

# I

## *Underground, Overground: The Caver's Map of Britain*

Until the middle of the nineteenth century, the hills and mountains of Great Britain had an unsettling tendency to move. Not Jehovah-style, but still, their heights and relative places in the national records shifted irritatingly around from decade to decade and from century to century. In the second half of the eighteenth century, the flat-topped hulk of Ingleborough – one of Yorkshire's three peaks – varied between 3,987 and 5,280 feet on maps of the county (its actual height is just 2,372 feet).<sup>1</sup> And until the early 1800s, Cosdon Beacon – the rounded Dartmoor hill that watches paternally over the villages of South Zeal, Sticklepath and Belstone – was adjudged the highest point in south-west England. It was not until the Principal Triangulation of Great Britain had ventured into the interior of Dartmoor, and the first Ordnance Survey map of the moor had been produced in 1809, that it quickly became apparent that the title had been inaccurately bestowed – owing to the illusion of height created by the lowlands to the north of the hill – and Cosdon was swiftly deposed by the small rocky summit of Yes Tor.<sup>2</sup>

In these days of satellite mapping, mountains in Britain tend to stay where you put them. Pianos can reliably be hauled up Ben Nevis without discovering, on return to base, that the blasted rock down the valley is an inch or two taller. Yet venture beneath Britain's crust and the map of the country becomes almost as mutable as

those seventeenth-century charts with whole islands missing. The caver's map of Britain is being so constantly redrawn that by the time this book is in print, South Wales may have become bigger than Yorkshire, and Derbyshire may have grown deeper.

Chris Jewell of the British Caving Association (which maintains the National Cave Registry) explains to me that just as the surface-dweller might bag the highest Munros, walk the country's longest valleys or climb its tallest cliff faces, so Britain's underground landscape possesses a variety of natural highlights (or perhaps 'lowlights'), sites of pilgrimage that feature on every caver's map of the country. A cave might be famed as the deepest from ceiling to base, feared as the most intricate of mazes, or renowned as the longest system of passages underground. A pothole (distinguished from a cave by its vertical rather than horizontal form) might have the longest drop in Britain, or else the largest chamber.

On a blazing August bank holiday weekend, I visit one of those caving shrines. Gaping Gill in Yorkshire lies on the southern slopes of Ingleborough. The largest underground chamber to open naturally to the surface, this abyss of dizzying proportions is 140 metres long, 27 metres wide and 34 metres deep. York Minster would fit snugly inside. The chasm also contains the tallest unbroken waterfall in Britain, where Fell Beck tumbles suicidally from its happy course between low tufted banks into the yawning depths below. Its crashing fall to the bottom is twice the height of Niagara. Today, a small village of brightly coloured tents perches around the entrance to the pothole. Every August bank holiday since 1932, this hole in the ground has been a magnet not just for cavers but for curious members of the public like myself, who are winched one by one to the bottom by members of Craven Pothole Club.

The descent to the base, enclosed in an outsized canary cage, takes just minutes. Once on the boulder-strewn floor, I gaze in bewilderment at the circle of bright sky far above and the treacherous overhanging ledges between myself and the way out. If that winch were to break down . . . What fascinates me more than the

huge, chilly cavern itself, though, is a small group of cavers, helmeted and wellied, carrying ropes and other gear. For them the gill is not the pinnacle of the day's adventure, but merely the starting point from which to explore the 17-kilometre maze of passages that extends between here and Clapham. One by one they post themselves into a narrow horizontal slot at the top of a large slope of boulders, and disappear. The Alice part of me feels an irresponsible urge to follow, but the dimensions of this doorway are appalling. I am left with the sensation of teetering on a threshold between this Britain and a wonderland beyond.

The festive atmosphere of the bank holiday winch trips is a far cry from the first successful descent of Gaping Gill in August 1895. Much to the irritation of locals, who had made repeated attempts to conquer the pothole since 1842 and had been planning a fresh assault since 1893, this feat was accomplished by a Frenchman, Edouard Alfred Martel, an experienced potholer and prolific author on the caves of his homeland.<sup>3</sup> It took Martel 23 minutes, climbing down rope ladders in the icy spray of Fell Beck, to reach the base of Gaping Gill, and another 28 minutes of being hauled up on a lifeline to get out. Looking up from the base of the chasm, however, he recorded that the view past the waterfall to the sky beyond was 'one of the most extraordinary spectacles it has ever been my pleasure to witness'.<sup>4</sup> Martel made incredibly accurate sketches of Gaping Gill and observed that the chamber 'could contain a cathedral with the spire running up the shaft'.<sup>5</sup> In May 1896, he was emulated by local potholer Edward Calvert, who on this his second attempt on Gaping Gill became not only the first Englishman to set foot on the floor of the pothole, but also the first person to properly survey it, revealing its full extent. For a full century after Calvert took his triangulation equipment into Gaping Gill, the pothole was revered among cavers as the largest in the country.

All that changed on 1 January 1999. Just as Ingleborough, in the late eighteenth century, lost its crown as highest mountain in England, so two centuries later, Gaping Gill was relegated on the

map of subterranean Britain. On that New Year's Day, Dave Nixon, now one of Britain's premier cave explorers, scrambled into an unknown chamber beneath Derbyshire's Peak District. In the darkness it was initially impossible to tell whether the chasm was ten feet high or a hundred. In fact, after Nixon had spent six days climbing to its top, he came to the astonishing realisation that the chamber – Titan, as he fittingly named it – was 464 feet high, or 141.5 metres, equal in height to the London Eye. This vast abyss had lain unsuspected, and yet only a short distance below ground. 'It's amazing to think people on the surface would have had no idea that it was there,' Nixon reminisces. 'If you stand in the right place, there's ten metres of moor under your feet, then 145 metres of open space.'<sup>6</sup>

The discovery of Titan is not the only dramatic transformation of the map of underground Britain to have occurred in recent years. On 6 November 2011, below that western corner of the Dales where the counties of Yorkshire, Lancashire and Cumbria jostle each other like irritable bedfellows, two meandering underground labyrinths were reconnected for the first time in millennia. Together they formed what became known as the Three Counties system – a vast subterranean metropolis, which with more than 90 kilometres of passages extending across a trio of counties is now indisputably the Greater London of Britain's underworld.

