

## SATURDAY 27 MAY 2017

**SAT 19:00 Saints and Sinners: Britain's Millennium of Monasteries (b053pzz1)**  
Episode 2

The golden age of the British monastery was during the medieval period, when monks transformed British society and rose to a position of immense power. Fighting back after centuries of defeat and neglect, a wave of new monasteries spread across the nation, with over 500 British monastic houses established by the 14th century. Far from the inward-looking recluses of legend, monks were exceptionally creative, and became pioneers in the fields of medicine, science, scholarship, industry, farming, art and music. They didn't turn their back on the medieval world, but helped transform it.

Yet as the monasteries mingled with the world outside their cloisters they began to take on its corruption. They had begun with a vow of poverty, but eventually came to own a third of the nation's land. This wealth, combined with the sins of individual monks, sealed their fate, and as the medieval period ended the monks were on the brink of a catastrophic and total collapse.

From Viking-ravaged Lindisfarne to the astonishing achievements of Durham and Peterborough cathedrals (both built for monks), from cutting-edge hospitals to the rediscovery of the oldest collection of two-part music in the world, this is a story of astonishing success and spectacular artistic achievement that proved too good to last.

**SAT 20:00 Nature's Great Events (b00hq341)**  
The Great Salmon Run

Every year grizzly bear families in North America depend for their survival on a spectacular natural event: the return of hundreds of millions of salmon from the Pacific Ocean to the mountain streams where they were born. The salmon travel thousands of miles to spawn and then die. The great run not only provides food for bears, but for killer whales, wolves, bald eagles, and even the forest itself. The question is: will the salmon return in time to keep hungry bears alive?

A mother grizzly and her cubs emerge from their den high in snowy Alaskan mountains. Filming from the air, the team capture a TV first, following the bears as they negotiate a near-vertical slope on their journey to the coast where they await the return of the salmon.

Meanwhile, the salmon are making their way to the river mouths where they must swim upstream and against the current. The programme reveals how they tackle the torrents and leap over waterfalls, a feat equivalent to a human jumping over a house.

Dozens of hungry bears eagerly await the salmon that make it up river. In another TV first, underwater cameras record the ingenuity and fancy footwork they use to collect dead salmon from the bottom of deep pools.

In the final ten-minute diary, Close Encounters of a Grizzly Kind, wildlife cameraman Jeff Turner, who has filmed bears for 20 years, reveals how he pioneered techniques to show for the first time how bears caught salmon underwater.

**SAT 21:00 Hinterland (b08s3f2s)**  
Series 3 (BBC Four)

Episode 4

Tom Mathias and Mared Rhys seem to be no closer to solving the mystery of Iwan Thomas's death, when the case is officially closed by Superintendent John Powell, who claims that the circumstantial evidence all points to a verdict of suicide. However, the mystery deepens with the discovery that Thomas had been continuing his own private investigation into the children's home at Devil's Bridge with further tragic consequences.

In Welsh and English with English subtitles.

**SAT 22:30 Top of the Pops (b08rc663)**

John Peel and David Jensen present the pop chart programme, first broadcast on 22 December 1983. Artists include Slade, Culture Club, Paul McCartney, Dennis Waterman & George Cole, Billy Joel, Howard Jones and The Flying Pickets.

**SAT 23:05 Top of the Pops (b08rc78m)**

Peter Powell, Tommy Vance, Richard Skinner, Gary Davies and Adrian John present the pop chart programme, first broadcast on 29 December 1983. Features JoBoxers, Mike Oldfield, Thompson Twins, Tracey Ullman, The Cure, Phil Collins, The Belle Stars, Paul Young, Siouxsie & The Banshees, Spandau Ballet, Howard Jones, Rod Stewart, The Style Council and Culture Club.

**SAT 00:00 The Joy of the Bee Gees (b04v8677)**

Guilty pleasure or genius, misfits or mavericks, noble or naff - how do we really feel about the Bee Gees? Are the brothers Gibb a cacophony of falsettos or songwriting maestros, the soundtrack to every office party or masters of melancholy and existential rage? Are they comedy or Tragedy? How deep is our love and how deep are the Bee Gees?

With a back catalogue that includes hits like How Do You Mend a Broken Heart, Massachusetts, Islands in the Stream, Stayin' Alive, Chain Reaction, How Deep Is Your Love, Gotta Get a Message to You, Words, To Love Somebody and Night Fever, the Bee Gees are second only to the Beatles in the 20th-century songwriting pantheon, but while their pop success spans several decades, there are different Bee Gees in different eras. Is there a central glue that unites the brothers and their music and, if so, what is it?

