

**WILLIAM  
PENGELLY  
CAVE  
STUDIES  
TRUST**



**Newsletter**

**Number 187  
February 2023**

# WILLIAM PENGELLY CAVE STUDIES TRUST



<https://pengellytrust.org/>

## William Pengelly Cave Studies Trust Newsletter

**Issue 137**  
**February 2023**

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The William Pengelly Cave Studies Trust is registered as a Charitable Incorporated Organisation (CIO) number 259303. The registered address for the Trust is  
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All articles, notes, comments, reviews and news items are welcome and should be sent to the Newsletter Editor. Authors are responsible for the contents of their articles which do not necessarily reflect the policies of the William Pengelly Cave Studies Trust.

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Cover pictures are all from Reeds Cave:  
front and back upper by Richard Vooght (2012); back lower by John Wilmut (1968)

## From the editor

This issue is, perhaps, more concerned than most with changes in the Trust and with catching up with the backlog of work at the Centre. It's also an issue that we are distributing more widely than most, as a first step in establishing the Friends scheme as part of the new CIO constitution. So some items in this issue are concerned with explaining who we are and what we're about rather than communicating with our members. At the same time we are looking back to some of the early cave exploration in Norway and to the ways in which British caving expeditions managed themselves 50 and 60 years ago.

*John Wilmut*

## We are now a CIO!



The long-awaited and much delayed conversion of the Trust to a CIO (Charitable Incorporated Organisation) finally happened late in September 2022. The process has not been a happy one but we can now at last move forward with the creation of the Friends scheme which will replace

the traditional membership as well as taking advantage of simpler procedures for reporting to the Charity Commission.

On the following pages are introductions to the current members of Council and to the structure of the Friends scheme. The next meeting of the Council expects to make more specific arrangements for the implementation of the scheme and for a new style of Annual Meeting that will replace the traditional AGM.

## The Trusts's Development Plan

The Trust adopted its current Development Plan for 2019-2029 in March 2019. Digital copies of this are available on request to the Secretary (see inside back cover). Although this Plan still has 6 years to run the Council will be reviewing it at its March meeting, to see to what extent the events of the last 4 years (particularly as a result of the pandemic and the conversion to a CIO) suggest the need for changes.

# Council members in their own words

## Professor Patrick Boylan, President



A geologist and specialist in museums, heritage and environmental services, Patrick became involved with the Trust whilst director of the Royal Albert Museum in Exeter in the 1960s. He later moved to Leicester Museum and then became Professor of Arts Policy and Management at City University, London.

He travelled widely and was a consultant to UNESCO, EU, World Heritage Committee, Council of Europe, World Bank and many national governments, and was Centenary President of The Museums Association and of the Yorkshire Geological Society. He has written widely on the history of cave exploration and has been Trust Chairman and then President since 2009.

## David Warne, Chairman

I first became interested in caving in my final year at school in the mid-1970's when I was offered the chance to take up the subject as an option for physical education. This led on to adventuring out with the Plymouth Caving Group when I was first exposed to the Pengelly Trust. After completing an engineering apprenticeship and moving away for a number of years, I started to explore disused mines with work colleagues. By chance I reconnected with members of the PCG over twenty years ago and I am now its chairman.



## Alan Finch, Secretary



Involvement with the Trust began in 1983 when I visited Buckfastleigh for the first time. Joining the Trust as a member I later found myself nominated for Council. In 1995 I was asked to take on the role of Trust Chairman, when Dr. George Black retired. In 1998 I moved to Devon and volunteered as Trust Secretary, a position I have held ever since. During that time I negotiated the 99 year lease for the

Centre at Buckfastleigh with Royal Society for Nature Conservation; obtained a Heritage Lottery Grant to build the boardwalk in the quarry; liaised with all those agencies involved in the restoration of Joint Mitnor Cave after theft and damage; and most recently completed the conversion from limited company to a CIO.

### David Jean, Treasurer

David started his caving in 1963 and was particularly interested in geology and palaeontology with the first cave he visited being Kitley Caves at Yealmpton. After leaving university and returning to Plymouth he joined the Plymouth Caving Group in 1970 and was soon persuaded to join the Pengelly Trust. Here he worked closely with Wilf 'Squeak' Joint particularly on the Guided Walks around Higher Kiln Quarry which, in those days, was run by the Dartmoor National Park. Eventually he became treasurer of the Devon Account which, up until then, was run by Squeak. Today he is the Trust Treasurer and so looks after all the accounts.



### John Wilmut, Editor

I started caving whilst at school in Bristol in the late 1950s. Then in 1963, as a member of Chelsea SS, I was persuaded by Antony Sutcliffe to work at the Centre; I've been involved ever since. I was secretary from 1968-80 and saw in the Trust and the National Caving Association where I became Conservation officer. I was treasurer to the International Speleological Conference in 1977 and later edited *Studies in Speleology*. My professional career in educational research and development is also the area of the Trust's work that I have been keenest to support.



