwhile, the killer zeroes in on his next victim.

SUN 00:25 Cardinal (b08d9p35)
Series 1

Edie and Eric

Concerned that Cardinal is on to her, Delorme digs into the reasons behind her secret investigation. Meanwhile a dangerous, sadistic couple are roaming the streets for a victim.

SUN 01:05 Cardinal (b08f2zkr)
Series 1

Woody

Woody Baldwin, a small-time thief, gets caught in the centre of Eric and Edie's sadistic world when he breaks into their basement dungeon and finds Keith. Meanwhile, Cardinal and Delorme's personal issues threaten their new partnership and Cardinal takes big risks in the investigation that put him at odds with Dyson.

SUN 01:50 Cardinal (b08ftdw6)
Series 1

Keith

When Woody Baldwin's body is found hastily disposed of, Cardinal and Delorme are able to connect it to Eric Fraser, and Eric to Katie Pine and Todd Curry. They know they have their killer - now it's a mad dash to find him before he murders Keith. Meanwhile, Cardinal meets his daughter Kelly when she makes a surprise trip home to visit her mother Catherine - but where is she?

SUN 02:30 Cardinal (b08glcy9)
Series 1

Catherine

Cardinal wonders if he and Delorme are still missing a piece of the puzzle. He digs deeper and goes to the pharmacy where Edie works and finds something very disturbing. Delorme concludes her investigation of Cardinal and it's not good.

MONDAY 27 MAY 2019

MON 19:00 Beyond 100 Days (m0005hjj)
Series 1

27/05/2019

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

MON 19:30 Great British Railway Journeys (b0517pyg)
Series 6

Pembroke Dock to Swansea

Michael Portillo embarks on a new journey from west Wales to East Anglia. Beginning at Pembroke Dock, Michael visits the dockyard where Queen Victoria's royal yachts were built. He investigates what caused riotous rebels to dress up as women in Narberth and spends the night at an inn in Carmarthen where Admiral Lord Nelson once met Lady Emma Hamilton. After flagging down the steam train to ride on the Carmarthen-to-Aberystwyth railway, Michael pitches in with the volunteers who look after the Gwili heritage line. In Swansea, on the estate of one of the pioneers of British photography, Michael learns how to pose for a photograph in Victorian style.

MON 20:00 Victorian Bakers (b06whlhx)
Episode 2

Four 21st-century bakers bake their way through the era that gave us modern baking as we know it - the reign of Queen Victoria. Experts Alex Langlands and Annie Gray join them to tell the incredible story of our daily bread.

The bakers have left the rural bake house and the golden age of baking behind, this time it's the 1870s and they're moving into an urban bakery in the midst of the Industrial Revolution.

Their new bakery is totally authentic and it boasts two coal-fired ovens. At this time it is coal that fuels Britain's epic industrial expansion and bread that feeds its ever-expanding urban workforce. A growing middle class start demanding 'fancy breads' for breakfast and so the bakers must now bake through the night.

Machinery may be powering the nation, but manual labour is cheap and so the bakers are still kneading by hand and are expected to double their output. It's back-breaking work, so much so that one baker decides to do as some Victorian bakers did and use his feet. The bakers experience first-hand the exhaustion and squalid working conditions their forebears endured and it's no surprise to hear that Victorian bakers' lives were tragically short. Morale is low, but it plummets when they are tasked with using the adulterants their forebears added to Britain's bread, and some start to question whether it's safe to continue.

Britain may have been an industrial superpower, but it's the arrival of imported finely milled flour and cheap sugar that finally sweetens life for the bakers as it did for the masses. Cakemaker Hapreet Baura tries her hand at producing hugely popular London buns, the cupcake of their day.

MON 21:00 Last Breath (m0004y5s)

Underwater thriller following the story of a diver trapped on the bottom of the North Sea.

At the time of the accident, Chris Lemons was relatively new to saturation diving. It was an exciting time in his life: he was engaged to be married and building a dream house in the highlands with his fiancée.

After a system failure on the dive support vessel, Chris becomes stranded on the seabed with five minutes of oxygen, but no chance of rescue for more than thirty minutes.

What unfolds next is a frantic rush against the clock to regain control of the ship and find the lost diver. The original participants deliver emotional first-hand accounts of an incident that has reshaped their lives forever.

MON 22:30 Timeshift (b044yw1d)

Series 14

Mods, Rockers and Bank Holiday Mayhem

A trip back to the days when 'style wars' were just that - violent confrontations about the clothes you wore. Spring 2014 marked the 50th anniversary of the bank holiday 'battles of the beaches', when hundreds of mods and rockers flocked to seaside resorts on scooters and motorbikes in search of thrills and spills.

Timeshift tells the story of how this led to violence, arrests and widespread concern about the state of British youth. But mods and rockers had more in common than was first obvious - they were the first generation of baby boomers to reach their teenage years at a time when greater prosperity and wider freedoms were transforming what it meant to be young.