The Joy of the Bee Gees features a rare interview with the last remaining Bee Gee brother, Barry Gibb, many of those musicians and industry figures who have worked with them closely over the years, and a surprising cast of Bee Gees aficionados including John Lydon, Ana Matronic, Guy Chambers, Mykaell Riley and Alexis Petridis, who together share their stories and their insights into the band whose music and image moved us in the 60s and defined pop culture in the mid-to-late 1970s.

The film explores how the band were iconoclasts and outsiders, brothers in the family business, who worked best when together but who grew up and played out their fraternal struggles in public. The brothers went from child stars on the Australian variety circuit to competitors with the Beatles in the UK charts in the late 60s, scoring number one hits while still only teenagers.

In the mid-70s, the former 'beat group' reimagined themselves as a close-knit soul boy trio. The Saturday Night Fever album shot them to global superstardom and every radio station played a song written, produced or sung by the Bee Gees. The saturation of their music and their iconic 'medallion man' image would ultimately elbow them out of fashion, even make them figures of fun...

But you can't keep a good band down and in the 80s they became writing guns-for-hire to stars such as Kenny & Dolly, Barbra Streisand and Diana Ross. 1987 saw the band come back yet again and hit the top of the charts. The deaths of Maurice and then Robin brought the Bee Gees' reign to an end, but Barry and their music live on.

Let's enjoy finding out why and how: welcome to The Joy of the Bee Gees.

**SAT 01:00 The Bee Gees at the BBC... and Beyond (b04v8679)**

Classic Bee Gees studio performances from the BBC and beyond including all the big hits, rare 60s performances from European TV, including a stunning I Started a Joke, a rarely seen Top of the Pops performance of World, the big hits of the 70s and some late performances from the 90s, with the brothers Gibb in perfect harmony.

**SAT 02:00 TOTP2 (b007v15w)**

Boogie Fever: A TOTP2 Disco Special

Get your dancing shoes on for a show of disco mania as Steve Wright and the TOTP2 team take you back to the dancefloor for some boogie fever. The Bee Gees are here in all their glory, along with Gloria Gaynor, Liquid Gold, Sylvester, The Village People, The Weather Girls and The Three Degrees.

There's classic dance fodder from Chic, George McCrae, Hi-Tension, Heatwave, The JALN Band, Earth Wind and Fire, Tina Charles, The Gibson Brothers and Edwin Starr, disco pop from Blondie, Yaz, Boney M and Linx, while Sophie Ellis-Bextor and Infernal bring the story up to date.

And then there's the Disco Duck. Sorry...

## SUNDAY 28 MAY 2017

**SUN 19:00 Perfect Pianists at the BBC (b0729r6r)**

David Owen Norris takes us on a journey through 60 years of BBC archive to showcase some of the greatest names in the history of the piano. From the groundbreaking BBC studio recitals of Benno Moiseiwitsch, Solomon and Myra Hess in the 1950s, through the legendary concerts of Vladimir Horowitz and Arthur Schnitger, to more recent performances, including Alfred Brendel, Mitsuko Uchida and Stephen Hough, David celebrates some of the greatest players in a pianistic tradition which goes back to Franz Liszt in the 19th century. Filmed at the Cobbe Collection, Hatchlands Park.

**SUN 20:00 BBC Radio 1's Big Weekend (b08skn3q)**  
2017

## Highlights

All the highlights from Radio 1's Big Weekend in Hull. Catch the best bits from Biffy Clyro, Christine and the Queens, Stormzy and lots more. Brought to you from the scenic Burton Constable Hall in front of 50,000 fans, catch the excitement from both days of Radio 1's flagship event.

**SUN 21:00 BBC Radio 1's Big Weekend (b08sv5pq)**  
2017

## Kings of Leon Live

Kings of Leon's live headline set from Radio 1's Big Weekend in Hull. Set in the beautiful grounds of Burton Constable Hall, the brothers Followill top the bill for the main stage on the second and final day of Radio 1's flagship event in front of 25,000 fans. Playing the festival for the first time since Glasgow 2014, this performance comes after the success of their seventh studio album, WALLS, released at the end of 2016.