### Richard Vooght, Librarian & Cave Leader

Whilst at school Richard took up caving with the Plymouth Caving Group and later joined the Trust. He changed career from working in the care sector to doing a degree in mining engineering at Camborne School of Mines whilst taking on the task of managing the cave leader programme for Reeds Cave at the Centre. Later becoming the Trust's librarian (where he has completely re-designed the cataloguing system), he has been working at the Hinkley Point power station and other sites, commuting to and from Devon, maintaining his interest in cave and mine underground trips, and representing the Trust at the British Caving Association.



continued ►



### **Beth Cramman, Friends Administrator**

I started caving at the end of 2004 after being invited to try it by a friend and found the combination of physical challenge, team work and exploring new underground environments both fun and fascinating. I was initially part of the Axbridge Caving Group (Mendip) and later joined the Plymouth Caving Group. I joined Pengelly in 2013 and have since served on Council as Membership Secretary, the voice of the membership when needed. Outside of the caving world, work took me to London where I work for a local council and volunteer with young people two nights a week.



### **Keith Coventry, Website manager**



Caving and Underground structures have always been an interest of mine and in 2013 I contacted Plymouth Caving Group and finally did a mine trip in Cornwall. After a very wet evening, I got the bug and was introduced to David Jean who spoke about Pengelly and what it was etc. After a few years I finally joined the Pengelly Trust and help where I can regarding IT issues and projects (as this is my main interest and job!) Outside of Pengelly and caving I enjoy playing board games, amateur dramatics and scale models trucks.

### **Sheila Phillips, Visits organiser**

My interest in caves began with a visit to Cheddar Caves in 1947. An enlightened grammar school geography syllabus included physical geography and geology field trips. I joined a group of Exeter cavers in 1954 and explored many Devon caves including Higher Kiln Quarry. We often had the privilege of being led by Edgar Reed. One notable visit to Pridhamsleigh involved paddling on the lake in a WW2 inflatable dinghy followed by an underground Christmas lunch. Trips to the Avon George, Mendip and South Wales were part of my Bristol student life. Marriage called a halt to caving until an advert for a Pengelly walk gave the opportunity to introduce my son to my old haunts. I joined the Trust after chatting to the guide and I am still there.



## Charles Bird

Charles has been helping further the Trust's objectives for the past thirty years. During that time he has had stints helping the Trust as booking secretary, website developer, centre warden and with general maintenance until ill-health forced him to step down from these roles.



Although now retired he spent twenty-five years working with the Prince's Trust Team charity helping young people gain motivation and confidence through residential team building courses run at the Pengelly Trust Centre. These involved a range of team building challenges and adventure activities such as climbing, gorge scrambling, abseiling, canoeing and caving.

Charles continues to support and help the Trust but now in a limited way.

## Ben Hall

Ben's background in teaching science and fifteen years of running field ecology studies from the Pengelly Centre led him to become involved in action on climate change and climate litigation.

In 2020 he completed a Master's in Environmental Law achieving the Edward Elgar Prize for research by bringing a case against Shell UK for mis-selling petrol as "carbon neutral". This action provided the groundwork for his current research at Durham University Law School which uses legal routes to address weak climate governance, focusing on environmental claims made by



energy suppliers. Ben is also a Research Associate at the University of the West of England, an active member of the Durham Energy Institute and returns to schools occasionally to teach biology and chemistry.

## We need volunteers!

We need help in a number of areas:

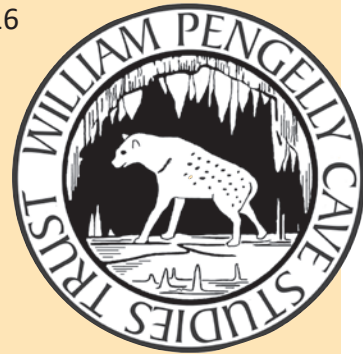
- To clear a maintenance backlog at the Centre
- With publicity and marketing publications
- With guiding at the day walks in August
- In organising events outside the Centre

If you can help please get in touch - details inside the back cover

# Friends of the William Pengelly Cave Studies Trust

With the final go-ahead for the CIO the Trust can get on with establishing the Friends system that will replace the former Membership. So, at its December meeting members of the Council were finally able to agree the structure of the Friends system and start the process of implementing this. Below is the full text that defines what is meant by a Friend and on what grounds an individual or organisation can become a Friend.

1. The William Pengelly Cave Studies Trust seeks to support cave studies through education programmes, research and cave conservation.
2. Friends of the Trust are people over the age of 16 and organisations that support these aims and wish to help the Trust in achieving them.
3. This support may be given in a variety of ways that could include (but not be limited to):
  - undertaking voluntary work for the Trust at the cave studies centre or elsewhere
  - making a one-off donation in support of a particular aspect of the Trust's work
  - a willingness to commit to an annual subscription to the Trust
  - organisational sponsorship that may be in general support for the work of the Trust or linked to a specific project
  - providing technical or other advice to the Trust, in relation to its aims or in the context of a specific project.
4. It will be for the Council (of the trustees) to decide whether the extent of any particular support is sufficient to warrant admission to the Friends group but, in general, the Trust will welcome help of all kinds.
5. In particular cases membership of the Friends group may be for a specific period (as, for example, where there is sponsorship of a particular project). Otherwise, membership of the group will be ongoing.
6. The Council will reserve the right to terminate membership of the Friends group where this is felt to be in the interests of the Trust.





