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SIR BEVIS BULMER: AN ELIZABETHAN ADVENTURER

By L.O. Tyson

SYNOPSIS

Bevis Bulmer was one of a breed of men that flourished in the age of the great Elizabethan swash bucklers. His activities ranged nationwide from London to Devon and from Ireland to Scotland. His interests were just as varied ranging from Nail Manufacture, supplying drinking water for London, to gold, silver and lead mining.

Much of the information on Bulmer's mining activities is found in a book written in 1619 by his refiner Steven Atkinson, who had access to a manuscript written by Bulmer about his various ventures, entitled "Bulmer's Skill".¹ Unfortunately Atkinson's book is a rambling mishmash of undated events which has given rise to some misleading references by later authors. It is, therefore, one purpose of this paper to bring together his various activities and present them in a more chronological sequence.

During this period the old style, or Julian, calendar was in use and the year ended on March 25th. For clarity this is retained when quoting from original documents, but it should be born in mind by the reader.

BACKGROUND

Where Bevis Bulmer originated from is unknown but attempts have been made to link him with the once powerful Baronial house of Bulmer of Wilton in Cleveland. A search through the extensive family pedigree's, which include three Heraldic Visitations, has failed to come up with any substantiation for this. The source of his capital is also unknown. He was evidently an accomplished engineer and his refiner Atkinson refers to him as an "*Ingenious gent*". Surtees the Cleveland antiquarian noted that he had seen a reference to him as "*Bulmer the Projector*".² That he was well connected at court and possibly a close friend of both Queen Elizabeth and James the First comes through in his various business ventures.

The spelling of his surname in various government documents is a source of confusion, perhaps the most variations occurring in Scottish privy Council correspondence where he appears as Bewis Bilmure, Bilmour and Bilmuris. In his own correspondence he uses Bullmer whereas his son used Bulmer. As most writers have since referred to him as Bulmer this practice is continued for greater expediency and ease of referencing by any other authors.

His activities took place against the background of the great age of monopolies when just about everything that could be was farmed out to obtain revenue for the Crown. It was also the age of the entrepreneur when fortune very much depended on influence and above all well placed gifts. A practice which Bevis Bulmer seems to have been particularly adept. Mid-16th century mining technology appears to have been dominated by German mining

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engineers but Bevis Bulmer is an indication that this may not have been a true picture.

To set the stage for this story it might serve to quote from Ben Jonson's play, *The Staple of News* (Act 1: Scene 4), which was written ten years after the death of Sir Bevis Bulmer.

*“Did I not tell you I was bred in the mines
Under Sir Bevis Bullion?
Pennyboy:
That's true,
I had forgot you mine men count no money,
Your streets are paved with't:
There the molten Silver
Runs out on cakes of gold.
Canter:
And Rubies
Do grow like strawberries”*

THE VARIOUS ADVENTURES OF BEVIS BULMER

LEADHILLS

Bevis Bulmer first comes to our attention in 1576 when he was engaged by Thomas Foullis, an Edinburgh goldsmith, to manage his lead mines at Leadhills in Lanarkshire.³ Previously Bulmer had been working in the north of England, possibly in the Forest of Bowland near Clitheroe, when Foullis had travelled to visit him.⁴⁻⁶ That Foullis would hear of Bulmer's reputation as far away as Scotland and travel to see him is a clear indication that Bulmer was fully established as a mining engineer by this date.

SOMERSET

We next hear of Bulmer in 1586 in the Mendips at Rowpits in the Mining Liberty of Chewton. He was working on Broad Rake where no lesser person than Queen Elizabeth had invested a great deal of money on “*engines and instruments for the drawing of water from the same workes*”. However certain “*claymers and pitchers had neglected their due labour in helping the said Bulmer to drawe away the water for their partes*”.⁷ In the middle of the 17th century there were ancient miners still alive who remembered that “*the forebreast of Bulmer's work was nine feet wide in ore*”.⁸

Bulmer complained to the Privy Council and they ordered five local Lords to set up a jury to enquire into the matter and render Bulmer all assistance. They found that the ring leader was Edward Morse “*a verie troublesome person and at this tyme banyshed by the lawes and orders for the myneryes within the manour of Chewton from working within the said manour, notwithstanding (which) he doth molest and troble the workes of the said Bulmer*”. The jury were given the right to imprison Morse if he continued to

cause trouble at the works unless he put up a bond with securities that he would behave himself.⁹

The jury's verdict was that Bulmer should have sole possession of Broad Rake and 100 feet quarter cord on it. Only those miners who became partners and contributed towards the costs of constructing the engines and future working costs would be allowed to work there. It is not known if Bulmer built his own smelting mill, but it is unlikely as there was one nearby for the Chewton Liberty, St Cuthbert's lead works.

Bulmer retained a presence in the Mendip mining field for the next 20 years. He wrote to the Privy Council in February 1605 requesting them to have the Bishop of Bath and Wells make enquiries about the activities of his agent, John Hole of Hawkes. Hole was reported to have been selling the pitches and ore of his master and the Council wished to know if any fraud was being perpetrated. The King himself took up Bulmer's cause in May when he wrote to the Bishop demanding to know if Hole was defrauding Bulmer.

Hole was convicted of fraud but refused to make restitution of the money. The King wrote again to the the Bishop in March 1606 saying that if Hole did not repay the money he was to be brought before the Privy Council. As no more is heard of the case it would seem the money was repaid.¹⁰

COMBE MARTIN

In 1587 a rich strike was made at the Combe Martin mines in Devon. The two partners working the mine, known as Fayes Mine, under lease from the Mines Royal Society, Adrian Gilbert and John Popplar, had great difficulty smelting the ore. The fame of the strike and the smelting problems spread through the mining community both at home and abroad and a great many people travelled to see for themselves. Bulmer had a two pound parcel of ore brought to Chewton and his refiner Stephen Atkinson, succeeded in smelting the ore and refined silver from it. Atkinson, who had recently been admitted as a "*Finer*" in the Tower of London Mint, was to remain a constant companion to Bulmer in all his subsequent mining adventures.^{1, 11}

With the success of the smelt Bulmer proposed to Gilbert and Popplar that he would bear the cost of raising the ore and smelting it, in return for a half share of the profits. The partners agreed and under Bulmer's direction the mine eventually reached a depth of 32 fathoms and worked the same length along the vein. In the first two years of it being worked the partners were reputedly receiving £10,000 each, which declined to £1000 by 1592 when the vein was more or less exhausted.

