

High Morlaggan
Argyll
Glass Report
(an Addenda on Pressed Glass attached at end)

Introduction:

Well over 2000 shards of bottle, vessel and window glass were recovered from excavations at High Morlaggan. The great majority of these were typical of mid 19th to early 20th century date and would be found on most sites of that era. Consequently most of the glass finds will be collected under general headings and only given brief comment. It should be assumed that all references are to shards unless otherwise stated. Again where items have not been given specific dates it should be assumed that they are mid 19th to early 20th century.

Items outwith the 19th/early 20th century date window will be mentioned separately as will any items of particular interest or with a story to tell, irrespective of date.

The glass catalogue is arranged in site catalogue number order irrespective of context number.

As part of an ongoing research project with Historic Scotland, eight shards of window glass were selected for analysis to determine their composition. The project is to assess window glass used in Scotland and to see if interesting results from similar research by English Heritage can be replicated here.

The eight shards were selected on their physical appearance and should represent most of the varieties of window glass recovered. However without testing literally every shard of window glass we can not be sure all varieties have been covered.

Discussion

As already mentioned the great majority of the glass finds from High Morlaggan date to the latter part of the occupation of the site, from the mid 19th century to its abandonment in the early 20th. This however should not be interpreted as an indication that there was little or no occupation before that. A rapid expansion in the use of glass for utilitarian containers with the exception of wine bottles did not occur until the 19th century and as the century progressed all sorts of products found bottles/jars being developed to accommodate them. For thousands of years pottery had been the mainstay but once glass was available cheaply enough, it rapidly took the place of pottery for many uses. One obvious advantage was that cleanliness and lack of contamination of the contents could be more easily assessed. The High Morlaggan assemblage contains most of the usual suspects that would be expected from a rural township site and indicates a supply arrangement with the 'outside world'.

There are quite a number of artefacts or more accurately shards therefrom which are worthy of some further comment. Starting with wine bottles, these first appeared in glass in the middle of the 17th century but are not common in Scotland, other than on prestigious sites, until the 18th. Although generally described as wine bottles, some of the shards could derive from beer or ale bottles. They were made in very similar shapes to wine bottles from the mid 18th to early 19th centuries. The glass wine/beer bottle underwent quite a radical shape evolution from the mid 17th century to the mid 19th and is relatively easy to date (**Van den Bossche 2001**). Body, neck and lip shapes all changed with time. There are several which are earlier than the main bulk of the assemblage and a few could date back to the late 17th century. Two wine bottles in **Cat 108 bag 5** are slightly out of the ordinary. They are much paler in colour and the neck and lip shape differ from the typical British product. The glass is very seedy (small gas bubbles) and these bottles may be French. The French continued to fire some of their furnaces with wood, rather than the coal used here, into the 19th century and the lower temperature resulted in seedier glass. Reference is also made in the catalogue to reverse kick, this is a mid 19th century feature of some wine bottles. Although the kick is pushed in as usual, the centre reverses direction and projects down towards the base, quite what the purpose of this was is unknown.

Quite a lot can be learned from how bottles were moulded. Early wine bottles were free blown and hand finished. About 1740 the main body of the bottle started to be blown into a cylinder mould and then was removed and attached to a pontil rod to finish the neck and lip. The pontil rod was attached to the base of the bottle and pushed in to form the indent or kick in the base. Because the bottle was no longer restrained by the mould some of the energy forced the base of the bottle outwards making it wider there than further up the body. This feature is called belling and can be seen on most wine/beer bottles between about 1740 and 1840. A semi automatic moulding machine was patented by Henry Ricketts of Bristol in 1821 and belling disappeared in bottles made using this. There is an embossed base shard from a bottle moulded by Ricketts machine in Cat 095. Allowing a few years for the new technology to spread, belling disappeared about 1840. Ricketts mould was three-piece, a solid slightly tapered (for ease of removal) lower section and two hinged upper parts. These bottles have a characteristic horizontal mould mark at shoulder level. As the 19th century progressed the desire increased to emboss more of the body of the bottle, not possible with the Ricketts mould. Although they had been around for many years, particularly for square section bottles, the two piece hinged moulds came into general use c 1870-80. Lips of bottles continued to be added by hand until the early 20th century. Reference to 'pimple' kicks appear frequently in the assemblage. This refers to a small raised 'pimple' in the centre of the kick in the underside of the base of the bottle and was common during the mid 19th century and gradually phased out later in that same century.