## **Administration**

Beth Cramman (who is the former membership secretary) will co-ordinate the Friends scheme. She can be contacted at [membership@pengelly.org](mailto:membership@pengelly.org). In general the Trust will welcome as Friends every individual or organisation that supports the Trust's work in any way but membership of the Friends group will always be at the discretion of the Council. The Trust will maintain a register for Friends in the same way that it maintains the current register of members.

## **Implementation**

The Trust will develop publicity that explains the role of Friends within the Trust. This publicity will invite applications for membership of the Friends group, indicating the range of support that will be welcomed, along the lines described in para. 3 opposite.

From time to time the Council will identify specific aspects of the Trust's work where help is needed (such as the items described at the foot of page 5). This may include volunteer help or assistance with materials or expert advice that might relate to the general work of the Trust or to specific activities or projects.

## **Existing members**

Existing members of the pre-CIO Trust have been automatically transferred to the Friends scheme. Whilst there is no longer a membership subscription we would welcome a voluntary continuation of an annual donation. In keeping with the Friends support structure described opposite, the Trust will also value continuing help from former members, whether or not this includes a donation to Trust funds. For more details please contact Beth Cramman (contact details above).

## **Advantages of membership of the Friends group**

Friends have the advantage of reduced Centre overnight charges - see page 11. Other advantages will include priority booking and reduced fees for Trust events, a Friends section on the website and involvement in the annual meeting, with some further benefits yet to be implemented. These details are due for discussion at the March meeting of the Council.

# Cave studies centre developments

The Centre Executive Committee (CEC) last met in September 2021. Because there were several pressing issues needing discussion a meeting was arranged for December 2022 and the CEC will now resume its more regular meetings, the next being in March this year. A quite extensive range of developments was discussed at the December meeting.

## Boardwalk

The boardwalk and steps down into the quarry have been deteriorating for some time and we reported the replacement of the Joint Mitnor staircase in Newsletter 135. There have been several repair sessions to the rest of the wooden boardwalk over a number of years, the most recent being needed just before the 2022 guided walks programme last August. But the main timber structures are now rotten and sections of the boardwalk and the wooden steps down from the car park will need replacement.



It has been agreed that the platform in front of Reeds Cave might be replaced by a limestone gravel surface with surrounding railings and the steps with concrete slabs with a handrail. These proposals are being discussed with the Devon Wildlife Trust (DWT).

A further stage where the platform and bridge near Rift Cave will need replacement will be deferred for as long as possible.

## Joint Mitnor lighting and Rift Cave gate

The lighting in Joint Mitnor has been updated. Richard Vooght has repaired the Rift Cave gate but the grill (dating from 1970) is in a poor state and will soon need replacement. These issues will also be discussed with DWT.



## Giant Hogweed

The infestation of Giant Hogweed in mid 2022 was dealt with by Richard Vooght but regrowth is likely in the summer and there will need to be continuing checks and treatment.

**Bat Count**

The 2023 count has been arranged.

**Drying Room**

The dehumidifier has been repaired and plumbed to drain directly out of the building. The drying room has been completely cleared out and will no longer be used for storing items. A timed heater may be installed in the drying room although a fan would help by moving the air around.

**Electrical system**

The lighting in Joint Mitnor and lights outside the building have been updated. There has been damage to some of the plastic socket boxes in the building and these are being replaced with metal boxes. A hob on the cooker has failed and will be replaced.

**Heating and plumbing**

Because of the low Centre usage during the lockdown period the wood pellets in the outside bin have become damp and stuck together so that they will not feed into the boiler. The damp pellets have been freed and some removed so that the boiler now works as intended. Now that the Centre is being used much more frequently new dry pellets will be ordered.



There is a need to install thermostats on the radiators and improve water circulation. The supply of hot water to the showers has been a concern and this will be improved.

The water stop cock is in an inaccessible position and will be moved.

**Centre storage**

The boiler room storage area has been reorganised and rubbish removed. Some cupboards have been reorganised and domestic materials currently stored in the museum will be moved into these cupboards.

**Gutters and drains**

More regular gutter and drain cleaning will be done.

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**Hornets**

Hornets have nested in the roof space above the man entrance and threatened visitors. Pest control will be contacted, the nest removed and the gap in the ceiling closed.

**Chairs**

Damaged chairs have been repaired and reupholstering will be done on some others.

**Minor repairs**

These have been to the key safe and to an arm in the disabled toilet. Some of the upstairs windows are currently getting blown open and are being replaced by locks.

**Museum**

Sheila Phillips will be installing displays highlighting recent work on the lamprophyre dyke and the discovery of evidence of tuberculosis in a bison bone.

A small number of photographs have faded and will be replaced.