A smelt mill and silver refinery had been built at Combe Martin when it was worked by Joachim Hochstetter in the 1520s. Bulmer probably had to refurbish the mill when he took over and used it to smelt his share of the ore and to refine the silver from it.

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The proximity of the mill to the Irish Sea and a sheltered bay for mooring ships served another purpose for Bulmer's interests, and that of the Society of the Mineral and Battery Works. Bulmer was in some way connected to the Society and they had a grant of all mines royal in the Pale in Ireland. The Society was thus enabled to have ore shipped over from their mines at Clomyne and Barristown in Wexford and smelted at Bulmer's mill.¹² Atkinson notes in his book that this ore was particularly rich in silver. For some unknown reason his partners sent their ore to Ashburton for refining, probably because Bulmer's mill could not handle all the refining. Bulmer also worked the Bere Ferrers and Bere Alston mines near Plymouth which were also large silver producers.

From the last smelt at Combe Martin Bulmer had two silver drinking tankards made. One he presented to William Bouchier, the Earl of Bath in 1593 which shows another side of Bevis's character and reveals a love of poetry. The inscription reads as follows:-¹³

*“In Martin's Combe long lay I hid,
Obscured, deprest, with grosser soyle,
Debased much with mixed load,
Till Bulmer came, whose skill and toyle,
Refined me pure and Cleene,
As richer no where els is seene,
And adding yet a farder grace,
By fashion he did inable,
The worthy for to take a place,
To serve at any Prince's table,
Combe Martin gave the use alone,
Bulmer fining and fashion”.*

Footnote: Adrian Gilbert was the brother of Sir Humphrey Gilbert, the celebrated Elizabethan navigator. He was also a strong supporter of John Davies's attempts to prove the north west passage.

LONDON

Bulmer's engineering skills were many and varied and this comes through in his activities in London. In 1584 he was a partner with Sir Julius Caesar, who later became Chancellor of the Exchequer, in obtaining a grant of a patent for a lighthouse he had designed.^{14,15}

His engineering skills were further demonstrated when he patented a new machine for cutting iron for nail making. This patent had received Royal approval by the Queen in May, 1588, and in November he received a licence for 12 years.^{14,15} A mill was completed by Godfrey Box of Liege at Dartford in 1590 where the water powered machine was installed.¹⁶ It is unknown whether Box built the mill for Bulmer or sublet the patent and built the mill himself. The iron which was only available in flat sheets was initially slit to

the required size by the machine and it was then rounded by being drawn through a steel wortle plate with various sized holes in it. This patent was renewed in 1605 and transferred to Clement Dawbeney. It was re-called in 1612 and re-granted to Dawbeney in 1618 for 21 years. There is no evidence that Bulmer himself worked the patent, but clearly it was of some considerable commercial value.¹⁴

As stated before he had some connection with the Society of the Mineral & Battery Works. In 1592 he sought an Exemplification (an official copy of a document under seal) of the patent granted to the Society on July 2nd 1584. This gave the Society a perpetual licence to search for "*calamite stone and to have sole use thereof in mixing it with other metals*".^{9,12}

Further expansion of his enterprises came in 1593 when the Corporation of London granted him a 500 year lease to build a "*water works*" powered by a "*newly erected engine*". This horse powered chain pump was built at Broken Wharf near St Pauls and was to supply drinking water through lead pipes to houses in the West Cheap area. The Court of Aldermen gave him the use of Green Yard at Leadenhall for putting together the engine and the Court of Common Council advanced him £1000 on easy terms to finance the engine.¹⁷ The pump was housed in a stone tower with a large cistern at the top. A report on the engine written in 1720 says that at first it was "*not managed without a great charge, in keeping so many servants and horses for the forcing the water up to the cistern*", but as it was still working at this date it demonstrates the effectiveness of the system.¹⁸ The tower of the engine is featured in several early prints of London.

To commemorate the success of his engine Bulmer presented the second silver tankard made from Combe Martin silver to Sir Richard Martin, Lord Mayor of London and Master of the Mint. The gift of the tankard, recorded in the Reporatory of the Court of Aldermen, on October 26th 1594, says "*weighing 131 oz., being 11 oz 17 pennyweights fine in goodness by the assay*".⁴ It had engraved on it a picture of Bevis Bulmer and the following verse:-¹³

*"When waterworks in Broken Wharfe
At first erected Weare,
And Bevis Bulmer with his art
The waters 'gan to reare,
Dispersed I in earth dyd lie
Since all beginning old,
In place called Comb, where Martin Longe,
Had hid me in his molde,
I did no service in the earth,
But no man set me free,
Till Bulmer by his skill and change,
Did frame me this to be".*

In 1643 the original tankard and lid were made into small cups, these were remade in 1662, and in 1674 they were converted into four tankards by Sir Robert Vyner. Finally, in 1731, the four tankards were made into three domed top tankards. They are still in the Mansion House collection today, each engraved "*the Gift of Bevis Bullmer*".

SCOTTISH GOLD - The road to ruin

The Scottish Government had a similar system of farming out licences for groups of partners to search for gold, silver and lead as the English Government. In 1592 it was having problems with the licence holder Eustachius Roche, who, among other things, had not carried out a proper search for any minerals and had failed to pay the Crown duty. It revoked Roche's licence and by an Act of the Scottish Parliament created the post of "*Master of the Metals*", and appointed John Lindsay, Lord Menmuir, to ensure that a proper search was carried out by subsequent grantees.⁴

The Act also stipulated that any ores found were to be refined by Thomas Foullis who had "*found out the ingyne and moyane (ingenuity and means) to caus melt and fyne the vris of metallis within this cuntrie, and has brocht in strangearis, and beiggit (built) houses and mylnis for this effect, to his grit cost and expensis, and to the grit and evident weilfair of the hail cuntrie*". Prior to this any ore that had been found had to be transported abroad in order to be refined. These mills were built at Leith near Edinburgh where he manufactured white and red lead. The German miners, often referred to as "*Dutchmen*", were evidently holding back their smelting technology. Indeed the Act of 1592 stated that none of the previous licence holders, mainly Germans, had "*instructit any of the leigis of the cuntrie in that knowlege*".¹

By 1593, Thomas Foullis, had purchased all the land at Leadhills in which the mines were situated and in 1594 he received a Parliamentary confirmation of his rights to all the mines of gold, silver and lead. As with many goldsmiths Foullis also acted as a banker and James VI was indebted to him for the sum of £14,598 scots. He also made another loan of £12,000 scots to the King. In recognition of these loans the King granted him all the gold, silver and lead mines in Crawford Muir and Glengonnar for 21 years. It was possible the loans also influenced his confirmation of possession at Leadhills.^{4,19} Foullis died sometime after 1613 and the mines passed down through his family until 1638 when the last of the line Anne Foullis married James Hope, later Sir James Hope of Hopetoun. This family continued ownership of the mines for the rest of their working life.