**SUN 22:00 Arena (b08s3fcd)**

## American Epic

## Blood and Soil

This episode takes a look at the stories of those early music pioneers whose names have largely been forgotten.

In the small South Carolina town of Cheraw, Elder Burch held lively church gatherings which inspired young musicians - including jazz giant Dizzy Gillespie. Gillespie's autobiography cites Burch and his sons as direct inspirations; it is no exaggeration to say that modern music would not look the same without Burch's early influence.

The programme takes a look at the gritty songs and musicians that came from the coal mines of Logan County, West Virginia - The Williamson Brothers, Dick Justice and Frank Hutchinson. The hellish conditions of the coal mines inspired them to find a way out, through their music.

Finally we head to the home of the blues - the Mississippi Delta, where Charley Patton captured the sounds and struggles of life in the cotton fields. Patton's significance cannot be understated; he is widely considered the most influential musician in the birth of blues, teaching some of the best blues artists that followed including Howlin' Wolf, Robert Johnson and Honeyboy Edwards.

**SUN 23:00 Blues at the BBC (b00k36m5)**

Collection of performances by British and American blues artists on BBC programmes such as The Beat Room, A Whole Scene Going, The Old Grey Whistle Test and The Late Show.

Includes the seminal slide guitar of Son House, the British R&B of The Kinks, the unmistakable electric sound of BB King and Buddy Guy, Eric Clapton and John Lee Hooker, as well as less familiar material from the likes of Delaney and Bonnie, Freddie King and Long John Baldry.

**SUN 00:00 The Man who Brought the Blues to Britain: Big Bill Broonzy (p01kc82z)**

Big Bill Broonzy would inspire a generation of musicians, yet he was not the man they believed him to be. This first, very intimate, biography of the pioneering bluesman uncovers the mystery of who Broonzy really was and follows his remarkable and colourful journey from the racist Deep South to the clubs of Chicago and all across the world. With contributions from: Pete Seeger, Ray Davies, Keith Richards, Martin Carthy, John Renbourn and members of the Broonzy family. Broonzy's own words are read by Clarke Peters.

**SUN 01:00 Jago: A Life Underwater (b08rp0ld)**

Documentary about Rohani, an 80-year-old hunter who dives like a fish on a single breath, descending to great depths for several minutes. Set against the spectacular backdrop of the Togian Islands in Indonesia where he grew up, this award-winning film recreates events that capture the extraordinary turning points in his life, as a hunter and as a man.

**SUN 01:50 Nature's Great Events (b00hq341)**

[Repeat of broadcast at 20:00 on Saturday]

**SUN 02:50 Engineering Giants (b011w71)**

Jumbo Jet Strip-Down

Engineer turned comedian Tom Wigglesworth and rising star

of mechanical engineering Rob Bell climb on board Victor X-ray, a 200-ton, £200 million Boeing 747. This jumbo jet has flown over 36 million miles in its 14-year life with British Airways. Now it will be broken into tens of thousands of parts in the airline's maintenance hangar in Cardiff, before being painstakingly reassembled and certified fit to fly again. This is the first time this complex process has ever been filmed and it provides fascinating insights into just how a 747 works.

Rob and Tom also visit the UK's largest plane salvage centre in the Cotswolds to discover what happens to a 747 when it reaches the end of its working life, and discover how valuable parts are stripped for resale before the carcass is torn apart to be recycled.

#### MONDAY 29 MAY 2017

**MON 19:00 100 Days+** (b08s35xv)  
Series 1

29/05/2017

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

**MON 19:30 Great British Railway Journeys** (b04xw7kd)  
Series 6

Stirling to Pitlochry

Steered by his Bradshaw's guide, Michael Portillo begins this leg of his journey in Stirling, where he visits the scene of a bloody battle at Bannockburn. Following in the footsteps of Victorian holidaymakers, he travels north to Crieff to experience the popular Hydro.

In the ancient capital of Scotland, Perth, Michael learns what it takes to make a sporan before catching the Highland mainline to Pitlochry and one of Queen Victoria's favourite haunts. He finishes for the day with a wee dram in Scotland's smallest distillery.

**MON 20:00 The Greatest Knight: William the Marshal** (b03z216l)

The fascinating story of knighthood, told through the extraordinary life and times of William Marshal, whom many consider the world's greatest knight. From Europe's medieval castles to the holy city of Jerusalem, presenter Thomas Asbridge explores William's incredible life, revealing a rip-roaring adventure story in the spirit of King Arthur's Knights of the Round Table.