## Centre charges

Like everyone else the Trust's costs have risen sharply and it has been agreed that the following charges for Centre use will now be:

**Overnight charge for non-members:** £12 per person per night. The minimum group size will remain at 12.

**Fuel surcharge:** From 1st October to 31st March inclusive there will be a fuel surcharge of £15 per group per night.

**Overnight charge for Friends:** £6 per person per night.

**Hire for commercial use:** £100 per day (9 am until 5 pm).

Discuss your requirements with David Jean (details inside back cover)

A general working day at the Centre was held on 11th February when a number of the issues described here were dealt with and parts of the building were extensively tidied and cleaned. The Trust would welcome help at the Centre on future occasions. This could be maintenance work, helping with publications and marketing and help with visiting groups. Our contact details are inside the back cover or on the website

<https://pengellytrust.org/>

## Summer Guided Walks Programme, 2023

The 2022 summer guided walks programme fall rather short of our expectations (see *Newsletter 136, page 3*). As a result it has now been agreed that, in August 2023, the **day walks**

- will be held on every **Wednesday** and **Thursday**
  - will be at the former times of **11 am** and **2 pm**
  - with each walk restricted to **30** visitors
- and that **bat walks** will be held
- on **Thursday** evenings, with a variable start time due to progressively later sunsets
  - with online pre-booking essential
  - and with numbers restricted to **20** visitors per walk



Prices will be £6 for adults, £3 for children under 16. However, the family ticket will no longer be available.

Online pre-booking will be available on Eventbrite, accessible directly or via the Trust website <https://pengellytrust.org/>

Publicity for these walks will be available from late April.



## Buckfastleigh Christmas Fair

Since its inception the Centre has had many links to both Buckfast and Buckfastleigh - many local people have been members and have contributed extensively to Centre development and activities. We have used local facilities for events and have regularly advertised ourselves locally whilst retaining our independence as a study centre accessible to all users.



It is always a surprise when local visitors to the Centre tell us that they didn't know that we existed. True, we are hidden in a quarry at the top of a steep and narrow lane, but we do have a well-used public footpath through the site. And Sheila Phillips has developed many local contacts and created links with a number of local organisations that have visited us and enjoyed the experience (at least, they say they have!).

With the help of John Brodribb, who lives in the centre of Buckfastleigh, we decided to have a stall at the town's Christmas Fair in December. Not the warmest of evenings but Sheila, John and I were inundated with enquiries: we gave out leaflets about visiting the Centre, we sold a good spread of publications and gifts and we told an awful lot of people about the Centre and the bone cave. And still people said that they hadn't known that we were there!

Perhaps the best part of the evening was that we probably managed to recruit some new volunteers as well as meeting people who had visited us many years ago and seemed to like the idea of doing so again. The evening was certainly worth the effort and we were grateful for Brodribb family support with cups of tea and electricity to power our lights.

*John Wilmut*



photos by John Brodribb

## 28th International Cave Bear Symposium

This will take place in Bayreuth, Germany from 21st - 24th September 2023. There are the usual keynote addresses, presentation and poster sessions with excursions (at various levels of physical demand) to local caves including Geisloch (illustrated here).

The Symposium is held under the auspices of the International Speleological Union (UIS) and will be at the Umwelt-Museum Oberfranken in Bayreuth. Unfortunately there doesn't

appear to be a website for the event but we have details and application form on pdf files, available from the editor.



## Bats age less when hibernating

Bats may age more slowly during hibernation compared with when they are active. Marmots also do this, suggesting that the mechanism could be widespread among hibernators. A test, which measures the accumulation of certain chemical labels on an animal's DNA, makes it possible to calculate its biological age.

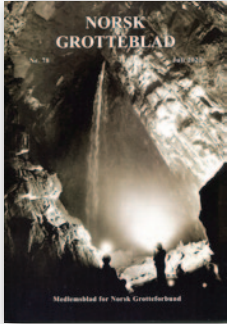


This technique has been applied to a species of hibernating brown bat (*Eptesicus fuscus*), finding that they showed reduced ageing biomarkers when hibernating. DNA samples were collected in winter, when the bats were hibernating, and again in summer, when they were active. When

the researchers looked at the differences in DNA base pairs between the hibernating and active animals, they found that around 3000 biomarkers were expressed differently. Of these, about three-quarters were associated with genes "switching off", which probably leads to the suppression of certain bodily processes during hibernation. The remaining quarter, which "turn on" genes, were probably effectively turning on factors that are controlling or regulating metabolism.

# Review of *Norsk Grotteblad* 78, July 2022

Pub. Norsk Grotteforbund Postboks 1301 N-8602 MO Norway. ISSN 0332 6810. 36 pp inc. Colour photos and maps. In Norwegian with English summaries. Nkr150 to non-members. A copy is held in the Pengelly Trust library.



The lead article in this issue is one on conservation by Stein-Erik Lauritzen. He highlights the degradation of many Norwegian caves, mainly by caving activities. Norway has relatively few cavers. Any visit to a cave, however carefully undertaken, will inevitably result in some damage and the state of most caves is an inevitable downward spiral. People conducting scientific studies or prospecting for minerals often cause damage in the cause of science! There are particular problems with commercial organisations offering adventure trips to the general public, groups from schools and other voluntary organisations where the levels of awareness of conservation issues are often not what they should be. Worse still are companies using caves in travel documentaries or as sites for action movies, not to mention non-cavers using caves as locations for partying and the like. Stein-Erik likens this to “the tragedy of the commons” and illustrates the problems with various diagrams and photographs.