Like any British city, this hidden capital is made up of distinct districts and neighbourhoods, each with its own character. Ease Gill Caverns to the north has broad 'trunk passages' running through it like underground A roads, and is home to five species of bat. Pippikin, just south of that, is a mature cave system – the 'old town' of the underground capital – formed by streams that have long since migrated elsewhere, leaving behind strikingly decorated passageways. Lost Johns' is a newer and mostly flooded area, while to the far south of the system, Large Pot is perhaps the Canary Wharf of this subterranean city, with the most extensive and complex vertical geography.<sup>7</sup> 'It's got an awful lot of variety,'

says Andy Walsh, who was part of the team that connected up the Three Counties system. 'Whenever you find new sections, they're completely different to other bits.'<sup>8</sup>

What is also truly remarkable is that from the grey-green sheep-dotted hillsides around Casterton you would scarcely guess that you were standing directly above such a subterranean conurbation. A few of the Three Counties' 'city gates', such as the entrance to Lost Johns', are obvious enough – there a large stream tumbles dramatically underground. Consequently it was explored to a limited extent early in the cave system's human history – certainly in 1928, but perhaps far earlier according to an 1888 account, which claims that the cave was named for two lost explorers.<sup>9</sup> The hole into which those unlucky candle-bearing cavers may have descended, however, is just one of at least 44 known entrances to the Three Counties system, the majority of which are as well concealed as foxholes, hidden beneath heather or between rocks.

The serious exploration and piecing together of the Three Counties cave system began from one such innocuous-looking recess. The story goes that on 29 September 1946, two Lancaster men, George Cornes and Bill Taylor, were sitting on Casterton Fell in Cumbria when they noticed that the grass close by them was quivering in a breeze. They traced the draught to a small, overgrown gravelly hollow.<sup>10</sup> Today this unassuming entrance, now known as Lancaster Hole, which alarmingly opens immediately on to a 110-foot-deep shaft, remains one of the most popular (if terrifying) ways into the Ease Gill part of the Three Counties system. In the weeks and months after Cornes and Taylor's discovery, members of the British Speleological Association explored the network of passages radiating out from Lancaster Hole.<sup>11</sup> What they gradually revealed was a long, dry ancient stream bed with clusters of passages branching off it like the fronds of some gigantic fossilised fern. By 1968, the known cave system was 12 miles long. Two years later, a neighbouring cave, Pippikin Pot – previously believed impassable – was explored, and by the end of the 1970s that had been connected

to the Ease Gill caverns, adding its five miles of passages to the total length of the system and extending Ease Gill across one county border, from Cumbria into Lancashire.

Over subsequent years, further caves were discovered and connected to Ease Gill, like villages being swallowed into the suburbs of some inexorably mushrooming subterranean city. The next dramatic enlargement came in 1989, when divers discovered long flooded passages that expanded the cave system well into Lancashire, connecting it with Lost Johns' cave. And by the start of the twenty-first century, claims for the overall length of the Ease Gill caves varied across different published guides from around 70 to 100 kilometres as competing surveyors – like overly optimistic city planners – incorporated both actual and projected 'suburbs' into its official size. Ease Gill's pre-eminence as the longest cave system in Britain was not to remain unchallenged, however. In August 2010, a new and detailed survey conceded that at that time it was actually just 60 kilometres long. Although still substantial, this meant that it not only lost between a seventh and two-fifths of its proclaimed length in one fell swoop; it was also instantly deprived of its place as the capital of Britain's underland.<sup>12</sup>

Its place was taken by Ogof Draenen, South Wales's 'Hawthorne Cave'. For many years this cavern had been considered as short and inconsequential as its namesake tree, neither penetrating much deeper than the subsoil of a hillside above Abergavenny. On 6 October 1994, however, members of the Morgannwg Caving Club had cleared a way through a mess of collapsed boulders inside the known cave to reveal unsuspected passages beyond. Newly discovered caves, like unknown seams of oil or gold, are often closely guarded secrets in the caving world. However, Ogof Draenen's discoverers took the unusual step of inviting other cavers to find whatever caves they could. The result of this collaborative effort was that within just one month, more than 20 kilometres of new passages had been identified – a record for British caving. By 1997, Draenen was 70 kilometres long, making it in fact the longest cave

in Britain, although like many an eighteenth-century mountain, its status was not recognised until more than a decade later.

One of the first cavers invited to help unearth and map Ogof Draenen's secret passages was Tarquin Wilton-Jones, now the compiler of the UK Caves Database. Cavers had long predicted the existence of a large cave somewhere in the vicinity of Draenen, he explains to me, simply because of the way in which streams mysteriously sink and rise in the hillsides. What they found, however, 'almost immediately surpassed expectations'.<sup>13</sup> The typical passage size in Ogof Draenen, Wilton-Jones tells me, 'is about ten by ten metres in cross section – that's wide enough to hold three lanes of traffic. The largest passages are just under 20 metres square – enough to hold an entire motorway, with four double-decker buses stacked on top of each other. And the largest chambers are about 50 to 100 metres across, and 30 metres high – roughly the area of a football pitch, and taller than Buckingham Palace.'<sup>14</sup>

While these dimensions mean that stooping is seldom necessary, Draenen is nevertheless one of underground Britain's most challenging environments. Its sheer size means that trips into its interior need to be lengthier than many seasoned cavers are accustomed to – Wilton-Jones himself has often spent stints of almost three days' duration inside. It is also an old cave, abandoned millennia ago by the waters that once formed it, and like a grand but neglected colonial city is now prone to collapsing ceilings and crumbling decoration. It has 'spectacular stal formations – grand stalagmites, intricate helictites and aragonite needles, gypsum crystals and crystal pools. And some of the most amazing collections of fossils in their natural setting,' Wilton-Jones enthuses. However, he concedes, 'It's hard to admire them when you're slipping and stumbling over kilometres of boulders. You spend more time looking at your feet than the cave.'

For this reason, Draenen is not generally one of Britain's best-loved caves. But those cavers who know it well – especially those who were involved in its discovery – are devoted admirers of the



system. For Wilton-Jones it was a serious injustice that for over a decade it was incorrectly listed as shorter than Ease Gill and was 'denied its rightful recognition' as the longest cave system in Britain. 'It's a cave that I have a very soft spot for,' he confesses, 'so I would have liked it to have got the recognition that it deserved.'<sup>15</sup>

Sadly for Tarquin Wilton-Jones, and the other discoverers of Ogof Draenen, their cave was not given long to enjoy its pre-eminence on the map of subterranean Britain. Even as celebrations were under way in Wales, deep beneath Lancashire work was going on to dramatically extend the Ease Gill system. As early as 1968, when those caves were just twelve miles long, there had been speculation that they could form part of 'a single cave complex on an enormous scale', straddling Cumbria, Lancashire and Yorkshire.<sup>16</sup> It was that dream that fuelled the gradual expansion of Ease Gill over subsequent decades, and its realisation came closer in May 2010, when caves in North Yorkshire were connected to Ireby Fell Cavern in Lancashire. That left just one missing link – between Notts Pot and Lost Johns' caves – in order to join the Yorkshire–Lancashire cave system with the Cumbria–Lancashire one to create a vast complex straddling the three counties.