In a career that spanned half a century, this English soldier and statesman served some of Christendom's greatest leaders, from Eleanor of Aquitaine to Richard the Lionheart. Marshal fought in battles across Europe, survived court intrigue and exile, put his seal to the Magna Carta and proved to be the best friend a king could have, remaining loyal to those he served through disaster and victory. Then at the age of 70, despite all the odds, he saved England from a French invasion.

**MON 21:00 Timeshift** (b0610v9d)  
Series 15

Looking for Mr Bond: 007 at the BBC

After more than 60 years tracking James Bond in print and on screen, the BBC opens up its vaults to reveal the forgotten files on the world's most famous secret agent. Featuring rare and candid interviews with all six actors to play 007, and exclusive behind-the-scenes footage, this is James Bond unguarded, unrestricted and unseen.

**MON 22:00 Arena** (b08sr1jx)  
Kirsty Young: 75 Years of Desert Island Discs

As Desert Island Discs reaches 75, today's custodian of the island, Kirsty Young, introduces the 1982 Bafta-winning Arena classic. It celebrated Roy Plomley and his magical idea on their 40th anniversary.

By then, everyone who was anyone had been cast adrift and washed up on Roy's island. Arena's castaways include 40th anniversary guest Paul McCartney, Frankie Howerd, Trevor Brooking, Professor J K Galbraith, Russell Harty and the great comedian Arthur Askey.

This programme does not include the documentary itself.

**MON 22:05 Arena** (b0080tp3)  
Desert Island Discs

First transmitted in 1982, Arena celebrates Roy Plomley's Desert Island Discs with the help of many celebrity castaways, including Frankie Howerd, Russell Harty, Trevor Brooking, the Lord Mayor of London, Professor JK Galbraith and Arthur Askey. The special guest for the 40th anniversary programme was Paul McCartney who was also a fan of the show: 'I love its homeliness. It conjures up the best in traditional British pleasure, like the great British breakfast. It's an honour to be asked'.

**MON 22:50 Mud, Sweat and Tractors: The Story of Agriculture** (b00k9bms)  
Beef

A look at how two of our finest native breeds of cattle, Hereford and Aberdeen Angus, reigned supreme before the Second World War and helped earn Britain a reputation as the 'stockyard of the world'. The programme also shows how, since then, both breeds have been transformed to a much larger size - from standing only to the stockman's waist to reaching his shoulder.

**MON 23:50 Francesco's Italy: Top to Toe** (b00791y3)  
A British Love Affair

Francesco da Mosto enters Tuscany and Umbria to look at the long love affair that Britain has had with the area. He learns how to be the perfect courtier in Urbino, goes grape harvesting in Chianti, discovers the romantic inspiration at the heart of Puccini's operas, travels to Assisi to find out why he was named after St Francis and takes Dame Maggie Smith on a sightseeing tour of Florence.

**MON 00:50 Mothers, Murderers and Mistresses: Empresses of Ancient Rome** (b022bbkr)  
Episode 2

Professor Catharine Edwards explores the dramatic lives of two women at the heart of power in 1st-century imperial Rome. One is Messalina, whose scandalous reputation lives on 2,000 years after her bloody and dramatic death. The other is Agrippina - sister of Caligula, wife of Claudius and mother of Nero - an extraordinary woman who was not only a skilled and ambitious politician but also a murderer and ultimately a murder victim.

**MON 01:50 Ray Mears Goes Walkabout** (b00c4wwj)  
Rock Art

Rock art is incredibly important to the indigenous Australian way of life and the Kimberley area in north western Australia is full of it. Ray travels with an Indigenous Australian artist to learn more about the significance of the art of the area and even has a go at painting in the Indigenous style himself.

**MON 02:50 A Timewatch Guide** (b06z59g7)  
Series 2

Stonehenge

Using 70 years of BBC history archive film, Professor Alice Roberts uncovers how the iconic ancient monument of Stonehenge has been interpreted, argued over and debated by some of Britain's leading historians and archaeologists. She reveals how new discoveries would discredit old theories, how astronomers and geologists became involved in the story and why, even after centuries of study, there's still no definitive answer to the mystery of Stonehenge.