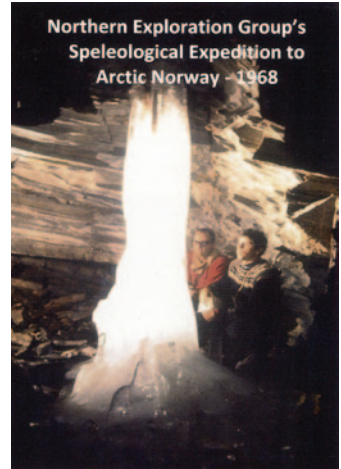
This problem will be familiar to most serious cavers in the UK\*. He proposes that caves are divided into three categories: 1. Scientific sites, 2. Aesthetic and recreational sites, and 3. Sporting and challenging sites and that this is given legal status. How this would be enforced is another matter, given that entrances are generally far from human habitation. Norwegians are perhaps on average a little more law abiding than us Brits, which offers a little hope. Legislation can be effective when dealing with commercial organisations, but with individuals and informal groups.

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\* Ed: And this has been a topic for discussion here, both before and since the creation of the NCA (now BCA) in the early 1970s, to which the Trust contributed. Damage is, indeed, very difficult to limit though there is a greater awareness of the need to protect caves with the widespread adoption of conservation policies at national and local levels and the recognition that there are certain caves of such significance that great care has to be taken to protect them.

whether cavers or non-cavers, it is almost impossible to police most sites. Over the years I have got the impression that some Norwegian cavers do not publish their discoveries, or if they do, they leave out details of location in the aid of conservation.

This issue is big on nostalgia with several articles of historical interest. Norwegian cavers and speleologists are now very skilled and competent, but back in 1968 Norwegian caving was in its infancy and visiting British cavers were very influential. Long-time Norwegian caver Ulv Holbye had been caving just a year, when in 1968 he guested on three British expeditions in the Rana district, one from the Eldon Pothole club, one organised by David Heap from Kendal Caving Club and lastly one with the Northern Exploration group. There is an article on this with photographs of key personnel taken at the time.



Ulv has also translated two other articles on 1968, one based on the NEG expedition report, the other on personalities active in Norway in 1968 and how their lives developed from there on. Most noteworthy was the late James Lovelock (left), the famous scientist, inventor and environmental thinker, who besides being a caver, promoted his Gaia theory of Earth as a self-regulating entity. There is a comprehensive bibliography. The NEG article is ostensibly by me

but has been expanded by others from my brief review of the (updated and republished in 2020) NEG expedition report to also include photographs and maps. The article on personalities is ostensibly by David St Pierre but again owes much to Ulv's editing.

Continuing the historical theme there are two short articles taken by Johan Olsen from the Sørkjold yearbooks of 1986 and 2001. The first is reprinted from the SWETC CC occasional publication of 1977 describing their explorations of the Leirfjord area of Bonnådal in 1970, 1972 and 1974. The second is taken from 1997 local reports in the Dagbladet newspaper describing the early exploration of Tjørvekraigge cave in Bonnådal.

There is an interesting rescue article by Marek Vokáč describing how to

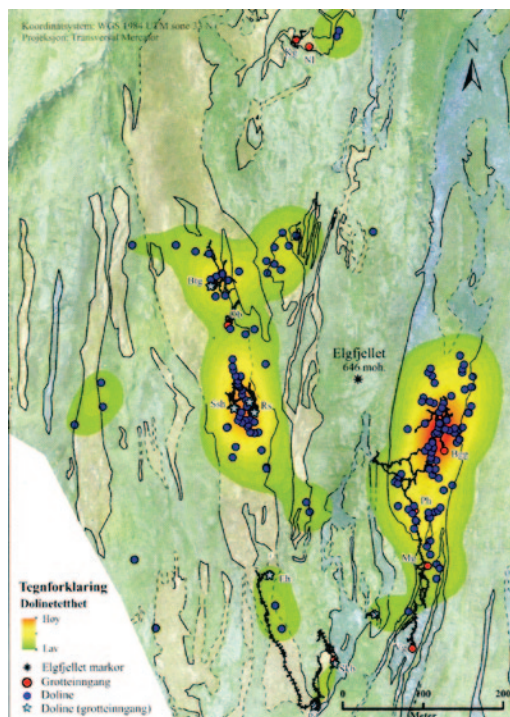


rescue someone hanging on a single rope above you when the only way to reach him is to climb up the same rope.

NGB Nr.77 introduced “The Elgfjell Project”.\* This follows on from work carried out by British caving expeditions organised by Trevor Faulkner and myself in 1988, 1989 and 2008. The Elgfjell Project is run by Bergen University under Stein-Erik Lauritzen in collaboration with the National Park and involves Masters’ students re-surveying the caves and investigating the surface geology. The results are reported in full in a “master thesis” and can only be summarised in this article, let alone in a short review.

The project located 162 dolines and resurveyed 13 of the main known caves. They have concentrated on the two largest marble bands in the western part of the Elgfjell plateau, the yellow (Mg rich) and grey (Ca rich) bands. Many of the caves in each band are related to each other, with actual or potential connections, as demonstrated by small scale surveys superimposed on partial area maps. The caves are all thought to be formed by ice-contact (sub-glacial) speleogenesis. The 162 recorded dolines are all thought to be cave related, but many entrances have been blocked by sediments in the past.

The article is profusely illustrated with maps, surface photographs, sketches, rose diagrams and the project has benefitted from digital publishing, digital surveying tech such as Disto X, not to mention more time and manpower than we had. Its not complete; there is no mention of Sarvenvarttoehullet, for example, an interesting cave with an obscure entrance in a more easterly band of marble. One can always find more bits and pieces with every visit to an area like Elgfjell, but whether Bergen will think it worthwhile to go back again, given the wealth of other areas to be visited, remains to be seen.