Although the way to connect those systems was first confidently identified in 2009, 140 metres of collapsed rock stood obstreperously in the way of the Three Counties vision. The mission of clearing it was taken up by a group of almost fifty cavers, led by Tim Allen, Andy Walsh, and Hugh St Lawrence. Calling themselves the 'Misty Mountain Mud Miners', this subterranean brotherhood laboured with dwarfish persistence for more than two years, gathering every week deep beneath Leck Fell to smash fallen rocks, cart oozing sediment up to the surface, patiently buttress their newly cleared passages with scaffolding, and pump out flooded areas. 'It was,' Andy Walsh says, 'a bit like the First World War. We thought it'd be done by Christmas. But it really turned into a war of attrition. It was like the worst kind of nightmare.'<sup>17</sup>



Hopes of a breakthrough came slowly. By January 2010, a whispering breeze was insinuating its way into Lyle Caverns from Notts Pot. By August of that year, sounds could be faintly heard between the two cave systems.<sup>18</sup> But it was not until 6 November 2011 that light could be glimpsed through a tiny hole in the rock. 'First we heard voices, then we saw a light,' Hugh St Lawrence remembers. 'After a few hours we managed to pass a crowbar through the small hole, and soon after that we shook hands with the team on the other side. Eventually we could pass through. It was a fantastic moment.'<sup>19</sup>

Most of the cavers who worked on the Three Counties connection lived locally – around the Lancashire villages of Heysham and Grange, Cumbria's Kendal, or Yorkshire's Ingleton. While Britain's subterranean explorers may travel the length and breadth of the country to undertake underground quests, many cherish a particular affection for the caves of their home area. Tarquin Wilton-Jones, who lives 'virtually on top of Ogof Draenen', has, by his own admission, 'a love affair with it'.<sup>20</sup> This is partly because, like their overground counterparts, each major subterranean province of Britain has its own distinctive character. Take Dave Nixon blindfolded into a cave and he could tell you whether or not he was in Derbyshire. 'The caves in the Dales are cleaner than the Peak District caves. They're well washed. Derbyshire caves are smaller and muddier,' he explains. 'There are also different mineral deposits. There are mineral deposits that we have here that are extremely rare. Particularly the Blue John – a blue-stained calcium fluorite.'<sup>21</sup>

The Peak District is also distinctive for the number of natural caves that combine with and are often accessed via lead mines, some of them dating back as far as Roman times. It is perhaps to underground Britain what Cornwall is to its surface – on the one hand an area still marked with the signs of an intensive industrial history; on the other, a Mecca for tourists. The area around Castleton has a total of four show caves and a long history as a destination for pleasure-seekers and the curious. In 1129, Peak

Cavern was hailed as the 'First Wonder of Britain' by Henry, Archbishop of Huntingdon, in his *Historia Anglorum*. From 1622, the 'Seven Wonders of the Peak' (which included more than one cave) were promoted to tourists after Michael Drayton published his series of poems by that title. And in 1880, Queen Victoria attended a concert within the dark recesses of Peak Cavern.

Much of the distinctive character of underground British regions, like the country's surface, is a result of geology. Because of the angle of the limestone bed in both Derbyshire and the Dales, cave systems there tend to be very vertical, with lots of potholes, whereas the caves in Mendip are fairly shallow and those in South Wales even more horizontal. 'A classic underground trip in the Dales would start at an open hole and head steeply down,' explains Chris Jewell.<sup>22</sup> These entrances might be huge yawning chasms (like Gaping Gill), secret slits on remote fellsides searched out using grid references, or unimpressive-looking holes that the casual passer-by would dismiss as a drain or an animal den. Starting Handle Hole, for example, looks like nothing more exciting than a manhole hidden on a roadside verge next to Leck Fell car park (its name taken from a car starting handle found inside). Most of the caves, however, are wet. 'In Yorkshire, you're usually following an underground stream all the way,' Jewell continues, 'going down lots of steep shafts and using ropes until it finally levels out.'<sup>23</sup> Such Dales trips typically end at a sump – a section of completely flooded passage.

Besides Gaping Gill and the Ease Gill system, other attractions on the caver's map of Yorkshire include Alum Pot, with its 140-foot sheer drop of an entrance, and Manchester Hole, once believed to be a subterranean route to the city after which it is named, and now a popular destination for school groups. Such sites can be nearly as busy below ground as the overland attractions of the Dales. Even on a weekend in December, cavers might arrive at a popular Dales pothole only to find that, like the car park at the Brontë village of Haworth, it is full for the day.<sup>24</sup> This has been

the case since the early twentieth century, when many of today's caving clubs were formed. At Whitsuntide 1929, members of Yorkshire's Gritstone Club 'regarded with some dismay' the queues of potholers waiting to descend into the Lost Johns' cave system.<sup>25</sup> Today cavers book their descent into the same deep recess at least three months in advance.<sup>26</sup>

One virtue of the Dales area, however, is that, despite its popularity among cavers, with 285 kilometres of known passages (the distance from Leeds to Bristol), it is still relatively easy to find a pot of one's own to descend into, away from the most celebrated grottos. Indeed, the region contains as many caves as all the other parts of Britain put together. Those disappointed young Gritstoners in 1929 ambled off to poke into a couple of unnamed holes and chanced upon Pippikin Pot, which now forms part of the Ease Gill System. Those halcyon days of casual discovery have long gone. 'All the easy projects were done in the fifties,' Dave Nixon laments. 'You don't just walk into a new cave these days in Britain.'<sup>27</sup> Nonetheless, riddled as it is like a Swiss cheese, the Dales area still proffers the promise of new caves to discover. 'Unless you're really lucky, it's difficult to find new caves in the Peak District or Mendip,' according to Nixon (who was, of course, unbelievably lucky himself), 'but in the Yorkshire Dales or in South Wales you might easily find a new few hundred metres.'