Foullis probably aware of the fleeting nature of the gold to be found in Lanarkshire did not bother with that part of the grant but concentrated on the lead mines. It was left to Bevis Bulmer to undertake the search for gold. Having obtained letters of recommendation from the Queen in 1593 he applied for and received a Patent from the Scottish Parliament permitting him "*to search and venture throughout the Five Muir's or Forests (of Lanarkshire) to search for gold and silver*".^{1,4}

Using Steven Atkinson's contemporary account of the various trials we can build up a picture of the search for gold and perhaps more telling the effect the gold had on Bulmer, which seems to have been the same since time immemorial. Due to the weather work was confined to the summer months. The principal method of searching for gold was by hushing. Atkinson describes the methods used thus, "*when they seek for gold in combes and vallies, to frame or make a long sowgh, or scowring place, into which they bringe the stream water to scower away the light earth from the heavy sandy earth, and cull away the great stones from the heavy sand, which sand or heavy earth they scrape into their troughe or tray, and by stirring it, and washing the same often, there is found both raine gold, flatt gold, pale gold, and black gold*".¹

The first search was made at Mannock (Mennock) Moor on Mannoch Water in Nithsdale. Atkinson says that a fair amount of gold was found but it was "*jagged and not smooth*" as at other sites. He also notes that "*he (Bulmer) builded no house to dwell in there, which was an hindrance*". Attention then turned to Robart Moor on Wanlock Water. Here Bulmer "*brought home a water course there to wash and scower the natural gold from the earth*", which he describes as "*good gold*". Whilst working here they stayed at Thomas Foullis's house at Leadhills, (which Atkinson calls Mr Floods).

Attention next turned to Friar Moor on Glengonnar Water where Bulmer "*builded a fayre countrey house to dwell in, (the site of this house is thought to have been near Lettershaws Farm, NGR 897200)*". Here "*he furnished it fitting for himselfe and his family*". On the lintel over the front door he eventually had carved the following verse:-^{19,20}

*"Sir Bevis Bulmer built this bour,
Who levelled both hill and moor,
Who got great riches and great honour,
In Short-cleuch Water and Glengoner."*

Bulmer also purchased some of the surrounding land and stocked it with livestock to feed his family and workmen. Here also he "*brought home a water course*" and "*got much stragling gold on the skirts of the hills, and in the vallyes, but none in solidd places; which maintained himselfe then in great pomp; and thereby he kept open house for all comers and goers, as is reported, he feasted all sorts of people that thither came*".

Attention then turned to the Elvan Water where the upper reaches are called Shortcleuch Water. Here beneath Glen Ea's Hill at Windgate another "*goodly water course*" was made and they intended to make "*sondry dammes to contayne water for the buddles, and for scowrers etc for the washing of gold*". Bulmer seems to have had a lot of success at this site for "*he gott as much gold as would maintain 3 times as many men as he did keepe, royally*". Atkinson here gives us the main clue as to the way Bulmer was affected by this wealth and shows us that he had little regard for it. *He "purposed to*

have built there (at Shortcleuch) another dwelling house and storehouse, but it is said that his (Bulmer's) hospitallity and (want of) frugality were the theeves that burst in, and so robbed his house, and cutt his purse bottom cleane away; and thus he consumed himselfe and wasted what he did gett in gold, which was much, both of great gold and small gold".

From Shortcleuch Water they moved to the other side of the valley to Longcleuch Head near Wellgrain Dod at a site which still bears the name of Bulmer Moss. Irving's map of 1856 shows these working as the "*Gawd Scars*".⁴ The reason for the move to Longcleuch was that some workmen had found two pieces of gold, one weighing six ounces and another of five ounce weight.

Here they found a great deal of what Atkinson called "*small mealy gold*". "*And he (Bulmer) gave some away, sondry times, to unthankfull persons. He sold much thereof for half payment, and such as he was most liberall unto, they were readiest to cut his throate*". The main find at this site however was "*a vaine discovered by Mr Bulmer*" that "*held much silver, and may prove a rich mine, if it be followed with such as know the nature thereof*". It would appear that this was not developed as "*he (Bulmer) wanted a watercourse to help him*".

The greatest find was made at Glengaberr Water on Hinderland Moor, north west of St Mary's Loch in the Forest of Etrick. Here "*Mr Bulmer gott the greatest gold, the like to it in no other place before in Scotland*". They found a large amount of "*great gold, like Indian wheate, or pearle, and black eyed like to beanes*". They did not build the usual water courses or houses and were eventually driven out by the weather, Bulmer deciding to leave it for another day.^{1,21}

RETURN TO THE CAPITAL

After three seasons Bulmer travelled back to London and the Royal Court in 1595/6. In his usual generous style Bulmer had a porringer made from some of his gold which he presented to the Queen. On it was engraved the following rhyme:^{-1,14}

*"I dare not give, nor yet present
But render part of that's thy own,
My mind and hart shall still invent
To seek out treasure yet unknown."*

So moved by the gift the Queen replied "*Bulmer thou art a true faithfull servant, I have too few such as thou art*". Such was her pleasure with the gift that she ordered him to look for a sinecure which had not been already granted and it would be his for the asking. Bulmer soon became in Atkinsons words "*one of her Majesties sworne servants and this was his first stepp at Court, and from thence he learned to begg, as other courtiers doe*".¹

With his return to more clement climes Bulmer wrote down his various enterprises, experiences and conclusions he had come to regarding minerals and their sources etc under the title of "*Bulmer's Skill*".^{1,14} Unfortunately it was never published and it was up to his pupil Atkinson, who saw the book, to narrate much that it contained.