MON 23:30 Clydebuilt: The Ships that Made the Commonwealth (p01n8f5d)

CS Mackay-Bennett

David Hayman explores the stories of four ships, built on the river Clyde, that helped forge links with countries throughout the Commonwealth of Nations.

Here, David tells the story of CS Mackay-Bennett, a cable repair ship launched on the Clyde in 1884. She kept information flowing along a network of underwater cables that connected Britain with her empire and the world - the Victorian internet of its day. It's also a story of a date with disaster, as the ship and her crew recovered the bodies of those who died when the Titanic sank. David travels to Halifax in Canada to find some facts about the ship and to unravel a DNA mystery that's taken over a century to solve.

MON 00:30 Cardinal (b0bfd8m2)

Series 2

Red

Detective Commanda finds a confused young woman, alone at a roadside bar. The red-haired woman has no memory of who she is, how she got there, or who shot her. Even after the bullet is removed, 'Red' can't remember anything. Commanda turns the case over to Cardinal and Delorme, who must protect Red while trying to uncover her identity and find her shooter. While on the trail of a stolen gun that may be the murder weapon, they find another victim, not shot this time but ritually murdered and left in a gruesome tableau.

MON 01:15 Cardinal (b0bfdwbq)

Series 2

Kevin

Cardinal and Delorme's investigation leads them to a local motorcycle gang as the number of victims continues to rise.

MON 01:55 Cardinal (b0bfw78)

Series 2

Terrri

Cardinal and Delorme uncover Red's identity and her connection to Algonquin Bay, as the person who shot her looks to finish the job.

MON 02:40 Cardinal (b0bfw8v)

Series 2

Toof

Cardinal and Delorme work with Terri to piece together the events leading up to her shooting. Delorme gets a major break in the case, but it comes at great personal cost.

TUESDAY 28 MAY 2019

TUE 19:00 Beyond 100 Days (m0005hh4)

Series 1

28/05/2019

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

TUE 19:30 Great British Railway Journeys (b0517s9p)

Series 6

Swansea to Hereford

Michael Portillo continues his journey from Pembroke Dock to Cambridge. On this leg, he begins in the ruinous gardens at Aberglaslyn in Llandilo before riding shotgun in the driver's cab on the Heart of Wales Line on one of the most scenic routes in Britain. En route, Michael learns about the Victorian signalling system still in place today and struggles with his Welsh pronunciation. Over the border in Leominster, Michael steps out on to the dance floor at the Lion Hotel Ballroom, where a grand ball was held to celebrate the opening of the Ludlow to Hereford railway. He finishes this leg of his journey at a traditional cider house in Hereford, where he is invited to enjoy the fruits of his labour.

TUE 20:00 India's Frontier Railways (b05mp8mt)

The Last Train in Nepal

In 1927 a British civil servant drew a line on a map to define the border between their Indian empire and the kingdom of Nepal. Today, that border line is only marked by a chain of boundary stones and pillars - it's a border that is almost invisible.

This is the story of an international railway line. It runs for 20 miles from the little-known town of Janakpur in Nepal and crosses over the border to Jaynagar junction in India.

But now the last train in Nepal is under threat of closure. Starved of funds from central government, the train and the track are in a dilapidated state. Derailments are common and the engine often breaks down. Yet it's a lifeline both for the community and the railway workers - their little train is held together with determination, invention and love.

Regina is strong, independent Nepali woman, married at 12 and pregnant at 13. Deserted by her husband, she's now a single mother of two teenage boys. She makes a living as a smuggler of small household goods. But it's illegal, so even when the train is running there's always the chance of getting caught.

Aarman is a ticket collector in Janakpur station. Married with three small children, he's the sole breadwinner for an extended family and he hasn't been paid for three months. Already deeply in debt, he wanted to send his kids to school, but if the line closes he's out of job - and no job means no money.

This is the story of the last train in Nepal and the community and railway workers who struggle every day to keep their train and their hopes alive.

TUE 21:00 Rhythms of India (m0005hh7)

Series 1

Music of the People

In the second episode of Soumik Datta's musical travels around India, he goes in search of the country's folk and religious music - the traditional music of ordinary people. In the southern Indian state of Kerala, home to some of the oldest religious music in India, he visits the Panchari Melam, a spectacular Hindu festival with extraordinary displays of massed drumming. And in Maharashtra, he discovers how the brass band tradition, with its origins in the military bands of the British Raj, is falling out of favour as the staple of Indian wedding processions. In Bengal he encounters Baul singers, part of a tradition of wandering musicians, mystic minstrels whose music is intended to spread a message of spiritual enlightenment. And in the deserts of Rajasthan he discovers how the rich folk heritage of the region is drawing tourists from around the world and helping sustain communities. Throughout his journey, he marvels at how the music of ordinary people

continues to play an important role in their lives and reflects the challenges facing communities across India as they adapt to a fast changing world.