Around the middle of the 19th century some cheap bottles had completely unfinished lips, shear lips, where the blowpipe was wetted off and the lip left as a sharp edge. Corks could be either internal or oversize and simply jammed on. Shear lips were probably the cheapest glass bottles available at the time and small square section ink bottles were a favourite, there are several in the High Morlaggan assemblage. A square section probable whisky bottle from Cat 092 carries a six digit number 239655 which may a registered design number. If it is then we can date the design to 1894.

There are quite a number of shards of drinking vessels, stemmed varieties and tumblers. These appear to be typically 18th/19th century types although there is one enigmatic fragment. It is the prunted vessel from Cat 072. Prunts are small blobs of glass added to the vessel for decoration and sometimes to improve grip. In this case the prunts are moulded in the form of raspberry fruits and they are normally found on imports, typically from Holland where this type of prunt is called brambleknoppen. This style of decoration was very popular on Dutch drinking vessels even up to the early 19th century (Henkes 1994, 305). There are also fragments of stemmed drinking glasses with bucket shaped bowls and angular knobs in the stems. Knobs are local thickenings of the stem and can occur in a number shapes. Some of the drinking glass bowls have been facet ground and one example has a foliate decoration wheel ground into the surface. It is possible that the latter could have been made by John Ford's Holyrood glassworks in Edinburgh. They were renowned for wheel ground foliate decoration although that was carried out by an independent engraver. All these features could be late 18th to early 19th century (Ash 1962, 174). It is very likely that fine tableware would have been looked after and could have been in the family for many years prior to its demise.

Of later date are shards of press-moulded glass vessels some of which are represented over several contexts. Press-moulded glass was introduced into Britain in the early 1840s from America and enabled quite ornate tableware to be made much cheaper than by the traditional hand blown methods (Thompson 1996). It is easily recognizable because the inner non-moulded surface is perfectly smooth. The moulding was formed by a plunger which pressed the glass into the mould. Where a vessel has been blown into a mould an impression of the mould can be seen on the inner surface as well as the outer. Pressed glass can carry pattern numbers but none were found here. The milk glass jug from (Cat ???) dates from the second half of the 19th century but was quite crudely made. The use of a 3-section mould allowed the handle to be moulded at the same time as the rest of the vessel. No parallels were found but the late 19th century was the most prolific period for this type of ware.

Several of the clear glass shards have solarisation, a distinct purple pink tinge, caused by lengthy exposure to ultra-violet light, ie sunlight. It is caused by the effect of ultra-violet light on Manganese Oxide used as a decolourant in the manufacture of the raw glass. Most glass has a trace of iron in it which imparts a greenish tinge and the Manganese offsets that. Without going into great detail solarisation occurs when Manganese and Iron oxides exchange ions and the

valence of the former increases. (**Shelby 1997, p208**) Manganese was used as a decolourant up to the start of the first World War (**Ibid**)

Another decorative technique present was flashed glass, again shards of probably the same vessel being found in several contexts. It appears to have been a small lipped pouring jug with a handle and was coloured red/pink. Red glass was often very intense in colour and thin layers were 'flashed' on to clear glass to give more subtle shades while retaining the required thickness. The flashing in this case was on both inner and outer surfaces, however the handle which had been applied separately was clear glass.

A significant number of the shards/bottles in the assemblage carry embossing and that can be quite informative and helpful for dating. Since most of the lip apertures in the assemblage are small diameter it may be presumed that they predominantly stored contents of a liquid nature or possibly sauces. However, there were shards from Kilner jars present, one of the earliest dedicated storage jars. John Kilner started up in Castleford, Yorkshire, in 1842 and several generations of the family continued up until 1937. The examples here are from the mid to later 19th century.

Goodall, Backhouse & Co are also represented with their 'Yorkshire Relish' bottles having started up in Leeds in 1837 although the examples here are later 19th century.

A complete rectangular section bottle with indented sides **Cat 074** is embossed Bathgate & Burns, Edinburgh. According to the Post Office directories (**Edinburgh PO directories**) Bathgate, Burns & Learmonth are recorded as wholesale coffee, spice and fruit dealers at Gayfield Square, Edinburgh, in 1879-80.

Bathgate & Burns first appear on their own in 1885-86 and remain under that designation till 1902-1903 at which point Bathgate & Co appears. The contents of the bottle was probably coffee and chicory essence and this seems to have been a High Morlaggan favourite since Symington's and T & H Smith bottles for the same product were also found.