After the Dales, South Wales is probably the second dark heart of underground Britain. Besides Ogof Draenen, many other caves there are also vast – including Ogof Ffynnon Ddu (or the Cave of the Black Spring), which is currently the deepest cave in Britain at 308 metres, or 1,010 feet. In total, South Wales has over 250 kilometres, or 155 miles, of caves. Like Draenen, the majority of these contain huge passages, formed long ago. 'In many caving areas of England,' Tarquin Wilton-Jones explains, 'the caves are local drainage systems – relatively recent developments that provide underground routes for local streams. They tend to have smaller passages, and are usually clean-washed, with significant vertical sections.' By

contrast, subterranean South Wales has ‘horizontal caves that once served as the drainage routes for meltwater at the edge of the ice sheet, near the end of the last ice age. They carried vast amounts of water through large conduits, traversing entire mountains.’

These ancient riverways, now abandoned by the waters that formed them and encrusted with fossils, are like the giant galleries of a subterranean natural history museum. In them one sees ‘a cross section through the ages of the life that populated the area over 300 million years before – the shells, the coral, the bones of the sharks that swam in a carboniferous ocean, the remains of animals hunted by prehistoric peoples’.<sup>28</sup> For Wilton-Jones, the antiquity and sheer size of the subterranean region beneath South Wales makes it the Scottish Highlands of underground Britain: ‘It’s not to everyone’s taste. But it’s remote, wild and challenging, with some incredible views and rewards [. . .] somewhere where you can challenge your endurance, experience isolation, and feel what it’s really like to be ten hours of hard exercise from the nearest phone reception.’

The time and effort needed to journey through the South Wales underground is not just due to the cave systems’ sheer size. Many of the larger systems, like Draenen, are also known for the complexity of their geography, with labyrinthine passages that weave a long and tortuous path beneath ground – sometimes with as much as 15 kilometres of cave passage beneath just one kilometre of the surface. Here is the spaghetti junction of underground Britain, with numerous complicated intersections.

I wonder how one navigates around underground Britain – what landmarks do cavers use? Tarquin Wilton-Jones might find his way, he says, by reference to ‘the shape of a flake of rock, or the colour of a certain stalactite’. Other cavers might build a cairn at a junction as a reminder – much like those on the Lake District’s felltops. Occasionally they might even resort, Theseus style, to using string. ‘Imagine walking at night with a bright torch, following a series of streams,’ Wilton-Jones explains. ‘Now turn around and try to

recognise each stream junction to get yourself back to the start.' Chris Jewell describes the experience similarly. It is, he says, very much a memory game – a question of remembering particular passageways and striking rock formations. Of course, numerous guides are published for established and popular cave systems – the OS maps of subterranean Britain – but many cavers prefer not to carry these below ground, and in any case they tend to read in one direction only and reversing them is often difficult. 'What's key,' Jewell says, 'is always looking behind you on the way in.'

The region beneath the Mendip Hills and the Avon valley in the south-west of England is one of the easiest British areas to navigate below ground. After the Dales, Derbyshire and South Wales (in no particular order), this is the next most important site on the caver's map of Britain. Few of its caves exceed 500 feet in depth, or a mile or two in length, so finding your way around is relatively straightforward. Partly for this reason, it is also one of the busiest caving areas in Britain. In Swildon's Hole, south of Bristol, you are hardly more likely to find yourself alone than on the beach at Weston-super-Mare. Aficionados of the area, however, praise its variety, pointing out its 'noisy streamways, fine grottos, squeezes, and large chambers often all in the same cave'.<sup>29</sup>

The Mendips area is also well known as a cave-diving hotspot, attracting divers in the same way that surfers flock to the south-west's beaches every summer. The deepest sump discovered so far in Britain – a shivering 90 metres of dark, unlit water – lies in Wookey Hole. And far beneath the Mendip Hills is the largest underground river system in Britain – the 54-square-kilometre catchment area for the Cheddar Yeo river. Dye tests have shown that some of the water in this subterranean morass travels beneath ground for up to ten miles, taking fourteen days to reach the town of Cheddar.<sup>30</sup>

Unsurprisingly, it was the watery recesses of this region that attracted the very first attempts at cave-diving in Britain. In 1934, a team of caving enthusiasts led by Graham Balcombe successfully

sent one of its members, Jack Shepherd, through 300 metres of unknown, flooded passages in Swildon's Hole, armed with a home-made rubber suit and breathing apparatus fed by a bicycle pump.<sup>31</sup> A year later, the same team turned their attention to Wookey Hole, this time equipped with borrowed Royal Navy diving equipment. On 14 July, Balcombe took his first tentative steps below water (the equipment being so heavy that swimming was entirely out of the question). His log of the expedition recalls: 'The first trip up the bed of the River Axe is a revelation of the beauties of this underwater world. It is almost impossible to describe the feelings as leaving the surface [. . .] one suddenly enters an utterly different world, a world of green, where the waters are as clear as crystal.'<sup>32</sup>

During the course of that year, the divers gradually succeeded in penetrating further and further into the flooded sections of Wookey: from chamber three, the last dry section, to chamber seven, where they used floats and ladders in order to climb up to an air chamber never seen before by man. There their progress was halted, not simply because of the rudimentary nature of their equipment, but also because of a worm discovered in a kitchen sink in the village of Wookey; the unfortunate divers were immediately accused of muddying the local water supply.<sup>33</sup>

Unimaginable quantities of oozing, sucking mud is an impediment to be contended with in many of Britain's cave systems. According to the University of Bristol's nonagenarian Speleological Society, subterranean Devon in particular is ideal for 'mud-wrestling midgets', being mostly distinguished by its 'small passages and copious amounts of mud'.<sup>34</sup> Devon has sufficient caves to be classed as an outlying minor province on the caver's map of Britain – as does the Forest of Dean, North Wales, and Assynt, in the Highlands of Scotland.

What Devon does possess, however, besides its mud, is one of Britain's most visited show caves. Kent's Cavern in Torquay, if we are to believe an inscription found within it – 'William Petre 1571' – has been attracting curious visitors for over four hundred years.

Today it draws around 80,000 tourists a year – as many as Wales's Caerphilly Castle or Scotland's Burns Museum. On the caver's map of the country, of course, Kent's Cavern is to the Ease Gill System or Ogof Draenen rather like what Richmond Park is to the Scottish Highlands: a tamed, pocket-sized and cheerily populous taster of Britain's subterranean world: a nice place to take the kids. Show caves in Britain were not always such safe environments, however. In the late eighteenth century, when the first ticket booths were installed by the mouths of notable caves, the guide leading visitors around Poole's Cavern in the Peak District used, in one section of the cavern, to 'desire you to lean towards the rock lest you should fall down a chasm', while the women selling candles outside were also responsible for allowing 'such a certain time [ . . . ] and if the visitors do not return when it is expired, they come in with fresh lights lest any accident should have happened'.<sup>35</sup>

Even now, there is not always a clear distinction between show caves and 'cavers' caves'. In Wales's Dan Yr Ogof, bedraggled parties of wetsuited cave explorers occasionally brush shoulders with jeans-and-trainer-clad tourists as they re-emerge into an electrically illuminated world after long, dark expeditions through the subterranean miles of passage that lie beyond the end of the show cave. Similarly, in both Somerset's Wookey Hole and Yorkshire's Ingleborough Cave, the same cave system contains both wide, family-friendly passages, and some of the most challenging cave dives in the country; it is simply a question of how far in one ventures.