TUE 22:00 Timeshift (b00rm508)

Series 9

Bread: A Loaf Affair

The aptly-named Tom Baker narrates a tale of aspiration, industrialisation and plain old-fashioned snobbery in a documentary which unwraps the story of the rise of the popular loaf and how it has shaped the way we eat.

Historically, to know the colour of one's bread was to know one's place in life. For centuries, ordinary people ate brown bread that was about as easy on the teeth as a brick. Softer, refined white bread was so expensive to make that it became the preserve of the rich. Affordable white bread was the baker's holy grail - but almost as soon as it became possible to achieve, dietary experts began to trumpet the virtues of brown. Not surprisingly, the British public proved reluctant to give up their white loaves, and even a war couldn't change their eating habits.

TUE 23:00 Treasures of the Indus (b069g53h)

The Other Side of the Taj Mahal

This is the story of the Indian subcontinent told through the treasures of three very different people, places and dynasties that have shaped the modern Indian world.

The Mughals created the most famous and dazzling empire that India has ever seen, from the Taj Mahal to fabulously intricate miniatures of court life.

But in the process, did they bring civilisation to India or tear it apart?

From the moment the first Mughal emperor Babur arrived from Afghanistan the debate began - were the Mughals imposing their own religion of Islam on a Hindu country, or were they open to the religion and art of the country they were conquering?

The artworks the Mughals left behind over their 200-year empire - even the very buildings which have traces of Hindu architecture as well as Muslim - clearly show how this debate played out, and Sona Datta traces how this most spectacular of all Indian civilisations also sowed the seeds of discord.

TUE 00:00 The Culture Show (b03vkt8l)

2013/2014

Lego - The Building Blocks of Architecture

Tom Dyckhoff explores the contribution of Lego to architecture, and its continuing influence, arguing that it's changed the way we think about buildings.

Lego's plastic yellow bricks were launched in the 50s, and resonated with new visions of rebuilding society - with ethical, imaginative children's play at its heart. Tom meets the artists and architects reared on Lego who are using it to reimagine our cities today, from Bjarke Ingels, the leading architect of his generation, to international artist Olafur Eliasson, whose Collectivity project took three tonnes of Lego to the citizens of Tirana, Albania.

But with Hollywood franchises and huge expansion, has Lego lost its original ethos of creativity and construction? Tom looks at Lego's successors and how cult computer game Minecraft may be set to transform the cities of the future.

TUE 00:30 How It Works (b01g98vb)

Ceramics

Professor Mark Miodownik traces the story of ceramics. He looks at how we started with simple clay, sand and rock and changed them into pottery, glass and concrete - materials that would allow us to build cities, transform the way we view our world and communicate at the speed of light. Deep within their inner structure Mark discovers some of ceramics' most intriguing secrets. He reveals why glass can be utterly transparent, why concrete continues to harden for hundreds of years and how cooling ceramics could transform the way we power cities of the future.

TUE 01:30 Cardinal (b0bgkpf6)

Series 2

Northwind

Cardinal and Delorme connect evidence from a fresh crime scene to the ritualistic murder in the cave as Terri's memories

help them make connections between her brother and a likely suspect.

TUE 02:15 Cardinal (b0bgkpfq)
Series 2

El Brujo

Armed with Northwind's real identity, Cardinal and Delorme race to find him before he kills Terri and her brother. A betrayal from within the police ranks threatens not only the case, but Cardinal and Delorme's lives.

TUE 02:55 India's Frontier Railways (b05mp8mt)
[Repeat of broadcast at 20:00 today]

WEDNESDAY 29 MAY 2019

WED 19:00 Beyond 100 Days (m0005hdh)
Series 1

29/05/2019

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

WED 19:30 Great British Railway Journeys (b0517t3m)
Series 6

Abergavenny to Hanborough

Armed with his Bradshaw's guidebook, Michael Portillo makes his way from west Wales across Britain to Cambridge. On this leg, he begins underground at Big Pit coal mine in Blaenavon, where he learns how Victorians toiled night and day to power the industrial revolution. On the River Usk, Michael casts a line and learns about 19th-century developments in angling. On rebellious turf in Ascott-under-Wychwood, Michael discovers the Ascott Martyrs and lends a hand ploughing on the farm where they struck their early blow for labourers' rights. Michael's last stop is Hanborough and Blenheim Palace, where he investigates a fire described in his Bradshaw's which is said to have claimed some risqué art.

WED 20:00 Queen Victoria's Children (b01pp9dg)
A Domestic Tyrant

Queen Victoria and Prince Albert shared a passionate marriage. Behind closed doors, royal domestic life often seemed like a battlefield.

In a 60-year family saga this new three-part series explores the reign of Victoria through her personal relationships with her husband and her nine children. It is a story of manipulation, conflict, intimidation, emotional blackmail, and fevered attempts by her children to escape the clutches of their domineering and needy mother.

The series uses a wealth of written material and photos left by Victoria, Albert and their children, including letters, diaries, memoirs and journals, to bring the subject and characters to life.