The most impressive of the embossed bottles however is the complete globe-stoppered bottle from **Cat 076**. These bottles are generally referred to as 'Codd' bottles after Hiram Codd, their inventor, who took out his first patent in 1870. Codd bottles were one of a whole range of bottles designed to keep the fizz in aerated waters. Many interesting and sometimes bizarre methods of closing such bottles were invented in the 19th century and the Codd bottle was as long lived as any, remaining popular for around 60 years.

The idea behind the Codd bottle was that it was filled with a carbonated liquid in an inverted position and the pressure of the gas pushed the glass marble against the internal rubber ring creating an efficient seal even when the bottle was turned upright. To gain access to the contents the glass marble would be pushed down and sideways into the recess in the neck thereby allowing pouring. Although Codd bottles were made in huge numbers their survival was somewhat limited, children would break them to recover the glass marbles!

The example recovered from High Morlaggan is a fine specimen in both condition and in the information it can provide. Besides carrying information on the chemist, J.A Reid, in Helensburgh, who sold the bottle with its probable soda contents, it also carries details of the bottle manufacturer Dan Rylands. Ben Rylands was making bottles for Codd as early as 1874 (**Talbot 1974**) and went into partnership with him in 1877. Rylands son Dan, who made the High Morlaggan bottle went into partnership with Codd on his father's death in 1881 till that arrangement ended in 1884, after that only the name Dan Rylands appeared on the bottles. Rylands patented his 'Reliance' bottle (of which this is an example) in 1885. Dan Rylands went Ltd in 1888 making that year the earliest the High Morlaggan bottle could have been made. Rylands resigned from the company in 1892 and the company name was changed in 1897 as was the name format on the bottles. We can therefore date this bottle to between 1888 and 1897. Another example of 19th century aerated water bottle was recovered from **Cat 082 bag 1** in the form of 'egg' bottles. These had pointed bases so they could not be stored upright and the corks therefore remained wet and swollen maintaining a good seal.

The small glass bead **Cat 121** could be late 18th/early 19th century. Cheap glass beads were available at many markets around the country at that time and seem to have been popular with the rural population. Difficult to be certain but

being made of glass it would probably have some surface denaturing if it was much older. One possibility is that it is a piece of mourning jewellery (**Dr S Kirk, pers comm.**) although that was normally intricately decorated. However given the social status of the site it is not impossible. Looking at its composition (**Table 1**) it appears to have been made using a plant ash for the source of the fluxing alkali, this would account for the 2.5% Potassium Oxide (K_2O) and the presence of c2.8% (Magnesium MgO). The black colour comes from the 5% Manganese MnO . Manganese could be used to colour or decolour depending on the quantity used and the furnace conditions, ie oxidizing or reducing.

Table 1: pXRF analysis of glass bead Cat 121

Sample	MgO	Al_2O_3	SiO_2	P_2O_5	SO_3	Cl	K_2O	CaO	TiO_2	MnO	Fe_2O_3	CoO	NiO	CuO	ZnO	As_2O_3	BaO	PbO	SrO	ZrO_2
Bead 121	2.83	2.18	55.48		0.48	0.29	2.58	9.60	0.25	4.99	0.83		0.01	0.02	0.02	0.01	0.20	0.02	0.06	0.01
Bead 121	2.77	2.27	55.61		0.46	0.31	2.55	9.36	0.24	4.97	0.84		0.02	0.02	0.03	0.01	0.27	0.02	0.06	0.01

As already mentioned in the introduction the opportunity arose to have eight shards of window glass analysed as part of a current research project on the dating of such glass by its composition. The results of these tests appear in **Table 2**

Window glass type description (thicknesses are given for the shards tested although there could be considerable variation within the type).

- A** Firebright pale blue tinge, 1.6mm thick
- B** Firebright pale blue green tinge, 2-2.2mm thick
- C** Firebright similar to type B, 1-1.1mm thick
- D** Slightly dulled pale blue green tinge, 2.2-2.3mm thick
- E** Firebright very pale yellow green tinge, 3.1mm thick (plate?)
- F** Firebright no discernable tinge, 1.4mm thick
- G** Firebright no discernable tinge, 6.2mm thick plate.
- H** Firebright very slight grey green tinge, 2mm thick

Table 2: pXRF analysis of window glass

Note: There are two readings for each sample, one for either face.