In August 1595 Sir Walter Raleigh returned from his first voyage to Guiana (present day Venezuela) and the Orinoco River. He brought with him a great deal of white spar or quartz peppered with gold flecks. This was refined by Bulmer and Master Dimoke and assayed at between 12,000 to 26,000 assay pound of 12 grains to the ton.^{13,21}

Bulmer was rewarded for his gift to the Queen in 1599 when he was granted the duty on all coal which was transported by ship. He was to receive five shillings on each chaldron of coal which was carried for export and twelve pence per chaldron of coal transported between any of the haven towns. In return he was to pay an annual rent to the Queen of £6200.^{4,14,22} So lucrative was this sinecure that he had over a £1000 annual income from it. Bulmer held his position as "*Farmer of Duty on sea-borne Coals*" until August 1607 when his deputies who were supposed to take care of his business affairs neglected to pay the annual rent and he lost the monopoly. The King must however have had a soft spot for Bevis for he issued a warrant to pay him £500 "*of the Kings free gift*" by way of compensation on April 14th 1608 and on the 24th released him from repayment of the arrears.^{3,10}

He was further expanding his interests about the same time when in a letter to the Queen in which Bulmer writes "*re imposts on wines, you now have lost £2047 7s 1d, this year you will lose £1500 more. If you please to grant the same, you shall have £1400 a year and 200 tuns of good wine, or £10,000 rent paid at Michaelmas next, and the other £4000 next half year, but always before hand*". This letter is undated but in July 1599 he writes to the Queen, "*The amount collected, re imports on French and Rhenish wines, Michaelmas 1597 to same 1598, gives you a clear profit of £6841 7s 3d, and by the out ports £3632 18s 8d, total £11,385 12s 11d.*"¹³

In October 1599 he writes to the Queen requesting the "*prerogative for pre-emption of tin*" for which he offered £10,000 a year, the pre-emption to be £26 13s 4d per 1000 lbs. The Queen ordered that "*my Lord of Oxford be made acquainted with Bulmer's offer*". His offer was unsuccessful and Sir Walter Raleigh obtained the farm of the tin Royalty. He did not enjoy the privilege for long as the Queen abolished the pre-emption the following year.^{9,12}

THE KNIGHTS OF THE GOLDEN MINE

Bevis Bulmer was back in Scotland in 1603 when on January 18th a Warrant to the Exchequer was issued by James the 6th to pay Bulmer £200 to be "*employed about the Mynes of Gould in Scotland*".³ On February 7th George

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Bowes was granted £300 to make a search on the Wanlock Water.¹⁰ Bowes had recently undertaken an inspection of the Lake District mines leased by the Mines Royal Company.²³

It would appear that this was a preliminary sorte and it was not until October 1603 when an Assignment was granted by the King giving Bulmer rights to search for gold and silver on several rivers in Scotland and the Wanlock Water area assigned to George Bowes, that the search became official. They were also allowed to search jointly or singly at pleasure but from Bowes's letters there appears to have been considerable rivalry.^{10,14} In November 1603 George Bowes received a letter from Richard Cecil which told him that by order of the Privy Council he was to meet Sir William Godolphin and Bevis Bulmer at Carlisle about "*mining matters*".¹³

In January 1604 Bulmer had returned to London "*with assurances that ye goldmines in Crawford Moore wilbe found. Having brought hither so much sifted out of ye earth in droppes or crommes and little gobbets as must make ye King a cupp*".³

Bulmer was summoned before the King and notes in his book that "*his Highness was well pleased to see me so well and bearing my age and travailles so comely*". "*And especially (said the King) because I desire to hear more of my gold mynes in Scotland*". Maybe Bulmer had indeed made the King a "*cupp*" to receive such a summons.

The King then revealed to Bulmer a scheme to finance the further exploration of Scotland for gold and silver which the King referred to as a "*Plott*". To finance the "*Plott*" Bulmer was to find 24 gentlemen with "*lands, goods or chattels*" worth £10,000 or an annual income of £500 prepared to become adventurers in the "*Plott*". They were to be offered knighthoods in return for investing £300 sterling and would be known as Knights of the Golden Mines, or Golden Knights. Bulmer was to be the director of all the works, the workmen were to be paid weekly and all victuals, tools, implements and even a church for the workmen would be provided from the common fund.

Sadly through the interference of Richard Cecil, the Lord Treasurer, who was notorious for his opposition to original ideas, the scheme came to nought and only one knight, Sir John Claypool, who had already invested £500, was created. Bulmer's comment on this was "*me thinketh it strange, that the King of Greate Brittain should make a graunt, and that a Nobleman of England should cut it of, and say, It is not fitting that such a suite should be granted to so meane a man*".¹

He returned to Scotland in February 1604 armed with a proclamation from the King which was to be read at the market crosses at Lanark, Dumfries, Peebles and "*all other places needfull*". This prohibited "*in any way to steal or convoy secretly away any part of the gold or silver to be gotten in*

(Bulmer's) *mynes, under paine of death*".³ George Bowes, however, did not receive a similar proclamation.

Letters written by George Bowes to various people reveal not only that there was little love between himself and Bulmer but most of all the atrocious conditions he laboured under. Bowes and his workmen were forced to live in tents whereas Bulmer had the comfort of his home at Glengonnar. Whilst Bowes may have possessed a great deal of knowledge about normal mining he completely misunderstood the nature of the gold finds and wasted his time searching for a gold vein. Trenches several hundred feet in length were eventually excavated at Wanlock Water, Glangresse, Beltongrain and Stakemoss.

Letters written in April 1604 demonstrate his inexperience at alluvial mining when he asks that "*a skilfull Gold washer*" should be sent so that he could apply himself "*whollie to myninge, for discoverie of a vaine*". The gold washer could also collect all the gold found by both himself and Bulmer which hints that he suspected Bulmer of some dishonesty. A smithy, carpenters shop "*and other necessary lodges*" had been built and he had spent half the money granted to him. Work was being held up due to a snow drift in Glangrese Gill a quarter of a mile in length and over 400 yards in width.³

By the end of May he had spent all of the £300 and was using his own money to keep things going. Operations were still being hampered by wind and rain and his workmen were suffering from the atrocious weather. He and seven of his men were down with scurvy and the fact that winds had wrecked the workmens tents did little to help matters. Once again he requested that someone responsible should be sent to check that the work he was doing was comparable to Bulmer's. He seems to be getting very worried about the lack of progress as he admits that he had only found 30 shillings worth of gold.