This episode concentrates on Victoria's relationship with her daughters. It looks at how, after Albert's death, Victoria clung to and bullied them and arranged their marriages. In response the princesses fought back, becoming independent women determined to find love and fresh purpose. From sculpture to medicine, the daughters became champions of women for a new era.

WED 21:00 Victorian Sensations (m0005hhg)
Series 1

Decadence and Degeneration

The 1890s was the decade when science, entertainment, art and morality collided - and the Victorians had to make sense of it all. Actor Paul McGann discovers how the works of HG Wells, Aubrey Beardsley and Oscar Wilde were shaped by fears of moral, social and racial degeneration.

Paul, seated in Wells's time machine, sees how the author's prophecies of a future in which humanity has decayed and degenerated highlighted the fears of the British Empire. Paul finds out how these anxieties were informed by new scientific theories based on Charles Darwin's theory of evolution. Paul learns how Darwin's cousin Francis Galton sought to improve the genetic stock of the nation, through a project he coined as 'eugenics'.

Another of the decade's prominent scientific thinkers –

Austrian physician Max Nordau – declared that it was art and culture, and their practitioners – the aesthetes and decadents – that were causing Britain's moral degeneration, singling out Oscar Wilde as the chief corrupting influence. Paul explains how Wilde sought to subvert traditional Victorian values. Tucked away in one of Wilde's haunts - the famous Cheshire Cheese Pub on Fleet Street - Paul hears from Stephen Calloway about how Aubrey Beardsley – the most decadent artist of the period – scandalised society, in much the same way as Wilde, through his erotic drawings. Wilde and Beardsley were not alone in being parodied by Punch Magazine. Historian Angelique Richardson shows Paul caricatures of a new figure who had begun to worry the sensibilities of Victorian Britain. Known collectively as The New Woman, this was a group of female writers, who in more than 100 novels, portrayed a radical new idea of femininity that challenged the conventions of marriage and motherhood. However, as Paul discovers through reading a short story called Eugenia by novelist Sarah Grand, some advocated the idea of eugenics through their writing.

For eugenicists, if one means of keeping a 'degenerate' working class in check was incarceration, then that either meant prison or, increasingly by the 1890s, the asylum. Some lost their freedom due to 'hereditary influence', others to so-called sexual transgression. Paul explains how the 'vice' of masturbation was seen as sapping the vitality of the nation. The idea of sexual transgression was to intrude into the Victorian consciousness as never before when, in 1895, Oscar Wilde was found guilty of gross indecency and sentenced to two years in jail.

While Oscar Wilde had made a very public show of defiance, Paul uncovers another leading – and gay - writer of the period, John Addington Symonds, who together with the prominent physician Havelock Ellis, sought to produce a scientific survey of homosexuality. At the London Library, Symonds expert Amber Regis shows Symonds's rare handwritten memoirs to Paul, which served as a source for the groundbreaking 1897 work, Sexual Inversion. Paul explains how questions of sex and gender also lie at the heart of a very different book, published in the same year - Bram Stoker's Dracula. Paul explains how Stoker had his finger – or teeth – on the pulse of the 1890s, infusing his novel with many of the decade's chief preoccupations and growing fears of racial prejudice and immigration.

Paul also meets Natty Mark Samuels (founder of the Oxford African School) reciting a speech by a young West Indian called Celestine Edwards, who took a brave stand against imperial rule and its racist underpinnings. Edwards became the first black editor in Britain, and his pioneering work would be continued by a fellow West Indian, Henry Sylvester Williams, who in 1897 formed the African Association. Outside the former Westminster Town Hall, Paul describes how, in 1900, Williams set up the first Pan-African Conference to promote and protect the interests of all subjects claiming African descent.

WED 22:00 Bloody Queens: Elizabeth and Mary (b06wdz1)

Of all the dangers Elizabeth I had to survive - the Spanish Armada, a Catholic continent plotting against her incessantly, restless nobles uneasy at serving a queen who refused to marry - none was so personally intense as her rivalry with another woman - her cousin and fellow queen, Mary, Queen of Scots. This was her longest, most gruelling battle - lasting over two decades, it threatened to tear apart both Elizabeth and her kingdom. In the end, it would force her to make the hardest decision of her life.

The two queens stared across the ultimate divides of their time: Protestant and Catholic, Tudor and Stuart, English and Scottish. Their fascination with one another grew into the greatest queenly face-off in our entire history. And yet, in 26 years of mutual obsession, they never actually met. Their confrontation was carried out through letters - a war of words so heartfelt and revealing that the two queens' passions can still be felt.

For the first time on television, this chronicle of love turned to hatred, of trust betrayed by plot and bloodshed, is dramatised purely from the original words of the two queens and their courtiers. Expert historians examine, interpret and argue over the monarchs' motives for their 'duel to the death' - for in the end only one queen could survive such emotional combat.

WED 23:00 1066: A Year to Conquer England (b08jnwlp)
Series 1

Episode 3

In this three-part drama-documentary series, Dan Snow explores the political intrigues and family betrayals between Vikings, Anglo-Saxons and Normans that led to war and the Battle of Hastings.