Ref	Type	MgO	Al_2O_3	SiO_2	P_2O_5	SO_3	Cl	K_2O	CaO	TiO_2	MnO	Fe_2O_3	As_2O_3	BaO	PbO	SrO	ZrO_2
HM068-1	A	3.90	0.96	56.81	1.43	0.05	0.67	4.55	12.18	0.09		0.52				0.47	
HM068-1	A	4.08	1.03	58.24	1.45	0.06	0.63	4.54	12.11	0.09		0.55				0.47	
HM068-2	B	3.61	1.08	56.54	1.13	0.29	0.53	3.64	10.71	0.09		0.70				0.42	
HM068-2	B	3.85	1.16	57.37	1.14	0.28	0.59	3.74	10.79	0.09		0.68				0.42	
HM095-2	C	3.30	1.40	67.38	0.69	0.71	0.36	2.50	11.65	0.11		0.67			0.01	0.33	
HM095-2	C	3.04	1.36	67.30	0.72	0.63	0.36	2.50	11.57	0.11		0.66			0.01	0.32	
HM020-1	D	3.52	1.37	58.98	1.07	0.26	0.56	3.70	9.98	0.11		0.61				0.38	0.01
HM020-1	D	3.14	1.28	58.25	1.05	0.31	0.53	3.61	9.94	0.11		0.62				0.39	0.01
HM095-1	E	0.42	1.17	64.10		0.78	0.10	0.59	13.60	0.06		0.36	0.50			0.01	
HM095-1	E		1.11	64.63		0.82	0.10	0.57	13.65	0.06		0.35	0.50			0.01	
HM112-1	F		0.77	66.34		0.72	0.49	0.49	15.75	0.05	0.50	0.13				0.03	
HM112-1	F		0.79	67.11		0.78	0.47	0.49	15.87	0.05	0.53	0.13				0.03	
HM112-2	G			58.68		0.91	0.04	0.03	14.72	0.04		0.05	0.04		0.01	0.01	0.01
HM112-2	G			58.97		0.96	0.04	0.04	14.75	0.04		0.05	0.04		0.01	0.01	0.01
HM068-3	H		0.22	65.72		0.58	0.09	0.04	12.92	0.04	0.08	0.17	0.08			0.02	
HM068-3	H		0.14	65.48		0.59	0.09	0.04	12.84	0.04	0.07	0.17	0.08			0.02	

Window glass interpretation.

The window glass from High Morlaggan can be divided into three date periods based on the model devised by English Heritage (**Dungworth 2011**). While this model is based on English research there is no reason why it should differ radically from the Scottish scenario, the glass industries in both countries were influenced by similar sources.

Types A to D are what is known as kelp-fluxed glasses which have used kelp derived from sea-plants as the source of the fluxing alkali. This was used to lower the temperature at which the silica sand would vitrify and remain workable. The chemical signature for kelp-fluxed glass contains significant Magnesium, Phosphorus and Potassium oxides indicating a plant ash source plus a tell-tale marker of Strontium which identifies marine plants. The English findings were that kelp was used as the fluxing alkali there between about 1700 and 1835 but these termini may need adjusted slightly for Scotland as more is learned. However it is unlikely that the kelp-fluxed window glass at High Morlaggan dates to earlier than the second half of the 18th century. Evidence being gathered from similar rural sites is indicating that windows were simply not glazed in typical dwellings before that, in fact it was the early 19th century before it became more common.

In the early 1820s a synthetic soda, sal alkali, was patented for use in soap and glass manufacture and it gradually replaced kelp as the source of alkali. The first generation of synthetic soda glasses had arsenic added to assist in purging gas bubbles from the raw glass. This type of glass was made from around 1835-1870 (**Dungworth ibid**) and type E glass from High Morlaggan has 0.5% Arsenic present. Type E glass is quite thick and has very good optical surfaces and it may be what was called patent plate, a blown glass but ground and polished.

Finally types F to H are synthetic soda glasses of post c1870, arsenic levels are very low to negligible and there is no Magnesium, that was re-introduced around 1930 to assist with problems in the automated production of glass.

Type F is a very clear glass with no visible tinting due to the use of Manganese MnO as a decolourant especially considering the Iron Fe₂O₃ was very low in the first place. It is possible that this glass may have been made for use in furniture.