#### TUESDAY 30 MAY 2017

**TUE 19:00 100 Days+** (b08s35y4)  
Series 1

30/05/2017

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

**TUE 19:30 Great British Railway Journeys** (b04xw9w1)  
Series 6

St Andrew's to Edinburgh

On the last leg of his journey across Scotland from west to east, Michael Portillo pays homage to the birthplace of golf at St Andrews. He visits a factory where they make traditional hickory-shafted clubs and ventures out on to the green. In Dunfermline, Michael discovers the poor beginnings of one of the world's wealthiest men, a remarkable philanthropist who worked on the railroads before making his fortune in steel. Crossing the Firth of Forth via the legendary red bridge,

Michael arrives in Edinburgh in the middle of the world's largest arts festival, the Edinburgh Fringe, where he treads the boards in an unconventional adaptation of a play by Oscar Wilde.

**TUE 20:00 The First Georgians: The German Kings Who Made Britain** (b042twvq)  
Episode 2

Lucy Worsley's inside story of Britain's imported German dynasty, made with extensive access to the Royal Collection, reaches the reign of George II. She shows how he had to adapt to a growing 'middling rank' in society no longer content with being downtrodden subjects. Affairs of state were being openly discussed in coffee houses, while the king and his ministers were mocked in satirical prints and theatres.

George II was an easy target - grumpy, and frequently absent in Hanover. To his British subjects he became The King Who Wasn't There. But his wife, the enlightened Caroline, popularized a medical breakthrough against smallpox. However, it was their son, Frederick Prince of Wales, who really understood this new world - he had the popular touch monarchy would need to survive into the modern era.

**TUE 21:00 The Secret History of My Family** (b07569s6)  
The Salford Scuttlers

Press hysteria and public panic gripped 1890s Salford as it erupted into postcode violence. Rival gangs of youths, known as scuttlers, clashed in pitched street battles. Magistrate Joseph Makinson attempted to stamp out the epidemic of gang warfare by giving the scuttlers a taste of their own medicine.

More than a century later, descendants of the rival gang leaders and descendants of the judge who tried to stop them tell their family stories, and ask whether violence is still part of life in working-class Salford.

**TUE 22:00 Cosmonauts: How Russia Won the Space Race** (b04lxxms)

When Neil Armstrong stepped onto the moon in 1969, America went down in popular history as the winner of the space race. However, the real pioneers of space exploration were the Soviet cosmonauts.

This remarkable feature-length documentary combines rare and unseen archive footage with interviews with the surviving cosmonauts to tell the fascinating and at times terrifying story of how the Russians led us into the space age. A particular highlight is Alexei Leonov, the man who performed the first spacewalk, explaining how he found himself trapped outside his spacecraft 500 miles above the Earth. Scary stuff.

**TUE 23:30 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.

**TUE 00:30 Deep Down & Dirty: The Science of Soil** (b040y925)

For billions of years our planet was devoid of life, but something transformed it into a vibrant, living planet. That something was soil.

It's a much-misunderstood substance, often dismissed as 'dirt', something to be avoided. Yet the crops we eat, the animals we rely on, the very oxygen we breathe, all depend on the existence of the plant life that bursts from the soil every year.

In this film, gardening expert Chris Beardshaw explores where soil comes from, what it's made of and what makes it so essential to life. Using specialist microphotography, he reveals it as we've never seen it before - an intricate microscopic landscape, teeming with strange and wonderful life forms.

It's a world where the chaos of life meets the permanence of rock, the two interacting with each other to make a living system of staggering complexity that sustains all life on Earth.

Chris explores how man is challenging this most precious resource on our planet and how new science is seeking to preserve it.

**TUE 01:30 The Secret History of My Family (b07569s6)**  
[Repeat of broadcast at 21:00 today]

**TUE 02:30 Storm Troopers: The Fight to Forecast the Weather (b07d7mqg)**  
[Repeat of broadcast at 23:30 today]

### WEDNESDAY 31 MAY 2017

**WED 19:00 100 Days+ (b08s35y9)**  
Series 1

31/05/2017

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

**WED 19:30 Great British Railway Journeys (b04ynntc)**  
Series 6

Amersham to Regent's Park

Michael Portillo embarks on a series of journeys through London.

He travels on the capital's first underground railway, the Metropolitan Line, from Amersham, where he discovers the foundations for modern-day suburbia. In Pinner, Michael finds out about a Victorian domestic goddess and whips up a pint of her fanciest ice cream. In Highgate, Michael investigates the terraced catacombs of one of London's vast 19th-century cemeteries. At Baker Street, he comes face to face with Isambard Kingdom Brunel before experiencing a hot wax at first hand. He ends this journey with a trip to the zoo at Regent's Park.