When the winds finally change, Duke William leads his vast invasion fleet across the Channel after months of being trapped in a port in northern France. But King Harold is 300 miles away

in the north, having defeated the Vikings. He has to rush back south, gather a new army and head to Hastings to take on this new invasion. The two armies meet at battle in Sussex on 14 October 1066, and the outcome changes the shape of England and Europe forever.

WED 00:00 Horizon (b0675hcv)
2016

First Britons

Horizon reveals how new archaeological discoveries are painting a different picture of the very first native Britons. For centuries it's been thought that these hunter-gatherers lived a brutal, hand-to-mouth existence. But extraordinary new evidence has forced scientists to rethink who these people were, where they came from and what impact they had on our early history.

Now, our impression is of a hardy, sophisticated people who withstood centuries of extreme climate change and a devastating tsunami that was to give birth to the island nation of Britain. Their way of life may even have survived beyond its greatest ever threat - the farming revolution.

WED 01:00 Amazon Abyss (b00hhf63)
Episode 7

Mike de Gruy and Kate Humble lead an international team of scientists and divers as they search for species new to science in the Amazon River.

It is the climax of the diving expedition as the team explores a 90-metre chasm at the very bottom of the Amazon River. Scientists have no idea what lurks within. The team also explores overgrown jungle streams in search of giant caiman and electric eels - a fish that can stun you with a 600-volt shock.

As the expedition draws to a close, the divers prepare to jump into the depths of the river to confront and film the extraordinary fish that lie in the abyss.

WED 02:00 Awesome Beauty: The Art of Industrial Britain (b093q7gp)

Lachlan Goudie explores Britain's spectacular industrial landscapes and the artists and artworks inspired by them in a passionate and thought-provoking journey that challenges our national stereotypes. Travelling the length and breadth of the UK, and visiting an impressive range of industrial sites, from shipyards to quarries, mines to abandoned wind tunnels, steelworks to space age laboratories, Goudie builds a surprising and compelling alternative picture of Britain.

Featuring revelatory industrial art by the likes of JMW Turner, Graham Sutherland and photographer Maurice Broomfield, the film reveals the awesome beauty, drama and significance of our industrial heritage and proves there is so much more to these isles than the picture postcard cliché of a 'green and pleasant land'.

WED 03:00 Victorian Sensations (m0005hhg)
[Repeat of broadcast at 21:00 today]

THURSDAY 30 MAY 2019

THU 19:00 Beyond 100 Days (m0005hjb)
Series 1

30/05/2019

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

THU 19:30 Top of the Pops (m0005hjd)

Mike Read and Gary Davies present the pop chart programme, first broadcast on 17 December 1987 and featuring Wet Wet Wet, Mel and Kim, Simply Red, The Pogues and Kirsty MacColl, Level 42, Nat King Cole, Belinda Carlisle, Pet Shop Boys and Madonna.

THU 20:00 Neanderthals - Meet Your Ancestors (b0b4dffq)
Series 1

Episode 2

According to recent science the Neanderthals are not the knuckle-dragging apemen of popular imagination. In fact they are our distant ancestors. About 2% of the DNA of most people is of Neanderthal origin - and it continues to affect us today.

In this episode, Ella Al-Shamahi explores the fate of the

Neanderthals - asking why they became extinct, and discovering how they live on inside of us today. The programme starts in the caves of Gibraltar, which may have been the last place the Neanderthals survived. Discoveries here have shown the Neanderthals lived a good life - feasting on seafood and wild game. These were a people who were supremely well adapted to their environment. But about 40,000 years ago they disappeared. Why? It wasn't because they were socially unsophisticated. Back in the studio we return to Ned - the scientific recreation of a Neanderthal we built in the first programme with the help of actor Andy Serkis and a team of scientific experts. In this episode, Andy helps us see Ned towards the end of his life. Ned's fossil shows that he had survived for many years after suffering a number of crippling injuries. This could only have happened if he had been cared for by the rest of his community. This was an advanced society that knew how to survive. So why did they disappear?

One of the reasons might have been that they lost out in a physical showdown with modern humans. Ella investigates one of the world's oldest murder mysteries. A Neanderthal skeleton found in the Shanidar cave in Iraq gives us clues to a gruesome death. In the studio Ella and her team of scientists reconstruct an experiment to discover whether the perpetrator of this murder was a Neanderthal or a modern human. There are other reasons why Neanderthals may have become extinct: their small population size, or climate change. But when their DNA was first decoded in 2010 it became clear that they hadn't completely disappeared - because they live on inside of us - everyone except people from sub-Saharan Africa. Ella meets scientists who reveal how our genetic legacy from Neanderthals may have made all the difference to our survival in Ice Age Europe and how today the DNA from our ancestors affects our skin, our immune system, our risk for cancer, and even certain neuro-psychiatric diseases such as addiction.