The following month he began clearing an ancient shaft on Stakemoss. Some traces of gold had been found in the infill but after clearing it out it was found to have been washed in during his hushing operations. By the end of July he seems to have reached the end of his tether and writes pleadingly for someone to be sent to take an inventory of his stock and see that he had made a genuine effort to discover a gold vein. He had hoped to make a plan of his work but the weather had destroyed all his instruments and paints. We hear no more of his presence after 1604.³

Close examination of Atkinson's book reveals that Bulmer also worked the silver vein found at Bulmer Moss on the first expedition on this second trip. The clue comes in his book as he gives two accounts of the 1593 expedition. In the first account he stated that the vein of silver found at Longcleuch "*may prove a rich mine*" which suggests that it was not developed in the 1593 tour. However in the second account of the expedition he says that "*At Lang-cleuch-head Mr Bulmer made a stamping mill*", so it is highly likely

that the vein was worked on this second trip. Atkinson says the stamp mill in “*foreign parts is called a Tanacanagno*” and in Cornwall is known as a “*plash mill*”. Traces of the mill were to be seen in 1745 (see appendix 2). Another likely site he might have visited could have been the Forest of Ettrick which they had left unworked in 1593.^{1,4}

Bulmer must have been a lot more successful than George Bowes as he received a knighthood. The proclamation of February 1604 describes Bulmer as esquire. However in the correspondance over Bulmer’s Mendip mines in February 1605 he is termed Sir Bevis Bulmer so evidently the King was pleased with his work in Scotland.

HILDERSTONE

In 1605 an event occured which was to involve King James, Bulmer and others, in a venture that was to cost the King dearly for very little reward.

A collier named Sandy Maund whilst out walking near Hilderstone Burn below Cairn-Popple Hill four miles south of Linlithgow found a piece of “*redde mettle, no man thereabouts ever saw the like*”. He dug into the ground with his mattock and found another piece of stone which when he broke it open proved to be a white spar which glittered. After showing it to some friends, one of them told him to take it to Sir Bevis Bulmer’s house at Glengonnar. One of Bulmer’s workmen refined it and found it very rich in silver. Bulmer doubting the results then tried it again himself and it still proved rich.^{1,24,25}

Bulmer then notified the King who granted him a Tack note for all mines of precious stone in Scotland for five years to run from March 24th 1605. The King ordered the Great Seal should be appended to the Tack note in January 1606.¹⁰ Bulmer then reached an agreement in March 1606 with the landowner, Sir Thomas Hammilton of Bynnie, Lord Advocate of Scotland, possibly similar to the one he used at Combe Martin to work the mine. Although Sir Thomas owned the land in which the mine was situated he had to obtain the King’s consent to begin work as the mine contained silver and was therefore a “*Mine Royal*”. Sir Thomas was granted a charter under the Great Seal on April 4th 1607 granting him all mines within the lands of Ballinkrief, Baithgate, Drumcrose, Tortrevin, Torphichen, and Hilderstone. However Bulmer found he was unable to raise enough ore to pay the development costs and withdrew from the agreement in August, 1607.¹⁹

When first worked, Atkinson says the vein was two inches thick and the ore both malleable and tough, with coarse silver worth 4s 6d per ounce. One shaft was so rich that it was named “*Gods Blessing*”. Ore from this shaft contained 24 ounces of fine silver per hundred weight and was valued at £60 sterling per ton. The richest assayed at £120 per ton. When refining the ore Atkinson regularly produced £100 sterling per day. During the period from March 1st 1606 to December 1st 1607, 30 tons of lead ore was raised at a

cost of £700 sterling. The King was entitled to a tenth of this which amounted to 20 stone of clean silver. Sir Thomas estimated that the mines would yield a profit of £500 sterling per month after working costs were deducted.

Atkinson had sent a sample of the veinstuff from God's Blessing Shaft to his uncle in London. After showing this to various goldsmith's he got an interview with Cecil, the High Treasurer, and showed him the sample. After assurances that there was no fraud involved he told Atkinson that he would show it to the King whose cupidity was evidently raised by the sample from Scotland. On November 25th 1607 Sir Bevis Bulmer and five other Commissioners were ordered to Hilderstone to take enough ore to enable a true estimate of its value. A warrant was issued instructing Lord Knyvett, Warden of the Mint, to issue money when required for use at the mines.¹⁰

Sir Bevis Bulmer appeared before the Privy Council at Edinburgh on December 17th 1607 and presented a letter from King James. The letter authorised Bulmer and five others to go to the site and raise ten tons of undressed ore which was to be sent by ship for assaying in the Tower of London Mint. A previous shipment of samples sent to the Mint had been lost in a shipwreck. They were to be accompanied by Sir John Arnott, Deputy Treasurer for Scotland and Thomas Achieson, master of the Cunyie Hose (the Scottish Mint in Edinburgh). The Lords of the Privy Council expressed some doubt as to the legality of the Crown's taking the ore without the consent of the landowner. However a letter from Sir Thomas Hammilton, in which he said he was content that the Commissioners should be allowed to take the samples, was read out by Sir John Arnott,.

The Scottish Privy Council issued a warrant in January 1608 that, in order to ensure the King's interests were to be protected against any fraud, a sample should be taken from the ore raised. This was to be refined at the Cunyie House and cast into an ingot which was to be divided into two parts, one half to be retained at the Mint and the other half sent to the King. Later in the month the master of the Mint, Thomas Achieson, appeared before the Privy Council seeking clarification as to whether the Troy or Avoirdupois weight should be used. After consulting with the goldsmiths at the London Mint they decided to use the Troy weight.