In total, Britain has more than 30 show caves.<sup>36</sup> The biggest groupings are, unsurprisingly, in four of the principal caving centres – the Peak District, South Wales, south-west England, and Yorkshire (which boasts the longest show cave in the country, White Scar Cave). Several small show caves also exist in the south-east of England, in counties that barely register on the caver's map. In the main, however, these are man-made chasms, such as West Wycombe Caves in Buckinghamshire (the former residence of the notorious Hell Fire Club) and Chislehurst Caves in Kent – which are in fact



both chalk mines. In 1903, William Nichols, then vice-president of the British Archaeological Association, speculated that Chislehurst Caves were Druidic, Roman and Saxon in origin. In fact, there is no evidence of them existing before around 1250. However, his theories excited a flurry of tourism to the site, and today the three main sections of the 'caves' still retain the names of their supposed excavators, while guides will point out ominous-looking subterranean Druidic altars – which are in fact benches for eighteenth-century miners.

The guides at Chislehurst also habitually point out a mammoth's tooth to visitors. This is actually no more than a piece of flint embedded in the chalk.<sup>37</sup> However, dotted across the subterranean map of Britain are several caves with a prehistoric heritage as rich and antique as any site above ground. Many of the visitors to Kent's Cavern, for instance, are drawn there not for the fine display of stalactites and stalagmites, but to view the best collection of cave bear remains to be found anywhere in Britain. The Torquay cave also boasts a human jawbone, dated at between 38,000 and 40,000 years old, making it one of the oldest fossils from modern man ever to have been found in Europe.

Only a few of Britain's 'bone caves' have been developed into public show caves. Rhinoceros, bear, mammoth and lion bones, left behind by both men and hyenas, are among the attractions that continue to draw visitors to Wookey Hole. Ogof-yr-Esgyrn (the Cave of the Bones) in Wales was discovered in the 1940s to house 42 Bronze Age human skeletons – and now forms the central attraction of the National Showcaves Centre near Swansea. And at the caves in Creswell Crags in Derbyshire, the discovery of thousands of animal bones – some of them carved 12,000 years ago into daggers, drinking vessels, needles and other tools – has (along with the cave's rock art) created a thriving visitor attraction with ambitions for a multimillion-pound expansion. Such sites are the Stonehenges of underground Britain, complete with their own car parks, interpretation panels, and fibreglass cavemen. Elsewhere,

though, are subterranean necropolises that remain the province of Britain's cavers alone.

Close to Ullapool, in the north-west of Scotland, the bone caves of Inchnadamph have so far yielded up the bones of four humans, all well over 4,000 years old, as well as the remains of polar bears, reindeer, wolves and other creatures. This unique tableau of life in prehistoric Scotland has only emerged reluctantly, however: explorers have been retrieving remains from the subterranean national heritage site since the late nineteenth century, and the latest find – the almost complete skeleton of a large brown bear – was painstakingly recovered piecemeal by cave-divers from Grampian Speleological Group who braved Inchnadamph's tortuous flooded passages over a twelve-year period.

As bone caves demonstrate, subterranean Britain first began to be visited by humans – for shelter, sanctuary, storage, mining, or simply to marvel at, revere and adorn the rock – tens of thousands of years ago. A handful of caves continued to serve as hermitages, refuges or cells through the country's early recorded history.<sup>38</sup> However, the mapping of underground Britain did not begin until the seventeenth century, when the earliest survey of a British cave was published in the *Philosophical Transactions* of the Royal Society. The author of this work – Captain Samuel Sturmeay, a retired mariner – descended in 1669 into Pen Park Hole, a pothole now squeezed between a housing estate and a golf course in the northern suburbs of Bristol. His detailed account was published thirteen years later, along with the survey of a Captain Collins, who had descended into the chasm in 1682; it was also included in Robert Atkins' 1779 *History of Gloucestershire*.<sup>39</sup>

Sturmeay made his descent into Pen Park Hole by being lowered on ropes by a miner employed for the enterprise. Once down, he observed the horseshoe form of the chasm, and the rocks exposed inside. Spotting a cave leading off from the pothole, he was also intent on exploring this – or, rather, on sending the miner into the unknown void. 'I got a ladder down to us, and the Mine-Man went

up the ladder to that place, and walked into it, about 70 paces, till he had just lost sight of me,' he recalled. This promising quest quickly ran out of steam, however, for the miner 'returned affrighted by the sight of an evil spirit, which we cannot persuade him but he saw, and for that reason will go thither no more'.<sup>40</sup> Sturmeý was more successful in his other objective, however: his aim of proving that the water that rose and fell in the pothole was unconnected with that of the Severn estuary. 'I proved to the contrary,' he concluded, 'by staying there from three hours flood to two hours ebb, in which time we found no alteration in this river. Besides its waters are fresh, sweet and cool.'<sup>41</sup>

Sturmeý has a good claim to stand at the very vanguard of all subsequent speleologists and cave explorers who have meticulously traced dye, smoke, or the dirt from a sheep wash through the course of subterranean streams and passages to contribute to the mapping of underground Britain. And he might well have made further discoveries about the form of Pen Park Hole – or at least his hired miner might have done so, once his nerve had returned. However, just four days after his descent into the pothole, Sturmeý 'was troubled with an unusual and violent headache, which he imputed to his being in that vault, and falling from his head-ache into a fever, he soon after died'.<sup>42</sup>

Collins' 1682 survey of the pothole added little to Sturmeý's account, except for more precise measurement. But Pen Park Hole features again in the history of subterranean Britain in 1775, as the site of the first recorded caving fatality. On 17 March of that year, the Reverend Thomas Newnam, one of the minor canons of Bristol Cathedral, visited Pen Park with another gentleman and two young ladies. Newnam was apparently curious about the precise depth of the pothole and decided to try measuring it by holding on to an overhanging ash tree and dropping a line into the void. The branch he was holding broke and he fell 'in the sight of the gentleman and the two young ladies, neither of whom could possibly afford him the least assistance'.<sup>43</sup>

An air of mystery enveloped Newnam's death owing to the total disappearance of his body in the pothole for several weeks before it bobbed back to the surface. This conundrum led to much speculation in the press and, thanks to the typically Victorian taste for the macabre, for several weeks it drew large crowds daily to the cave.<sup>44</sup> Several of these nineteenth-century ambulance-chasers were so intrigued that a system of ropes was set up to lower them into the pothole itself. One man who descended into the chasm was George Catcott – a pewterer by trade, but better known as the first patron of the Bristol forger Thomas Chatterton, as the brother of the anti-Newtonian clergyman and author Alexander Catcott, and as a local eccentric who had once climbed across the unfinished Bristol Bridge in order to claim the title of first man to pay the toll.