**WED 20:00 Timeshift (b0803m60)**  
Series 16

Bridging the Gap: How the Severn Bridge Was Built

2016 saw the 50th anniversary of the Severn Bridge, which completed the motorway link between England and Wales. Timeshift tells the inside story of the design and construction of 'the most perfect suspension bridge in the world', and how its unique slimline structure arose by accident.

**WED 21:00 Koko: The Gorilla Who Talks to People (b07gxpdl)**

Documentary telling the extraordinary story of Koko, the only 'talking' gorilla in the world, and her lifelong relationship with Penny Patterson.

Project Koko started as a PhD project to teach sign language to a baby gorilla, but as Koko began to communicate with Penny, an intense bond formed between them. Penny has now been with Koko for over 40 years and claims Koko can reveal fresh insights into the workings of an animal's mind.

Koko's unique life with Penny has been filmed every step of the way. Over 2,000 hours of footage chart the most dramatic moments - Penny's battle to keep Koko from being taken back to the zoo in which she was born, Penny's clash with academic critics who doubted her claims and the image of Koko mourning the death of her kitten. Penny believes that Koko has moved beyond simple language to express complex emotions - such as a longing for a baby gorilla of her own, and that the empathy she evokes in people changes their attitudes to all animals.

This film explores what we can really learn from this extraordinary science experiment turned love affair. Does it tell us more about animal emotions or our own?

**WED 22:00 The Girl Who Talked to Dolphins (b046w2n8)**  
Documentary telling the story of the most extraordinary experiment in the history of animal science. In the 1960s, a

powerful and charismatic scientist flooded a house. He then invited a young woman to live there full-time with a dolphin. Their intention was the ultimate in animal research - they wanted to teach the dolphin to speak English. What happened next would change all their lives. For the first time those involved in the experiment reveal the secrets of the Dolphin House.

**WED 23:00 Storyville (b07hk228)**  
Unlocking the Cage

Documentary following animal rights lawyer Steven Wise in his unprecedented challenge to break down the legal wall that separates animals from humans. Steve and his legal team are making history by filing the first lawsuits that seek to transform an animal from a thing with no rights to a person with legal protections. It is an intimate look at a lawsuit that could forever transform our legal system, and one man's lifelong quest to protect 'nonhuman' animals.

Supported by affidavits from primatologists around the world, Steve maintains that, based on scientific evidence, cognitively complex animals such as chimpanzees, whales, dolphins and elephants have the capacity for limited personhood rights. Filing lawsuits used to free humans from unlawful imprisonment, Wise argues on behalf of four captive chimpanzees in New York State.

The film captures a monumental shift in our culture, as the public and judicial system show increasing receptiveness to Steve's impassioned arguments.

**WED 00:25 Natural World (b01nhwyz)**  
2012-2013

Queen of Tigers

The story of Machli, the most famous tiger in the world. She is a legendary fighter and a wise mother of nine cubs who has founded a vast dynasty of tigers.

She is now in the last season of her life and wildlife cameraman Colin Stafford-Johnson returns to find his old friend one last time. This film shows the extraordinary milestones in Machli's life, all set in the most stunning Indian scenery.

**WED 01:25 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.

**WED 02:25 Mud, Sweat and Tractors: The Story of Agriculture (b00k9bms)**

[Repeat of broadcast at 22:50 on Monday]

### THURSDAY 01 JUNE 2017

**THU 19:00 100 Days+ (b08s35y9)**  
Series 1

01/06/2017

Katty Kay in Washington reports on the events that are shaping our world.

**THU 19:30 Sounds of the Eighties (b0074sjk)**  
Episode 2

Serious and sincere they may have been, never cracking a smile where a tortured, artistic look would do, but this tranche of 80s pop stars know how to make that look work - Eurythmics, Spandau Ballet, Phil Collins, Fine Young Cannibals, Tears for Fears, Suzanne Vega and Simply Red.

**THU 20:00 Fossil Wonderlands: Nature's Hidden Treasures (b03z05zz)**  
The Mammal Hothouse

Professor Richard Fortey investigates the remains of an ancient volcanic lake in Germany where stunningly well-preserved fossils of early mammals, giant insects and even perhaps our oldest known ancestor have been found.

Among the amazing finds are bats as advanced and sophisticated as anything living today, more than 50 million

years later, dog-sized 'dawn' horses, the ancestor of the modern horse, and giant ants as large as hummingbirds.