In February 1608, 38 hogshead barrels weighing a total of 1171 lbs were delivered to Sir John Arnott and sealed in his presence. These contained 20,224 lbs troy weight of a mixture of ore and spar ready to be shipped to London. Atkinson travelled south with this ship and carried out an assay at the Tower of London. The results here were not as productive as those made in Scotland where the price of coal, wages and other charges were a lot cheaper. He accomplished more in three days there than he did in a week in London.

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Reports from the mines and Atkinson's assay were sufficient to persuade the King to pay Sir Thomas Hamilton £5000 Scots for the mines and work them at the Crown's expense. Letters Patent were issued on April 24th 1608 which appointed Sir Bevis Bulmer "*maister and surveyair of the earth werkis of the lait discoverit silver mine*". These received the Great Seal on May 8th 1608. The following day he received a grant under the Privy Seal of £2419 16s 10d to be "*ymployed about the mynes in Scotland*".¹⁰

Bulmer was paid a daily salary of £8 Scots. The other officers at the mines were:- George Bruce of Carnok, treasurer, Archibold Primrose, clerk, James Craig, purveyor, James Bla, deputy to George Bruce and Archibold Primrose, and John Myr, "*attending for putting of the workmen to wark in the morning, attending on them all day, and seeing them keip their ordinarie houris at lousing fra their work*".

The accounts for the period from May 8th 1608 to May 7th 1609 show that money seems to have been no object. A total of £20,815 8s 9d Scots was spent developing the mines, building stamp mills on the the river that flows from Loch Linlithgow and other ancilliary buildings. A similar sum was spent in building a smeltmill, refinery and warehouses at Leith. On the Leith Water as it flows through the suburbs of Edinburgh, there was a place which in 1859 was still known as Silver Mills.¹⁹ A copy of the accounts for the period May 1608 to December 1610 are given at the end of the article.

There were seven shafts eventually sunk at various sites; Gods Blessing, German's East and West Shafts, "*A new shaft set down by David the German callit - Serve them all*", Harlies Shaft and two others, the "*long shaft*" and "*the blak shaft*".

All the equipment for the mines and mills had to be shipped from Leith to Borrowstown and then transported overland to the site with only provisions being obtainable locally.

Conditions at the mines which were worked day and night were not without danger. In May 1608 £5 11s 0d was paid for "*ane winding sheit, ane kist and uther expenss maid upoun the buryall of Emmanuall Thomas englishman quho depairtit this lyfe at the mynes this week*". Earlier in the month he had been paid sick pay of 24 shillings. In 1609 a Cornishman, Henry Rice received £6 for 12 days wages "*being evill hurt*" and later he was paid £6 for his expenses to travel home. There are other payments of money to people hurt in the mines.

A Proclamation was issued in September 1608 forbidding any ships captains from assisting three men who had deserted the mines and were trying to obtain passage back to England. The Proclamation also ordered magistrates in the border towns to watch out for the three miners and any other miners who had been at the King's mines who were attempting to escape across the

border. They were to be imprisoned until they could be examined by the Lords of the Privy Council. The said *magistrates* “*will answer upoun thair obedience at thair heichest perell*”.

In August 1608 a shipment of 100 tons of ore was shipped to London. This was packed into 398 barrels and the total cost of the barrels, transporting them to the ship and loading cost £770 16s 4d. This suggests that the smelt mills were not finished at this time. To ship the ore on two ships cost £118 sterling.

The King ordered that trials of the ore should be made by several people in order to obtain a more balanced opinion as to the silver content of the lead ore. Sir Richard Martin, master of the London Mint, made an assay from the ore and estimated that a ton of silver ore could be refined at the expense of 500 cwt of lead and the ton would yield 36 dwt 8 oz which he valued at £116 2s 1d. Another trial was made at an iron furnace in Sussex in October which, not suprisingly, gave very poor results.

It would appear the King got the worst of the bargain, however, as Atkinson wrote “*But when the same mines befell unto the King’s Majesty to be superiour or governour thereof, then indeede it was not so rich in silver altogether*”. In an attempt to improve matters the King spent £140 to bring Henry Starchy and seven other miners from Saxony to Hilderstone in January 1609. Emmanuell Hochstetter, a skilled mining engineer, who ran the Mines Royal Company’s Cumberland mines, was paid £15 sterling for travelling to the mines from Keswick and staying there six weeks.

Direction of the work at Hilderstone was put in the hands of Henry Starchy and the other Germans on March 13th 1609, but Bulmer kept control of the finances. On September 11th he received £2160 from Sir John Arnott, the Deputy Treasurer, to clear up the financial side of the venture work finally ceased in December 1610.¹⁰

As with so many other mines the richest ore was usually the first to be found, the vein becoming increasingly poorer in depth. In Atkinson’s words “*Untill the same redd-mettle came unto 12 faddomes deepe, it remained still good; from thence unto 30 fathome deepe it proved nought; the property thereof was quite changed miraculously in goodness, it is worth little or nothing; and more, uppon an instant, after the Bronswick’s entered, it was quite altered in quality, but not in colour, fashion and heaviness*”.^{1,3,10}

The Hilderstone mines were leased in 1613 to Sir William Alexander, Thomas Foullis and Poalo Pinto, from Portugal, paying a duty of one tenth to the Crown. The Crown reserved the right to repurchase the mines for £100,000 Scots at six month’s notice. Needless to say, this option was never exercised.

THE SPIRIT DIES

After the decline of the Hilderstone mines Bulmer and Atkinson travelled to Ireland. A rich strike of silver had been made at Kilmore in County Tipperary in 1612 yielding 3lb of silver per ton. The licence of the Mineral and Battery Works had lapsed and a syndicate, headed by Sir Thomas Hammilton, was set up to work the mines. Bulmer was invited to take charge.^{1,12}

To bring the story to a close it would be well to use Atkinson's own words, "*And he had alwayes many irons in the fier, and often times intricate matters in hand to decyde; and too many prodigall wasters, hanging on every shoulder of him. And he wasted much himselfe, and gave liberally to many, for to be honoured, praised, and magnified, else he might have bin a rich subject; for the least of these frugalities (profusions) were able to robb an abbott. By such synister meanes he was impoverished, and followed other idle veniall vices to his dying day, that were not allowable of God nor man: and so, Once downe aye downe, and at last he died at Awstinmoore, in my debt £340 Starling, to my great hinderance, and left me in Ireland much in debt for him, etc: God forgive us all our sinnes! But if he had lived to this day, undoubtedly, he might have paid all men*".^{1,3}

Sir Bevis Bulmer died on September 15th 1613 at Randal Holme, the house of Mr Francis Whitfield just to the north of Alston. The inventory of his goods and chattels made by his son John shows that his worldly wealth amounted to the clothes he stood in which, along with a sword and dagger, were valued at £4 0s 4d. Bulmer had borrowed a further £10 from Francis Belgrave of Newcastle to purchase more clothes. There is no mention of any mining or surveying equipment which was possibly left with Atkinson in Ireland.²⁶ So the man who had mixed with the highest in the land died a pauper, ignored by all who had been so willing to court him in his heyday.