Catcott first descended into Pen Park Hole three days after the accident, and then again a month later. Seventeen years after this, his notes from the two visits were combined in *A Descriptive Account of a Descent Made into Pen-park Hole*, which was published in Bristol along with a copperplate engraving of the cavern. Although he stated in the preface to this work that it would make 'no attempts to explain and account for the causes or formation' of the cave, Catcott's patent motivation for surveying the pothole was to add grist to his brother Alexander's contention that the Old Testament deluge had been worldwide, and had been caused when waters trapped under the earth's crust broke free.<sup>45</sup> After carefully detailing the appearance and size of Pen Park Hole, George concluded that it 'could not have been made by art (as some have absurdly asserted) but by the retreat of the waters which flowed thro [ . . . ] into the great abyss beneath, at the time of the universal deluge'.

Catcott's geology may make us scoff today, but he did come up with a plausible answer to the mystery of Thomas Newnam's missing corpse, conjecturing that the body must have bobbed up into the air cavity above an adjoining cavern, only returning to the main chamber of Pen Park Hole once the water table had dropped.

Like Sturmeay, then, he stands in the vanguard of those who first tried to trace and understand the shape of underground Britain. Catcott's minor contribution to this enterprise has of course only been remembered because he was in a position to publish his report. However, his narrative also provides fascinating glimpses of the (often rather more adventurous) exploration being undertaken by other amateurs in this period, as part of the emerging world of British caving. He records, for instance, that a land surveyor named Mr White had succeeded in linking Pen Park Hole with another pothole, 120 feet to the east, by having 'forced himself through upon his belly [ . . . ] with the utmost difficulty, and not without great hazard'.<sup>46</sup> And he concludes his account with a letter from Jeremiah Milles, dean of Exeter Cathedral, who had himself ventured into 'Wokey Hole, and caverns at the Peak and Pool's' (both Peak District caves).<sup>47</sup>

Catcott's account is the second earliest book to have been published about Britain's caves. The earliest is John Hutton's 1780 volume, *A Tour to the Caves in the Environs of Ingleborough and Settle*. This first appeared as an addendum to the second edition of Thomas West's *Guide to the Lakes* but was evidently popular enough to have been republished later the same year as a work in its own right, with a second edition following hot on its heels in 1781. Hutton had first written on the subject of Yorkshire's caves in 1761, in an article for *The Gentleman's Magazine*, and the book was an elaboration of this essay. It relates how the author, a Westmorland clergyman, made an unplanned diversion to visit the caves in the 'not much explored' Craven area of West Yorkshire, following an excursion to the Lake District. Among the chasms that Hutton was led to by his local guide were Yordas Cave (later to be opened as a show cave), Gingle Pot, Hurtle Pot, Catknow Hole and Weathercoat Cave. Interestingly, although he was keen to seek out the 'most surprising natural curiosities' of the area, and although he visited the slopes of Ingleborough, Hutton was not at all anxious to visit 'Gaper Gill', but left it for 'another summer's excursion' – suggesting

that at that date the pothole hardly figured on the underground map of Britain, and even local guides still had little idea of its hidden magnitude.

Hutton viewed subterranean Craven very much through the lens of classical mythology. Descending into Hurtle Pot, he imagined himself as Aeneas entering the infernal regions, while investigating Yordas Cave he envisaged himself first as Cadmus encountering the den of a huge serpent, and then as Actaeon intruding upon the bathing goddess Diana.<sup>48</sup> His local guide seems to have been more than happy to exploit such fancies, assuring him that had he only arrived a few days earlier, he would have encountered 'a few rural beauties having assembled there on an occasion like that of Diana and her nymphs'.<sup>49</sup>

Hutton was roundly mocked for his classical fantasies by an anonymous reviewer for *Blackwood's Edinburgh Magazine*, who scoffingly dubbed him 'Aeneas Hutton'.<sup>50</sup> Like Sturmeay, his own cave exploration was far from heroic. His account repeatedly explains that investigations were terminated because of the threat of being 'besmeared with slime and mud'.<sup>51</sup> And when offered 'the honour of making the first expedition for discoveries' along an unknown cave passage, he declined, being 'apprehensive the pleasure would not be compensated by the dangers and difficulties'.<sup>52</sup> Again like Sturmeay, however, his account provides tantalising glimpses of the early mapping of subterranean Britain. His local guide was able to inform him not only that 'several of the streams run for a mile underground' but also that 'these subterranean brooks cross each other underground without mixing waters'.<sup>53</sup>

Hutton did effectively place the Dales area on the underground map of Britain. As well as having read quantities of classical literature, the Westmorland vicar had also clearly spent time studying the most fashionable aesthetic theories of the late eighteenth century. In his tour of the caves, he repeatedly alludes to Edmund Burke's belief that 'grand and terrible scenes' could produce cathartic effects in the observer.<sup>54</sup> The caves are each praised for

their capacity to inspire terror, with Weathercoat Cave most acclaimed of all for its 'sublime and terrible' qualities.<sup>55</sup> It was these sublime qualities that, once publicised by Hutton, were to draw first the painter J.M.W. Turner, then the artist Richard Westall, and finally the poet William Wordsworth to the subject of the Dales caves. Turner painted Weathercoat Cave in 1808; Westall made engravings of that and Yordas Cave in 1817; and in 1819 Wordsworth produced a trio of sonnets inspired by Westall's images of the Craven area, the first of which celebrates Ingleborough's subterranean landscape. By the mid-nineteenth century, the Dales area was not only on the maps of all speleologists and adventurers, but with its first show caves now open, it was also well known as a diversion for curious tourists en route to the Lake District.<sup>56</sup>