**THU 21:00 The Great Village Green Crusade (b08mzrb)**  
Documentary following Red Dwarf comic actor and green energy enthusiast Robert Llewellyn's two-year campaign to persuade residents of his idyllic Cotswolds village, Temple Guiting, to generate more of their own power through renewable sources, as a model for helping to wean the nation off imported oil, coal and gas.

Packed with scientific insight and explanation of the latest renewable technology, from Archimedes screws to solar photovoltaic panels, the film follows Robert as he tries to win over his fellow villagers with grand designs of a windmill atop the local hill, a water turbine in the village stream and solar arrays on parish roofs.

Robert takes inspiration from the extraordinarily rapid change in energy supply happening in perhaps the most surprising of locations - Las Vegas. In the neon-drenched gambling capital of the world, a revolution is under way as the city attempts to power itself entirely by renewable electricity in 2017.

Back in the Cotswolds, Robert and the village face a challenge as they find the local electricity grid cannot absorb the extra load from their proposed renewable scheme. Robert seeks out a solution in battery technology, comparing and contrasting the cutting-edge science of lithium-ion and air batteries. Is this technology that Temple Guiting can use? Can Robert's dream become a reality?

**THU 22:30 Engineering Giants (b0119m3h)**  
Gas Rig Strip-Down

Engineer turned comedian Tom Wigglesworth and Rob Bell, rising star of mechanical engineering, tell the story as an entire North Sea Gas installation, the Lima Platform, is pulled from the sea by floating cranes, brought back to Newcastle, and then torn into tiny pieces for recycling.

But the platform is not just thousands of tons of steel. It was once home to the men and women called the North Sea Tigers. They pioneered gas and oil exploration in the UK and now some of them are ending their careers as part of the decommissioning process. As the gas platform is stripped down, these engineers reveal the secrets of this vital part of our energy supplies, but they also reveal the emotional bonds to the engineering marvel that formed such an important part of their lives.

**THU 23:30 Catching History's Criminals: The Forensics Story (p0214q38)**  
Instruments of Murder

Sherlock has his mind palace, Morse his music - every detective has an edge. For most, it's forensic science. This three-part series provides a rare and fascinating insight into the secret history of catching murderers, charting two centuries of the breakthroughs that have changed the course of justice. Surgeon and writer Gabriel Weston explores this rich history through some of the most absorbing, and often gruesome, stories in the forensic casebook - and looks ahead to how forensics will continue to solve the murders of the future.

Where there's a murder there's usually a weapon. It's a key piece of evidence that can hold all the clues needed to catch the killer and shine a light into the mind of the murderer. In this final episode, Gabriel investigates the forensic advances that have elevated the murder weapon from its role of mere evidence to that of key witness.

Arsenic, the undetectable weapon of choice in the 19th century, was exposed as the murder weapon with one simple chemical test, and distinctive marks left on a victim's skull led detectives to the murder weapon and the killer.

Gabriel also looks to the future and the latest advances in forensics. Scientists have developed 3D laser scanning that can be used to reconstruct the exact sequence of events at the scene of a gun crime and decipher whether a shooting was murder or self-defence. Gabriel also investigates the pioneering chemistry that can now determine where in the world someone has spent time based on just a few strands of their hair.

**THU 00:30 Sound of Cinema: The Music That Made the Movies (b03bm2fy)**  
New Frontiers

In the last of three programmes in which composer Neil Brand celebrates the art of cinema music, Neil explores how changing technology has taken soundtracks in bold new directions and even altered our very idea of how a film should sound.

Neil tells the story of how the 1956 science fiction film Forbidden Planet ended up with a groundbreaking electronic

score that blurred the line between music and sound effects, and explains why Alfred Hitchcock's *The Birds* has one of the most effective soundtracks of any of his films - despite having no music. He shows how electronic music crossed over from pop into cinema with *Midnight Express* and *Chariots of Fire*, while films like *Apocalypse Now* pioneered the concept of sound design - that sound effects could be used for storytelling and emotional impact.

Neil tracks down some of the key composers behind these innovations to talk about their work, such as Vangelis (*Chariots of Fire*, *Blade Runner*), Carter Burwell (*Twilight*, *No Country for Old Men*) and Clint Mansell (*Requiem for a Dream*, *Moon*).