*Geoff Newton*

\* Reviewed in this Newsletter, Issue 135, pp 19-21, March 2022



## Cave art is older than we think

The art in Lascaux, France is said to be around 17,000 years old. In Altamira in Spain one painting is 36,000 years old, another 22,000, while artefacts in the cave are only 14,000 years old. But considering that our species, *Homo sapiens*, is probably more than 300,000 years old, and that our genus *Homo* has been around for more than 2 million years, those few tens of thousands of years are a very short span of time. Why did humans start painting so late in the day. Why didn't other hominins like Neanderthals do it?



If all the cave art in western Europe is really less than 30,000 years old, it could only have been made by our species as modern humans arrived around 45,000 years ago. Before that, Europe and western Asia were inhabited by Neanderthals and earlier, other hominins like *Homo antecessor* were around. They could have made our cave art.

In fact, only a very small proportion of cave art has been reliably dated. Until recently, the main method was radiocarbon dating. This is inherently destructive and only works if the art contains organic material, so it's useless for engravings and anything painted solely with minerals.

Research in 2012 showed that a red dot on the wall of El Castillo cave in northern Spain was at least 40,800 years old. The work was done using uranium-thorium dating which doesn't find the age of the art itself, but the age of a thin layer of mineral that forms when water trickles over a cave wall. Later work dated the art in other Spanish caves: in La Pasiega a symbol made of red lines is at least 64,800 years old; in Maltravieso a hand stencil is at least 66,700 years old while some of the red paint on stalagmites in Ardales cave is at least 65,500 years old. If the art is really this old, the most sensible explanation is that Neanderthals made it.

There is other evidence of symbolic behaviour by Neanderthals. In Bruniquel cave in southern France, a stone circle made from broken stalagmites is 175,000 years old, pigments on shells in Aviones cave in southern Spain are 115,000 years old and it seems that Neanderthals collected red ochre at Maastricht-Belvédère in the Netherlands at least 200,000 years ago. Perhaps we are not the only species to have made art in caves.

## Insights into how it used to be done

Northern Exploration Group Speleological Expedition to Arctic Norway 1968 Report, 2020 Edition, ed. John Conway. 38pp inc. 25 colour and 14 black & white photographs, 4 maps and 5 surveys. Available from the author at Raber Top Farm, Raber Top Lane, Ingleton, Carnforth, LA6 3DW. UK Price £8.00 + p&p . No ISBN.

Ed: This is a review of work done in Norway in 1968, the background to which was the subject of a paper by Shirley St Pierre in *Studies in Speleology* Vol 1.5, 1967, pp 275-284.



Why issue an expedition report 52 years after the expedition took place? I will address this question at the end of this review. This is not the original report (price 2/6d) which was a more rough and ready version prepared when the authors were less experienced and the printing / duplicating facilities available to them at the time were very primitive by today's standards.

It is as well that the author was able to access the original report, photographs, maps and survey notes of the time, mostly held by David St Pierre and recorded in the Norwegian Cave Index and Bibliography, otherwise he may have had problems producing a comprehensive and accurate report after a gap of 52 years.

The expedition was not a spectacularly successful one. The main achievements were the exploration and survey of three previously undocumented stream caves in the district of Rana adding up to a total surveyed length of around 800m. Each cave had a sporting marble streamway with a number of pitches requiring the use of ladders. These were Durmaalshullet and Dunderhullet in Dunderlandsdal and Saranesengrotta in Plurdal. These were significant caves for the time, but not major ones by current Norwegian standards. Not a massive return for an expedition of 12 members which lasted most of the summer of 1968.

The expedition kicked off with the descent of the then deepest known cave in Norway, Larshullet and followed this with visits to Grønligrotta, Kristallgrotta and Setergrotta. No new passages were found. Other projects to find new caves or extend or join other existing caves met

with limited success and only minor extensions. However, the expedition was a valuable experience for the participants who mostly put this to good use in subsequent caving expeditions elsewhere.

The 1968 expedition would have had to contend with a more fragmented road system of mainly dirt roads, which had to be remade every spring. Fast forward to the present day and North Sea Oil

money has financed a massive upgrade and extension of the road system with many new tunnels and bridges, which is still ongoing. The technology is now available to make tarmac roads which withstand the Norwegian winter and dirt roads are no longer found on major routes. There is less need to rely on ferries and coastal shipping. The expedition went out by the Newcastle - Bergen route but the food and equipment was freighted separately to Kristiansand on the south coast of Norway. Some expedition members had to divert there to supervise transfer of the food and equipment onto a vessel bound for Mo-i-Rana.

Over the years North Sea ferry routes to Scandinavia have been discontinued one by one until none are left, and expeditions are now faced with trying to negotiate a place on freight ferries from Immingham to Gothenburg. The alternative is to take part in Norwegian-led



Karl Johan Westermark at the Forhallen in Grønligrotten. The red paint marks from Oxaal's, 1913 survey indicate the distance 16 m. and depth -8.24 m from the Dagaapning-opening to daylight-upper entrance. With 300 m of electric lighting and the occasional bridge, ladder, and railings it remains a "sporting" show cave. The river flows under the arched roof. An exposed electric light hangs down. Nowadays the lighting is a bit more discreet. The cave exhibits good examples of phreatic and vadose development.

expeditions, fly out to Trondheim taking only personal gear and join with the Norwegians to organise the food, camping, and caving equipment.