Hutton's account had an immediate effect on the caver's map of Britain, but it was perhaps another eighteenth-century underground explorer who was eventually to have the most dramatic influence on the mapping of the subterranean country. James Plumptre was a Cambridge student, soon to be ordained, when in 1793 he set out on a summer excursion to the Peak District. Among the man-made and natural wonders that he viewed there were Poole's Cavern, Eldon Hole, and the Peak Cavern (then still known as 'the Devil's Arse'). Plumptre cannot be credited with having put these subterranean features on the map – by the time of his visit they had already been included in Thomas Hobbes and Charles Cotton's 1636 poem 'The Seven Wonders of the Peak', and the locals were making good money by fleecing tourists for guided tours and candles.<sup>57</sup> Indeed, Plumptre himself had to contend with rather irritating crowds on his visit into the Peak Cavern: 'the lights and noise of so large a party took off much from the horror and solemnity of the scene', he laments in his journal. 'The effect must be more grand with only a few.'<sup>58</sup>

Plumptre succeeded in escaping from the hordes of other tourists, and in encountering real horror, by venturing into the nearby Speedwell Mine. He was led by miners on a two-hour



tour through man-made passages to view first one natural cavern, then another. The second cave was shaped 'like a beehive', he records, with a huge waterfall dashing from the top to the bottom.<sup>59</sup> He found the sight 'dreadful'. Like Hutton and Catcott before him, he had ventured underground to experience the sublime. Unlike either of these predecessors, though, his aesthetic experience came hand-in-hand with real danger. Once at the bottom of the beehive cave, he saw by candlelight that many of the ladders on which he had been climbing with the miners were 'nearly worn through [ . . . ] so that one false step, or the breaking of a rail had dashed us lifeless to the bottom'.<sup>60</sup>

Besides his surprising pluck, Plumptre is remarkable for having produced a painstakingly accurate and unexaggerated account of the precise route by which he was guided by the miners from the surface to the beehive cave. This account, along with the rest of his travel journals, was not published during the author's lifetime, and despite strong hints in his will that his work should be made public, it remained sequestered after his death – first at his vicarage and then in the archives of Cambridge University. In 1992, however, an edited selection of his work, including the description of Speedwell Mine, finally appeared in print.<sup>61</sup>

Curiously, the long-belated publication of Plumptre's journals was not in itself to be the apotheosis of the underground adventurer's writing career. Soon after its first publication, his account of Speedwell Mine was republished in the journal *Cave Science* – along with a note observing that the beehive cave still awaited 'rediscovery by modern cavers'.<sup>62</sup> That article was read by the Peak District caver Dave Nixon, who was inspired by it to begin a quest for Plumptre's long-lost beehive cavern. 'We started in 1992,' Nixon explains, 'working in the part of the mine that Plumptre described [now known as James Hall's Over Engine Mine], looking for a lost route in.' His team finally made it into the beehive cave in 1996, after four years of clearing debris to unblock the forgotten passage down which the eighteenth-century student had nervously

ventured. Once Plumptre's footsteps had been retraced, it was then possible with yet more digging to make a connection to a remote part of Peak Cavern that had hitherto been accessible only to divers. That route, in its turn, was to lead to the discovery of Titan.

The shape of underground Britain shifts and alters for a variety of reasons. Fresh surveys of caves today invariably correct the measurements recorded in the early days of caving, when only very basic equipment – a tape measure, compass, handwritten notes, sometimes even a ball of string – could be used. Cave systems occasionally shrink, when cavern roofs collapse or passages are filled with silt. And they grow when divers swim into flooded passages to discover unknown chasms beyond the limits of previous exploration. By far the most common reason for the constant redrawing of cavers' maps, however, is digging.

Cave digging, Tarquin Wilton-Jones explains, usually falls into two categories: 'The most easy is where silt has been washed into the passage and filled it to the roof. Digging here would simply mean removal of the silt. The second, and often more difficult form of digging is through chokes. These occur where the roof of the passage has collapsed over thousands of years, and the rubble that has fallen has blocked the passage.'<sup>63</sup> Either way, it is a Herculean activity, requiring either the patient removal of thousands of bucket-fuls of mud, weekend after weekend, with the diggers sometimes even sleeping underground, or else the highly specialist and potentially perilous use of chisel-action drills, explosives and scaffolding. It also requires an incredibly keen awareness. Few diggers have a Plumptre journal to guide them towards new caves. Instead they are led by the slightest draught wafting blue curls of incense beckoningly down a passage, suggesting a hidden opening ahead; by the distant whisper of voices on the other side of what seems to be solid rock; or by 'tiny shapes in the walls or roof' of a cave, and minerals that seem 'out of place'.<sup>64</sup> 'You've got to be able to read the geology,' Dave Nixon explains. 'You've just got to know what the rocks are telling you.'<sup>65</sup>

In total, it took Nixon and his team almost seven years of underground excavation to find the record-breaking chasm into which they scrambled on New Year's Day 1999. For most cavers in Britain, however, the rewards are small in proportion to the sheer physical effort. Indeed, there is often no reward at all. 'You have to kiss a lot of frogs to find your princess,' Chris Jewell says ruefully. Tarquin Wilton-Jones has also known his fair share of abandoned enterprises – digs that became too unstable to continue, that headed back ouroboros-like to their own start, or that ended in passages that 'closed completely, rounding off without even a narrow crack left behind'.<sup>66</sup> And there were numerous false starts and dead ends before the Three Counties cave system was finally connected.

Nevertheless, digging is central to caving in Britain, and at this very moment there are multiple projects under way around the country. In the Dales, attempts continue to extend the Three Counties system further into Yorkshire, and connect it to the Kingsdale Master Cave near Ingleton, which would add a further 25 kilometres to its length. At present Andy Walsh estimates that that connection is around 250 metres off, 'but if the passages dog-leg, it could be a lot further in real terms'.<sup>67</sup> And in South Wales, Tarquin Wilton-Jones remains convinced that there is still more of Ogof Draenen to find – perhaps as much as 30 kilometres of dry cave, with another 40 kilometres of flooded passage, judging by the overland distance between the end of the known cave and the point where its underground waters return to the surface.<sup>68</sup>

It strikes me that the desire to extend these cave systems, to link one known cavern with another, is not unlike the impulse to pioneer trade routes and link colonies that saw the rosy tones of the British Empire creeping inexorably across the pages of atlases in the nineteenth century. Indeed, digging's closest parallel is perhaps the fixation that led numerous Victorian mariners to their deaths in search of the fabled Northwest Passage. 'To cavers, the map is only complete when the area's hydrology has been completely explained by the known caves – when the individual cave surveys, placed

together, make a completed map without any gaps in the drainage systems,' Tarquin Wilton-Jones explains. Such an absolute map of subterranean Britain does not yet exist – perhaps it never will – but the cavers get 'a little closer with each discovery'. Time and again, those to whom I spoke about digging described its appeal as 'a puzzle'. 'When you're working on a project it's like a big puzzle. It burns in your head,' says Dave Nixon. 'It appeals to people with inquisitive minds. You also need tenacity and determination. You never know whether you're going to break into a ten-foot cave with a low ceiling, which is horrible, or something like Titan.'