At the Pasteur Institute in Paris, Ella meets a scientist who explains how, once we know exactly what we have inherited from Neanderthals, we can use this information to develop new approaches to treating diseases such as the flu virus. But not all of our Neanderthal inheritance is necessarily good for us - it is possible that obesity and type 2 diabetes may have their roots in Neanderthal heritage. Finally, Ella explores a truly mind-blowing possibility that we could manipulate their DNA to bring a Neanderthal back to life. Individually many of us have around 2% Neanderthal DNA. But each person's 2% is different. It turns out that modern humans living today collectively have up to 70% of the Neanderthal genome walking around within us. It's enough that scientists have started contemplating bringing Neanderthals back from extinction.

THU 21:00 Eat to Live Forever with Giles Coren (b05n2csc)
In Eat to Live Forever with Giles Coren, the food critic takes up three extreme diet regimes in a bid to push the very limits of life expectancy. Giles's search to find a diet which might extend his life comes after his great-grandfather lived to the grand old age of 93. His grandfather passed away aged 76 and his father Alan died aged 69. The Coren men are bucking the global trend of living longer so Giles, now in his mid-forties, wants to find out what he can do to avoid a premature death.

In this witty, entertaining and informative documentary, Giles investigates how not to die young with the help of some extreme regimes. He meets people from around the world whose pursuit of longevity is an obsession that dominates every aspect of their lives. It won't be an easy ride for Giles - as a food critic who has eaten in some of the world's finest restaurants, he'll have to make sacrifices. He meets ardent devotees of extreme food regimes, but how much suffering will be involved, and can any of these extreme regimes actually extend Giles's life?

He undertakes the calorie-restriction diet, meeting followers of this near-starvation regime, some of whom aim to live to 150. He then takes up the Palaeo diet, aka the Stone Age diet, which consists only of foods hunted, fished or gathered by our Palaeolithic ancestors. Giles ends his journey with a regime consisting of almost 100 per cent fruit, the aptly named fruitarian diet.

Throughout the process, Giles's health is monitored by his doctor, who helps Giles assess the impact these unusual regimes are having on his body.

Can Giles be persuaded to change his ways by the well-being and enthusiasm of the people he meets? Can he hack the strict self-imposed rules under which they live? Will he discover the secret to a longer life? Or will he decide that the pleasures of a short and happy life matter more to him than living to a ripe old age?

THU 22:00 Operation Cloud Lab: Secrets of the Skies (b04bzkhf)
Episode 2

Continuing their journey across the USA in one of the world's largest airships, the team questions how the atmosphere changes

with altitude and how that has an impact on the life found there.

Microbiologist Dr Chris van Tulleken and former paratrooper Andy Torbet search for living microorganisms in the 'death zone' of high altitude. Parachuting from 26,000 ft, Andy has to overcome sub-freezing temperatures and fatally low levels of oxygen to undertake the experiment.

Aboard the airship, expedition leader Felicity Aston and Dr Jim McQuaid explore the impact of human behaviour upon the atmosphere, questioning whether cities can create their own weather. They unravel a mysterious increase in rainfall over the desert city of Phoenix, Arizona.

Dr Sarah Beynon paraglides for a close encounter with a hawk and a unique opportunity to study up close the adaptations that enable these birds to fly so effortlessly.

To conclude their expedition, the team scuba dive in the giant kelp forest of Monterey Bay, California, to discover how the atmosphere creates habitats below the ocean surface. One of the most fertile and diverse habitats in the seas, it is a vivid demonstration of the power of the atmosphere to reach in to every corner of the planet and make it a place for life.

THU 23:00 Botany: A Blooming History (b0122k8y)
Hidden World

For 10,000 years or more, humans created new plant varieties for food by trial and error and a touch of serendipity. Then 150 years ago, a new era began. Pioneer botanists unlocked the patterns found in different types of plants and opened the door to a new branch of science - plant genetics. They discovered what controlled the random colours of snapdragon petals and the strange colours found in wild maize.

This was vital information. Some botanists even gave their lives to protect their collection of seeds. American wheat farmer Norman Borlaug was awarded the Nobel peace prize after he bred a new strain of wheat that lifted millions of people around the world out of starvation. Today, botanists believe advances in plant genetics hold the key to feeding the world's growing population.

THU 00:00 Top of the Pops (m0005hjd)
[Repeat of broadcast at 19:30 today]

THU 00:30 Storm Troupers: The Fight to Forecast the Weather (b07d7mqg)
Episode 2

Alok Jha investigates how modern weather forecasting was born amid the horrific catastrophes of the 20th century, as meteorologists helped fight two world wars and tried to predict natural disasters across the globe.

He tells the story of Lewis Fry Richardson, a visionary scientist who laid the foundations of modern computer-based weather forecasting in between shifts as an ambulance driver in the trenches of World War I.

In Norway, Alok sees how meteorologists managed to unravel the mysteries of weather fronts and in India he sees how famines, which cost millions of lives, spurred meteorologists to try to understand climate on a global scale.