As the expedition members were mostly between jobs, they were able to have most of the summer to play with and the pace of the expedition could afford to be relaxed, although cost was an issue for all of them. Some members found time to go glacier camping and walking, and horse riding. Whilst there they met well known author James Lovelock who inspired them to mount the 1970 British Speleological Expedition to the Himalayas, subject of a separate book by John Conway.

Members first set out for Norway on 7 June and the last significant

discovery (of Saranesengrotta)

was made on 22 August.

Subsequent to that, an unsuccessful attempt was made to connect Olafshullet and Kristallgrotta in Plurdal. It's not clear from this report when the expedition actually ceased to function. People started to drift away and found their way home by all sorts of interesting means such as hitching a lift on a ship carrying pig iron bound for Runcorn. The two somewhat beat-up and unreliable expedition Land Rovers caught freight ferries to Immingham from Gothenburg over the border in Sweden, just like one would today.

In 1968 cavers were less well equipped than today. Mostly caving in old clothes and boiler suits and maybe goon suits to keep water out if they were lucky. Cavers needed to be "hard", particularly in Norway's



Expedition members visit an Arctic circle hunters' bothy whilst in Dunderlandsdalen. This shelter, constructed for hunting and reindeer gathering is not used by local Norwegians so as to maintain good relationships with the Lapp community.

stream caves. Lighting was mainly carbide cap lamps. Surveying was more tedious. No calculators, only log tables and slide rules for drawing up and things like Disto-X were beyond their wildest dreams.

What has stayed the same? Norwegian food prices are still much higher than in the UK and expeditions try to take as much tinned and dried food as they can with them to Norway. This was clearly a problem for an expedition lasting the whole summer. Accommodation is still mainly camping, with occasional chances to use huts, cabins or schools. Norway is still a beautiful, wild country with friendly inhabitants and is a great place to visit and go caving. The caves are still mostly in attractively striped marble and exciting streamways abound. Biting insects can still sometimes be rather tedious in some locations.

This report has value as a historical document and will be of interest to all cavers with an interest in Norway, and is a readable record of how things were done in the 60's. Cavers considering an expedition in Norway today would do well to note that the logistics required today differ from those described in this report.

*Geoff Newton*

## Bakers Pit is steaming



During January's cold weather John Brodribb was walking past Bakers Pit (formerly a quarry) when he saw steam rising from the concrete shaft that connects the cave to the surface through the landfill. This is a still from a short video that he took and he wondered whether the steam was generated by warmth in the landfill. Hard to say, but the cave has a lower entrance in Bully Cleaves Quarry and therefore a natural updraft through cave passages that would have been warmer than the outside air, whether or not there was landfill.



# Trust publications

Publications of the Trust may be obtained either from **Alan Finch** at **'Zennor', Throwleigh Road, South Zeal, Okehampton, Devon EX20 2QA**. Telephone **01837 840259** or by ordering online at <https://pengellytrust.org/> or from the Centre bookstall.

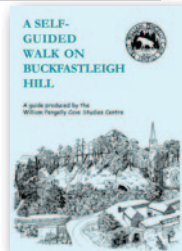
Here is a list of the books, booklets and leaflets available. Prices include postage and packing.

## A Self-Guided Walk on Buckfastleigh Hill

*John Wilmut, David Jean and Sheila Phillips (2004)*

This is one of two guides for use at the Centre. Over 14 pages it describes a self-guided route that starts at the Centre and introduces the walker to the principal features, structure and geology of the hill and its caves. It is well illustrated, has a map and is a valuable summary of the more detailed information in other Trust publications and in the Centre museum.

£2-50

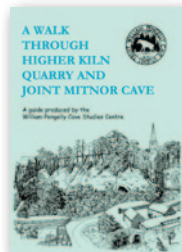


## A Walk through Higher Kiln Quarry and Joint Mitnor Cave

*John Wilmut, David Jean and Sheila Phillips (2004)*

This is the second of two guides for use at the Centre. Over 12 pages it provides a summary of the principal features that visitors see in the guided walk through the quarry, in Joint Mitnor Cave (the bone cave) and in the Centre museum. It forms a companion guide to the self-guided walk, limekilns and geological garden publications.

£2-50

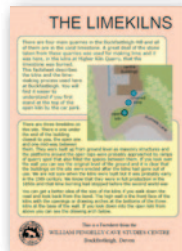


## The Limekilns

*Wilfred Joint and John Wilmut (2005)*

This is a 4-page supplement to the information boards at the Centre. There are four main quarries in Buckfastleigh Hill and all are in the coral limestone. Much of the stone taken from these quarries was burned for making lime in the kilns at Higher Kiln Quarry. This factsheet describes the kilns and the traditional lime-making process that was used at Buckfastleigh.