When Nixon discovered Titan, reducing Gaping Gill to the second largest cave in Britain, he was, he confesses, 'delighted to steal the crown, as it were' from Yorkshire.<sup>69</sup> While sprawling cave systems may stretch underground like colossal sleeping dragons, with a prehistoric disregard for county borders and human rivalries, one spur to diggers is certainly local pride. Nixon is a Derbyshire man, and although he has discovered caves around the world, 'it just means so much more' to have extended the cave system on (or beneath) his own doorstep.<sup>70</sup> The connection of Lancashire's Ireby Fell caverns to Rift Pot in Yorkshire was celebrated proudly with Eccles cake, Lancashire cheese, Black Sheep beer and Yorkshire teacakes, as the Three Counties system took its penultimate step towards deposing Ogot Draenen.<sup>71</sup> And for many other cavers, making their local caves deeper, longer or more complex than caverns further afield becomes a challenge akin to the race between medieval parishes to build church spires reaching ever closer to the heavens.

Regional pride is not the only spur to diggers, though. Like the pioneers who named North American valleys after lost wives or forsaken home towns, the man or woman who discovers a new cave also has the honour of naming it. Thus Peterson Pot, in the Dales, is named after 'a cherished pipe' inadvertently left inside it in 1929 by the man who found and christened it.<sup>72</sup> Perhaps unsurprisingly, however when individuals obsessed with hidden chambers

and secret passages are let loose on place names, the results more often recall the worlds of Lewis Carroll, C. S. Lewis and Terry Pratchett. In *Ogof Draenen, Forever Changed* leads to Another World, you can drop through the floor to enter the Realm of Baron Von Carno, and you must choose between going straight on past Knees Up Mother Brown and heading right towards Tea Junction.<sup>73</sup> Explored largely in the 1960s and 1970s, large sections of the Gaping Gill system possess underground Britain's most Tolkienesque place names. Here Rivendell lies just a short distance from Gandalf's Gallery, Radagast's Revenge and Bilbo's Battery.

While subterranean Britain may offer cavers virgin territory to tread upon and christen, however, those undiscovered realms – much like the 'new worlds' explored in past centuries by European explorers – are by no means without owners. While Titan 'belongs' – as far as most cavers are concerned – to Dave Nixon, the cave is legally in the ownership of the farmer beneath whose land it is hidden. Technically a large cave system may belong to numerous landowners if various sections of it lie beneath different estates. However, in practice it is the landowner who possesses the entrance to a cave who controls access to it.

Today, the British Caving Association exists to negotiate on behalf of cavers for access to Britain's underground landscape. In the early days of caving, however, questions of access and ownership often caused tensions. During the post-war exploration of the Ease Gill system, for instance, the British Speleological Association controversially took out a lease on Casterton Fell and installed a cap on Lancaster Hole. The ostensible reason for this was 'to allow a programme of speleological research to progress unhindered'. However, at the time there was a strong suspicion in the caving community that 'no real research was being carried out, and [. . .] that the lid was serving purely to exclude other clubs'.<sup>74</sup> Threats of blasting off the offending lid began to circulate. Then when it was discovered that with the right technique it could in fact be levered off, the pothole quickly became the subject of secret, nocturnal

explorations by rival caving clubs. This situation endured until the Ease Gill system had extended sufficiently for new entrances to be discovered well beyond the bounds of the land leased by the BSA – although when the first of these was found, the BSA allegedly toyed with the idea of installing underground grilles to continue restricted access.<sup>75</sup>

The BSA's underground grilles never materialised, but it would be a mistake to imagine that subterranean Britain is an entirely unspoiled landscape. The British Caving Association, Chris Jewell tells me, has sponsored an anchor-placing system in many of the country's potholes to save cavers from having to fix their own climbing gear in precarious rock niches, and in many caves you'll also find rope ladders in place. In the Ease Gill system, fixed survey stations have been installed underground, while in Ogot Draenen, brightly coloured tape marks out routes for cavers to take, in order to protect delicate stalagmites and gypsum deposits on the cave floor.

Such precautions are necessary today for the conservation of Britain's subterranean landscape. It is estimated that there are now more than 20,000 active cavers in the country.<sup>76</sup> So the underground map of Britain is far from uninhabited: if every caver in the country were to descend on South Wales for a bank holiday weekend, they would have only around ten metres length of cave each. Still, it would be less crowded than some beaches. In practice, of course, Britain's cavers are never all below ground at any one time, and even if they were, they would be spread across the whole country, with more than 1,800 kilometres of passages to share amongst themselves.

The growing population of underground Britain is the third and perhaps most important reason why so many cavers dig in search of new territory – and why the caver's map of Britain is continually in flux. Tarquin Wilton-Jones's autobiography, *Ten Years Underground*, contains one of the most lyrical expressions of the power of this attraction: '[ . . . ] there is very little that can compare with the knowledge that you are the first person to ever see this piece of

cave. An ancient stream flowed through this passage, maybe a hundred thousand years ago, creating these beautiful sculpted shapes in preparation for this one moment. For you. Never before has a light shone on that rock, and the sound of your footsteps is the first human sound that has ever broken the silence of these majestic caverns.<sup>77</sup>

It is this tantalising possibility of being able to tread on virgin ground, in an age when almost all other terrestrial exploration has been exhausted, that still draws Wilton-Jones into Ogof Draenen time and time again, searching for a breakthrough that will radically reshape South Wales. It was this promise that lured Dave Nixon underground for seven years, and some of the Misty Mountain Mud Miners for nearly forty. And it is this enticement that keeps a small but determined mud-spattered army chipping away in search of that vast, pristine chasm that must – really must – exist in one of those blank, empty spaces on the map of underground Britain. We live in a small and populous archipelago. Yet on the caver's map of our islands, it is still just possible to trepidatiously label regions 'Unknown'. Here be dragons.



# Major Megalithic Sites of Britain