Alok investigates how, during World War II, weather forecasters working from a secret camp outside London under the most testing wartime conditions were called on to make the most important weather forecast in history - they were asked to predict if conditions would be good enough for the D-Day invasion to proceed. He sees how a family operating a tiny weather station on the west coast of Ireland became a key part of this extraordinary drama, as they provided weather readings that were vital to the outcome of the war.

THU 01:30 Timeshift (b00795qb)
Series 6

Planet Ping Pong

The story of table tennis and how it became the most popular sport in Asia. The programme revisits the glory days of the 30s and 40s, when thousands would cram into Wembley to watch top players do battle.

Contributors include British world champion Johnny Leach, China's former World and Olympic women's champion Deng Yaping, and writers Howard Jacobson and Matthew Syed.

THU 02:30 Secret Knowledge (b03d6b1j)
The Hidden Jewels of the Cheapside Hoard

In 1912, workmen demolishing a building in London's

Cheapside district made an extraordinary discovery - a dazzling hoard of nearly 500 Elizabethan and Jacobean jewels. For the first time since its discovery, all the pieces from this priceless treasure trove were on display at the Museum of London in an exhibition in October 2013.

With exclusive close-up access to the fabulous collection, award-winning jewellery designer Shaun Leane goes behind the scenes during the run-up to the exhibition to uncover some of the secrets of the hoard. Who did the jewels belong to? Why were they buried? And why were they never retrieved?

As Shaun uncovers a world of astonishing skill and glittering beauty, he also reveals a darker story of forgery, intrigue and even murder.

THU 03:00 Neanderthals - Meet Your Ancestors (b0b4dffq)
[Repeat of broadcast at 20:00 today]

FRIDAY 31 MAY 2019

FRI 19:00 World News Today (m0005j35)

The latest national and international news, exploring the day's events from a global perspective.

FRI 19:30 Top of the Pops (m0005j37)

Peter Powell and Gary Davies present the pop chart programme, first broadcast on 31 December 1987 and featuring Krush, Nat King Cole, Climie Fisher, Belinda Carlisle, Morris Minor and The Majors, Cher, Wet Wet Wet, Pet Shop Boys, and Mel and Kim.

FRI 20:00 Elton John at the BBC (b00v5c0)

Elton John's career tracked in archive from performances, interviews and news clips.

FRI 21:00 Meat Loaf: In and out of Hell (b04xdrbb)

Since the release of the Bat Out of Hell album, Meat Loaf has possessed the kind of international status that few artists obtain. His larger-than-life persona and performances are fuelled by a passion for theatre and storytelling. This candid profile reveals the man and his music through his own testimony and from the accounts of those closest to him.

Meat Loaf's life story is one of epic proportions - he survived a childhood of domestic violence only to face years of record company rejection before eventually finding global fame. Along the way he experienced bankruptcy, health scares, bust-ups and one of the greatest comebacks of all time. All this and more is explored in the film, which features behind-the-scenes footage of his Las Vegas residency, plus plans for a new album featuring songs by Jim Steinman.

The film also revisits the Dallas of Meat Loaf's early years and includes insights from his high school friends, who reveal how Meat really got his famous moniker.

After his mother died, Meat Loaf fled Texas for the bright lights of L.A. He sang in itinerant rock bands, but no-one would give him a recording contract. By 1969 he was broke and disillusioned. His break would take the form of a musical. He was offered a part in Hair, having been invited to audition whilst working as a parking attendant outside the theatre. Shortly afterwards he met Jim Steinman and the road to success really began. Yet the Hair gig was the beginning of an enduring love affair with theatre that is reflected in his singing persona today.

His first album, the now legendary Bat Out of Hell, was initially rejected by scores of record companies, yet went on to spend a staggering 485 weeks in the UK charts. The whole album is a masterwork of storytelling that Meat Loaf and Steinman worked on for four years and then battled to get heard. Meat Loaf and those who worked on the album - from Todd Rundgren to Ellen Foley - reflect on the songs, and celebrate the alchemy that resulted in such a blistering back catalogue.

When Bat Out Of Hell II was finally released 15 years after the first album, it defied industry expectations, with 'I Do Anything for Love' reaching number one in 28 countries. It is considered one of the greatest comebacks in music history. More albums and hits were to follow across the '90s and '00s, alongside a varied and successful acting career. Mark Kermode examines some of the roles Meat Loaf made his own, in films as diverse as The Rocky Horror Picture Show and Fight Club.

Having traversed the peaks and troughs of a career spanning the best part of 50 years, this consummate performer finally reveals what spurs him on, in this, the inside story of a bat out of hell who continues to blaze a trail into the hearts and minds of millions.

FRI 22:00 Queen: Rock the World (b09d5xpf)

Behind-the-scenes archive documentary following Queen's Freddie Mercury, Brian May, Roger Taylor and John Deacon as they record their sixth album News of the World and embark on a groundbreaking tour of North America.