£0-50



## The Geological Garden

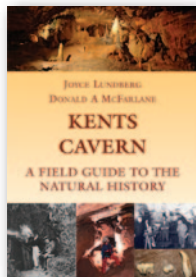
*Bob Symes, Sheila Phillips and John Wilmut (2007)*

This is another supplementary 4-page leaflet. In the courtyard of the Centre there is a group of rocks from the local area, set out as a geological garden. They give some idea of the range of rocks that visitors see on and close to Dartmoor. The leaflet gives detailed information about the rocks and where they came from.

£0-50



Articles from back numbers of **STUDIES IN SPELEOLOGY** or from this **NEWSLETTER** are available. Please contact the librarian to enquire about copies.

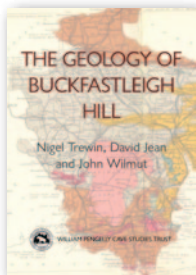


### **Kents Cavern: A Field Guide to the Natural History**

*Joyce Lundberg and Donald A McFarlane (2008)*

Over more than 150 years researchers at Kents Cavern have discovered a sequence of deposits that cover a half-million year history, making this cave one of the most important cave sites in the world. Here the authors show how the cave first formed and developed and they describe the excavations by William Pengelly. The Guide then takes the visitor on a tour of the show cave. At each stop the authors describe the evidence on which our understanding of its development is built.

£4-50

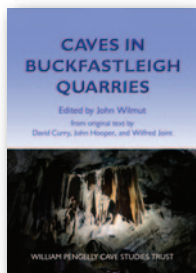


### **The Geology of Buckfastleigh Hill**

*Nigel Trewin, David Jean and John Wilmut (2007)*

The origins of Buckfastleigh Hill go back 350 million years and its story embraces tropical seas, volcanoes, coral reefs and the building of a massive mountain chain. Caves in the hill's limestone provide evidence of ice age erosion and of warm periods when lion, elephant, hippopotamus and other animals roamed the Dart valley. This illustrated booklet provides a detailed description of the geological history of the hill.

£3-50

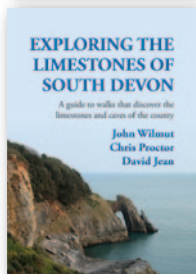


### **Caves in Buckfastleigh Quarries**

*Edited by John Wilmut (2012)*

This booklet has been produced by the Trust as an updated and extended replacement for two of its earlier publications. It includes descriptions of the history, geology and exploration of the caves that will be of interest to anyone who has visited the area and particularly for those who have seen some of the caves at the Centre.

£5-50



### **Exploring the Limestones of South Devon**

*John Wilmut, Chris Proctor and David Jean (2014)*

Created when Britain lay south of the equator, Devon's limestones are as exciting and interesting as any rocks in Britain, as are the caves which have been formed by the action of water over thousands of years. Research in the last two centuries has yielded much information about our past climates and about the people, animals and plants that once inhabited this area. The walks are described in great detail and the book can be used to combine the walks in ways to suit the walker.

£7-00

# The William Pengelly Cave Studies Trust and Centre:



The William Pengelly Cave Studies Trust is a charity, originating in 1962, when Higher Kiln Quarry at Buckfastleigh became the site of a cave studies centre. The quarry contains several caves including Joint Mitnor Cave where there are the remains of animals dating from the warm period between the last two ice ages. The organisation is named after William Pengelly, a local man who, in the mid-19th century, excavated local cave sites including Brixham Cave and Kents Cavern at Torquay.

He was responsible for establishing excavation methods and records that became a model for all modern archaeology.

Joint Mitnor Cave was first entered just before WW2 when bones were found and identified as the fossil remains of animals that had once been present in this location. The cave was excavated in the 1940s and 50s but a large part of the deposit was left in place and this can be viewed by visitors. The picture shows a tooth from a juvenile straight tusked elephant and bones from bison and red deer. Other species include hippopotamus, lion, hyena, wolf, and bear.

Other caves at the Cave Studies Centre are closed to visitors either because of their fragility or because they are used by hibernating bats.

There are other local caves that are used for recreational purposes.



## What we do

### Research

The Trust supports a range of research in areas such as cave water percolation, cave location techniques, palaeontology and bat studies.

### Education

The Trust provides information about cave studies through visits, lecture programmes, publications and displays in the Centre museum.

### Conservation

The management of the quarry and caves is consistent with good conservation practice.

# what we do and how you can visit us

## How you can visit the Centre

### Group visits

We welcome visits from student groups, children and special interest organisations. These can be at any time of year although visits to the caves are not possible from mid-autumn until mid-spring. Your visit can be tailored to your specific needs. To arrange, please contact **Sheila Phillips** on **01752 775195** or email **danehurst@tiscali.co.uk**

### Specialist visits

These are visits from those expressing interest in the Trust's work and do not need to be group visits. Please contact **Sheila Phillips**, details above.

### By joining public day walks

Held during August, widely advertised and lasting for a couple of hours including a cave visit. Book on our website **<https://pengellytrust.org>**

### By joining a bat walk

Held on August evenings, these are an opportunity to see bats and hear the ways in which they use echolocation to navigate and catch insects.

Book on **<https://pengellytrust.org>**

### Residential visits

We can accommodate just over 20 people. These visits are especially suitable for groups interested in environmental activities. Book or enquire on **<https://pengellytrust.org>**

## Officers and Council members

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