When Bulmer died, he had a lease of the Alston mines from Mr Henry Hilton for 21 years, for an annual rent of £10. This was held in trust by Francis Belgrave, but the location of the mines on Alston Moor is not stated.²⁷

He left a son John, and two daughters, Elizabeth and, somewhat ironically, Prudence.¹³ His name still lives on in Scotland, however, in Bulmer Moss near Leadhills and Bulmer's Hill near his old home at Glengonar. In 1876, when Porteus wrote his book a row of houses in the village of Wanlockhead still bore the name of "*The Gowd-Scar Row*".²⁴

Bulmer also worked mines at Treworthie and Langassock in Cornwall and had coal mines and salt works in Wales. Unfortunately we have no precise dates for these ventures.^{1, 17,28}

John Bulmer seems to have followed in his fathers footsteps for in 1634 he is named as Master Surveyor of the Kings mines in a Liverie for application to patent a waterpowered device for raising goods and ships from the sea bed.²⁹ In 1641 he is named as a sea captain in a petition to the House of Lords. In this

petition he states that Letters Patent had granted him licence to raise goods and ships which had been lost at sea. After spending “*many thousands of pounds*”, he was opposed by the Lord Admiral and others who claimed wreckage.³⁰ It would appear that his petition failed and he resorted to writing broadsides to back up his case. In 1643, 1647 and 1649 various tracts appeared under his name referring to his device for raising ships.³¹⁻³³

Atkinson’s fortunes did not improve after the death of Sir Bevis. He managed to persuade some London merchants to finance a venture for gold in Scotland and applied for a licence from the King. The licence was approved and, on June 11th 1616, he obtained permission from the Scottish Privy Council to search for gold and silver in Crawford Muir. He was to bring all gold and silver he found to the Cunzie House at Edinburgh where it was to be coined. The King was to receive one tenth as his due and Atkinson the other nine tenths.¹

He returned to Shortcleuch where he got some “*redd gold*” which he alleged assayed at “*threescore sixteene pounds the ton weight*”. He describes the water courses as “*in great decay for want of reparation*”.

Some of the gold he found was sent to his cousin, John Atkinson, who gave it to a Groom of the Bedchamber, John Murray, to show to the King. The King told Murray to keep it for himself, and, despite requests from Atkinson that he might borrow it to show to his merchant backers, Murray refused. As Atkinson then had no proof of his find, his backers withdrew their finance, saying “*that it was more fitting for princes than subjects*”.

Atkinson wrote his treatise in 1619 and it is fortunate for posterity that he did. Whilst the book gives a somewhat disjointed account of his and Bulmer’s travels, the greater part of it was penned in order to flatter the King by comparing him to various Biblical luminaries and Kings so that he would come up with the necessary finance. It would appear that Atkinson’s strategy failed, however, and he drifted into obscurity or, in his own words “*And because merchants are not willing to adventure to Scotland, I am therefore resolved to adventure my life and skill to Guiana*”.¹

CONCLUSION

Perhaps the most positive result of this paper is that Bulmer will be established as a recognised national figure after my being commissioned by the Oxford University Press to write a short biography of him to be included in the New Dictionary of National Biography which is in an advanced stage of preparation. I have also been able to write a new entry for Stephen Atkinson which appeared in the old Dictionary of National Biography was highly inaccurate.

I hope that one day, Father Time permitting, enough information will be gathered on Bevis Bulmer to publish a book on his life. If any fellow researchers come across him in the course of their work, then I should be pleased if they would pass on any information they find.

APPENDIX 1

The Accomptis of ane noble Lord George Erll of Dunbar, Lord Home of Berwick, Lord Heighe Thesaurair of Scotland, and Lord Governour of his Majesties Mynis within the same kingdomme. (The money is in Scots pounds).

Samples of some of the everyday costs at the mines:-

May 8th to 15th, 1608. To Sr Beves Bilmer, knicht, for his wages fra the said aucht day of Maii inclusiuie, to the fyftene day of samyn exclusiuie at viij li. in the day, Lvj li. (£56)

May 22nd to 29th. Money debursit vpoun the dressing of the ore quhilck (which) Sir Thomas Hammiltoun of Bynne, knicht, left abone the ground qhuan he deliuerit possessioun thairof to his Majesteis seruandis, L li. (£50).

To William Corstone carpentar brocht out from Lyn in England for his daylie wages fra the first day of Maii that he tuke jorney from Lyn to the fyft day of Junii being five weeks and haueand of weekly wages £7 4s 0d = £36.

June 5th to June. Materiallis and uther extraordinary costis including “changing of the forme of the auld melting hous and double lofting the samyn and placeing of beddis therein for lugeing of the English pickmen that come out of Cornwall”. £14 8s 8d.

June 12th to 19th. For 4 elnis of tweill hardin maid in ane cover to saue Thomas Burd that wesches with the seiff fra the injurie of the wedder, 30s 8d.

For xxj pund wecht of candile to the pickmen at iijs ixd the pund, £3 18s 9d.

July 31st to August 7th. For melting pottis, agoll, and saltpeter, to Sr Beves Bulmer to mak assayis with, xiiij li. xj s. viij d. (£13 11s 8d).

August 21st to 28th. For clay to mak mufflaris for the assay furnace, 8s 0d. To James Sharpe to gang to Killeith to caus Mairtene the German meit Sir William Godolphyne in Edinburgh, 20s 0d.

September 18th to 25th. For sex stane and xiiij pund wecht of Spanish irone wrocht the week preceiding at xxxvjs a stane, £12 7s 6d.