By 1977, Queen had become a major headlining act in the UK, releasing chart-topping albums and singles as well as playing sell-out concerts in all the country's major venues. However, they were facing an increasingly hostile music press, who had a new favourite in punk and had turned against the elaborate, multi-layered recording techniques that had become the hallmark of the band's previous albums.

But an unfazed Queen had their sights set on greater things. As the band announced plans to record their next album, the expectation was it would be another production extravaganza, but Freddie, Brian, Roger and John already had other ideas. News of the World showcased them at their most raw, simple and best, returning to their roots as a live act. With a self-imposed limit on studio time and produced entirely on their own for the first time, this stripped-back album took the fans and press by surprise and demonstrated Queen's ability to transcend fashions. It was to prove a seminal moment in the band's history.

At the time, BBC music presenter Bob Harris was given exclusive and extensive access to the band to cover this period. Conducting insightful interviews with all four band members as well as filming them at work in the studio as they were planning and rehearsing their forthcoming North American tour, and then following them as they performed across the US, Bob captured a band attempting to replicate their huge domestic success on the global stage. Curiously, the documentary he set out to make was never completed, and the footage lay unused in the archive until now.

To mark the 40th anniversary of the release of the News of the World album, the footage has now been carefully restored and revisited to compile this hour-long portrait of a group setting out to take the next step on their remarkable journey to becoming one of the biggest bands on the planet. Armed with an array of new songs, including the monster hits We Will Rock You and We Are the Champions, Queen dazzled the American audience and laid the foundations of a relationship that endures to this very day.

Coming full circle, this film is bookended by footage shot in the summer of 2017 as Brian May and Roger Taylor took Queen back to the US with Adam Lambert as lead singer. Revisiting many of the cities they had performed in 40 years previously and including many of the songs from that 1977 album, they prove that despite the tragic loss of Freddie Mercury over 25 years ago, Queen can still rock the world.

FRI 23:00 The People's History of Pop (b07ycbr8)

1976-1985 Tribal Gatherings

Pauline Black, lead singer of Two Tone band The Selecter, looks at the years 1976-1985, when she first picked up a guitar and when music got involved in passionate protest and the high street filled with colourful factions of music lovers.

After a lot of big hair and big rock stars, punks brought pop back down to earth and, out of that, music lovers shattered into an array of pop tribes who posed with passion.

We hear from a man who loved listening to pop hits on Radio 1 and who recorded his own 'Record for the Day' in his incredible picture diary every day. And one former student at a college in Surrey tells how a ball at his graduation was saved by a favourite rock star when the headline act pulled out - neighbour Elton John popped over and played an intimate set on the college's grand piano.

We speak to fans whose lives were changed forever by punk, and the members of an Asian punk band who were inspired by the music to shout for what they believed in at Rock Against Racism gigs and marches. Mods, a Numanoid and a fan of the New Wave of British Heavy Metal explain why they chose their tribes, while Two Tone was the music that tried to unite the kids and just get them dancing. The reverend of Kerry parish shares her unstoppable love of Duran Duran, much to the regret of her punk fiancé. And pop fans were brought together by the experience of Live Aid, when music changed the world outside of us.

Unearthed pop treasures include a tambourine punched through by Sid Vicious, played by a Sex Pistols fan as he sang with the band on the Great Rock n Roll Swindle album. A former music promoter shares some rare items from the Sex Pistols' ill-fated Anarchy in the UK tour, and the son of artist Ray Lowry shows Pauline the drawings his dad did of The Clash's summer American tour in 1979, when Ray was taken as their 'war artist'. We feature some precious material that gives us an insight into the thinking of The Clash's lead singer, Joe Strummer.

FRI 00:00 Top of the Pops (m0005j37)

[Repeat of broadcast at 19:30 today]

FRI 00:30 Metal at the BBC (b00r600p)

Compilation of memorable heavy metal performances from BBC TV shows, including Iron Maiden, Black Sabbath, Judas Priest and Motorhead.

FRI 01:00 Guitar Heroes at the BBC (b00lk48h)

Part II

A celebration of Seventies-era axe-men, acoustic virtuosos and thumping riff merchants, in a compilation of guitar-heavy performances from the BBC TV archives.

Guitar gods including Jimi Hendrix, Pete Townshend, Peter Green and Johnny Winter are joined by, among others, flamenco maestro Manitas De Plata, bottleneck bluesman Ry Cooder and straight-up rockers AC/DC and Thin Lizzy.

Everything from Fleetwood Mac's ambient masterpiece Albatross to hits like The Jam's In The City and Free's All Right Now feature along with lesser-known gems like Maid in Heaven by Be Bop Deluxe and Nils Lofgren's Keith Don't Go.

The tracks were recorded in the heyday of BBC shows such as The Old Grey Whistle Test, Top of the Pops and Rock Goes to College.

FRI 02:00 Elton John at the BBC (b00vs5c0)

[Repeat of broadcast at 20:00 today]

FRI 03:00 Meat Loaf: In and out of Hell (b04xdrrb)

[Repeat of broadcast at 21:00 today]