**THU 01:30 Arena (b08s3fcd)**

[Repeat of broadcast at 22:00 on Sunday]

**THU 02:30 The Great Village Green Crusade (b08rnzrb)**

[Repeat of broadcast at 21:00 today]

**FRIDAY 02 JUNE 2017**

**FRI 19:00 World News Today (b08s35ym)**

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

**FRI 19:30 Sounds of the Eighties (b0074sk2)**

Episode 3

Musical memories from the BBC archives. This edition concentrates on the soul and funk artists who found success in the British charts of the 1980s, with performances from Kool and the Gang, The Pointer Sisters, Grace Jones, Cameo, Bobby Womack, Sade, Alexander O'Neal and Whitney Houston.

**FRI 20:00 The Good Old Days (b08rc78p)**

Leonard Sachs presents an edition of the old-time music hall programme, first broadcast on 15 February 1979. With Roy Castle, David Kernan, June Marlow, Deryk Parkin, Alan Randall and members of the Players' Theatre, London.

**FRI 20:50 Sounds of the Seventies (b08skpz3)**

Shorts

The Temptations, Michael Jackson and The Real Thing

A soulful soupcon of seventies songs. The Temptations with *Can't Get Next to You*, The Real Thing perform *Can You Feel the Force?* and a young Michael Jackson gives an energetic performance of *Rockin' Robin* with his brothers.

**FRI 21:00 Top of the Pops (b08skpz5)**

The Story of 1984

1984 sees *Top of the Pops* at the height of its 80s pomp - the year of big hair and big tunes. A BBC ban on Frankie Goes to Hollywood's *Relax* in January leads to an embarrassing Frankie-shaped hole on the show when it reaches No 1. One of the sounds of 1984 is Hi-NRG, that goes overground from the gay club scene into the mainstream charts. And 1984 is perhaps the gayest year in pop, with a trail blazed by Bronski Beat, who are out and proud and on *Top of the Pops*.

1984 sees the rise of the one-man acts such as Nik Kershaw and Howard Jones. And jazz pop's soaraway star is Sade, who brings a stripped-back soulful vibe to *Top of the Pops*. Yet 1984 isn't all about smooth sounds. German singer Nena hits the top spot with *99 Red Balloons* - shocking Brits with her hairy armpits. And *The Special AKA's* *Free Nelson Mandela* combines a political message with an irresistible tune.

And the year ends on a landmark moment when many of the stars of the chart-topping *Band Aid* single appear in the studio as the climax to the Christmas show. It's a moment that reaffirms *Top of the Pops's* place at the heart of British pop culture.

Featuring original interviews with Trevor Horn, members of Frankie Goes to Hollywood, Hazell Dean, Howard Jones, Nik Kershaw, Paul Young, Nigel Planer, Nena, Jerry Dammers and Midge Ure.

**FRI 22:00 Top of the Pops (b08skpzg)**

1984 - Big Hits

Celebrating the big hits from a big year in British pop. The big hitters in this compilation are performed by the likes of The Smiths, Duran Duran, Sade, The Weather Girls, Wham! and Bronski Beat, to name a few.

Further stellar appearances come from the TOTP debuts of iconic Americans Madonna, Miami Sound Machine and Cyndi Lauper, who runs riot in the studio.

Frankie Goes to Hollywood celebrate their 1984 chart dominance with one of their celebrated renditions of *Two Tribes*, while we couldn't let you forget a little ditty from *Black Lace* - you'll be singing this for days... you have been warned!

**FRI 23:00 Arena (b073rgy1)**

Loretta Lynn - Still a Mountain Girl

Legendary country music singer-songwriter Loretta Lynn is loved by fans from across the world. She has sold over 45 million albums worldwide and won more awards than any other female country music star. With affectionate and irreverent contributions from her extended family of self-confessed rednecks, now in her early eighties and still going strong, Loretta looks back at her long and extraordinary life, from being born a coal miner's daughter in Kentucky to receiving the Presidential Medal of Freedom from Barack Obama in 2013. Featuring Willie Nelson, Sheryl Crow, Jack White, Sissy Spacek and, of course, Loretta herself.

**FRI 00:30 Top of the Pops (b08skpz5)**

[Repeat of broadcast at 21:00 today]

**FRI 01:30 Top of the Pops (b08skpzg)**

[Repeat of broadcast at 22:00 today]

**FRI 02:30 Arena (b073rgy1)**

[Repeat of broadcast at 23:00 today]