For the charges of xxxv Englishmen being on thair jurnay to the mynes and resting at Edinburgh ane day and ane nicht befor they come to the

mynes and allowit to thame be the Lords Commissioneres for the mynes, £36 8s 0d.

For thair chairgis at Linlithgow twa nichtis and ane day befor they enterit to wark becaus thair wes na ludging for thame at the mynes, £36.

October 9th to 16th. For xxij fute of new glas for Sr Beves chalmer windok, and for the new windok in the chalmer abone the say house at iiij s. the fute, iiij li. viij s. (£4-8s).

October 16th to 23th. To Martene Smeddell, Ducheman, appointit be the Lordis Commissioneris to set downe ane new schaft vpoun the bray on the south syd of the burn, for his wages this week, viij li. (£8)

To Hans Myar (6 days work same schaft) at xiijs iiijd in the day £4.

To Henry Ryce a Cornischman (sick 3 weeks half daily wages) £4 10s 0d.

To Henry Ryce for twelff dayis wages being evill hurt at xs in the day, £6.

To him in free gift to mak his expenss and fraucht be sey hameward, £6.

January 8th to 15th, 1608(9). For twa pompes reddy bored, being xlv fute in lenth, at xxiiij s. the fute, Liiij li. (£54).

May 14th to 21st, 1609. For sax quair of paper to mak buikis and tickettis for sending of mettell to the mylnis, and to mak pasportis for sick men as ar dischargit at any tyme, xxiiij s. (£1 4s 0d).

May 21st to 28th. For ane horse hyre frome the mynis to Killeith with bedding for four Englishmen appointit to work in the mynis of Killeith, xx s.

For ane horse hyred to Daid the Germane myner to ryd from Linlithgow to visit the mynes at Caldermure, vjs. viij d.

July 30th to August 6th. For four loadis of coilis to mak ane bonefyre upoun the fyft day of August, xvj s.

September 17th to 24th. To Johnne Pattoun in attending vpon Sr Beves Bulmer, and carrying with him into the Hielands of certane warklomes for searching of gold be the space of sex dayis, at vj s. in the day, xxx s. (30s)

September 24th to October 1st. To Thomas Jakharras for attending three dayis vpoun Sr Beves Bulmer, and carrying of certane warklomes with him for measoring of mynes, at x s. a day, xxx s.

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February 4th to 11th, 1609(10). For Jaylour fee at Linlithgow for Johne Robertis, Thomas Robertis, and Thomas Jackharris, being wardit for dissobedience, xx s.

Given below is a summary of the mining costs in pounds scots, the numbers have been changed to modern script to make it more legible:-

“Summa of the haill money debursit in ordinary and extraordinary expensis, and upoun materiallis and all other necessaris for the Kingis most excellent Majestie his Silver Mynes of Hilderstoun”:-

Fra May 8, 1608, to May 7, 1609,	£25,702	13s	3d.
Fra May 7, 1609, to Aug 6, 1609,	£ 3,814	3s	0d.
Fra Aug.6, 1609, to Aug.5, 1610,	£11,197	8s	4d.
Fra Aug.5, 1610, to Dec 2, 1610,	£ 4,577	13s	7d.

Fynning Milnes

The Compt of all sowmes of money debursit vpoun repairing of the siluer mylne at Leith, quhilk (which) wes appointit to haue bene vsed for melting and fynning of the mettel of his Majesteis siluer mynes: And vpoun the building of the fynning and melting mylne, and of the stamp mylne and vther warehousis, vpoun the watter that rynis frome the Loch of Linlythgow. Quhilkis mylnis ar buildit for the stamping, melting, and fynning of the mettel of his Majesteis foirsaidis mynes.

Summa of the haill money debursit in ordinarie and extraordinarie expensis at his Majesteis melting, fynning, and stamping mylnis:-

Fra May 8, 1608 to May 7, 1609,	£20,135	10s	11d.
Fra May 7, 1609 to Aug 6, 1609,	£ 2,873	10s	7d.
Fra Aug 6, 1609 to Aug 5, 1610,	£ 7,156	14s	5d.
Fra Aug 6, 1610 to Dec 2, 1610,	£ 1,480	2s	6d.

Killeith Myne

Summa of the haill money debursit in searcheing of ane myne within the landis of Killeith:-

Fra July 3, 1608, to May 7, 1609,	£709	17s	9d.
Fra May 7, 1609, to Aug 6, 1609,	£ 98	10s	8d.

Caldermoor Mynes

Summa of the haill money debursit in searcheing of ane myne at Caldermoore:
Fra May 21, 1609, to June 25, 1609, £12 12s 4d.

Water of Even Myne

Summa of the haill money debursit in searcheing of ane myne at the Water of Even: Fra May 21 to 28, 1609, £14 18s 0d.

APPENDIX 2

*“June 22nd 1745. From Bailgill we went over the hill to the head of Langcleuch, on the west side of which is a pretty wide hollow resembling an open cast which John Williamson told us, according to tradition, was digged by Bulmer who is said to have got out of it a transparent Spar, which being pounded and washed produced gold. In our way down the burn we saw many heaps like that they call the Gold Workings in Glengonner, and John Williamson shewed us a place where Bulmer had a Stamp Mill. We could perceive the vestiges of a water course from the burn along the hillside, and overgrown with grass which we digged into and found it to be very small wastes intermixed with spar”.*³⁴

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One thing which I have found very heartening during the preparation of this paper is the willingness of other researchers to assist and share information on their respective areas. This attitude can only be commended as cooperation will serve to enhance our knowledge as we delve deeper into the history of mining. I would like to express my sincere gratitude to the following people who have assisted me with advice and information: Bill Harvey for advice on Scottish mines and pointing me in the right direction when I first started on this paper; Ray Fairbairn on Alston Moor; Peter Cloughton on Combe Martin and Ireland, and Tom Taylor for general comments. A special thank you is due to Emma for rushing my request for Cochrane - Patrick's book through the Library lending service. I have also been able to draw on the work of an earlier researcher on Bevis Bulmer, Rhys Jenkins, who did work in the early part of this century and deposited his papers in the Science Museum Library. I would like to express my thanks to Mr Robert Anderson, Plate Butler at the Mansion House, for the information on the subsequent history of the tankard which Bulmer presented to the Mayor of London in 1594.

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