Type G is a plate glass over 6mm thick which may have had a special purpose, possibly even window glass in a moving vehicle.

Table 3: Distribution of Glass types by Catalogue number (note the count is merely of number of shards, it does not relate to size of shards)

Cat No	A	B	C	D	E	F	G	H
047						8		11
053		1				1		
056						1		1
058						2		
061								1
062	2		1		2	2		8
065		1	2			1		2
068	6				6	2	2	94
069							1?	
070								3
071			2			1		
072	4	1			1	1		9
073						1		
077		2				1		
079			2					1
080			1	1				
081				2				
082				15				2

083	1							1
084						4		
085	1					1		
086		6	4		4	4		1
087		2	12		12	2		
089						21		
091		1				7		1
094		1	3		3			
095			15		15	22		13
098			17		17			
101						3		
102						4		
103						27		
104						2		
107			3		3			
112	5	2	3	2	3	14		126

Ash D 1962 *How to identify English drinking Glasses & Decanters, 1680-1830*, London.

Dungworth D 2011 *Walmer Castle, Deal, Kent, Analysis of Window Glass*, Research Dept Report series no 2-2011, English Heritage.

Henkes H 1994 *Glas zonder glans, glass without gloss*, Rotterdam Papers 9, Rotterdam.

Shelby J 1997 *Introduction to Glass Science and Technology*, Royal Society of Chemistry, Cambridge

Talbot O 1974 *The Evolution of Glass Bottles for Carbonated Drinks*, Post-Medieval Archaeology, Vol 8.

Thompson J 1996 *The Identification of English Pressed Glass, 1842-1908*, Cumbria ?

Van den Bossche 2001 *Antique Glass Bottles, their History and Evolution (1500-1850)*, Suffolk

1874-5 to 1909-10 *Edinburgh Post Office Directories*

Main Catalogue

Cat 062

Moulded glass stopper, aqua

Mid to late 19th century

Cat 063

3 pimple kicks, dark olive, dull green and pale green, mid to later 19th century

Two bases pale aqua, square section, round kick, possibly whisky, late 19th century.

Whisky flask

Storage jar

3 piece mould

Various shards aqua and pale copper blue

Thick walled tumbler clear, slightly solarised, mid to late 19th century

Coffee and chicory

Cat 064

Moulded aqua glass stopper, embossed 'patent' plus indecipherable

Mid to later 19th century

Cat 065

Various dark olive green shards, belling on one, late 18th/early 19th century

Enhanced lip similar

Wine/ale base with belling. Late 18th/early 19th century

Shoulder 3 piece mould

Whisky flask

Whisky flask clear, slightly solarised

Pale copper blue medicine

Drinking glass base clear (stemmed)

Clear, probably early 20th century shards

Cat 066

Lamp glass

Cat 067

Small phial in clear, two piece mould, external screw neck, appears to have been in fire, medicine/perfume

Probably early 20th century

Cat 068

Whisky flask, aqua

Two upright lips

3 pimple kicks in aqua, one embossed 'W.A Gilbey Ld, 24', port bottle?

Flat sided shard embossed '---sterclark & c-' ' Maidstone'

Cobalt blue ink

Dull blue shearlip

Lamp glass rim

Pressed glass

Moulded tumbler base, mid to late 19th century

Cat 069

Lamp glass

Clear bucket bowl from stemmed drinking glass, octagonal ground facet cut (see discussion)

Cat 070

Upright lip, aqua, mid 19th century

Cat 071

19th century bottle shards including one with glass gall.

Cat 072

Whisky flasks x 2

Whisky square section with round kick

Clear shards modern soft drink

External screw jar clear

Wine glass base, stemmed, clear with slight solarisation, ground faceted bowl. (see discussion)

Lamp glass

Pressed glass bowl

Shard clear vessel with two raspberry prunts, slightly iridescent surface, probable import, (see discussion)

Cat 073

Pimple kick dark beer

Pimple kick aqua, embossed 'E.B & Co, 6627'

Whisky flask

Storage jar clear, ground lip, late 19th/early 20th century

Upright lips, one dark olive, one aqua

Amber indented side bottle

Cat 074

Complete indented side rectangular section bottle, two piece mould, added upright lip, pale aqua, some seed, some internal iridescence, embossed 'Bathgate & Burns, Edinburgh' (see discussion)

Cat 075

Complete small medicine bottle, clear, two piece mould with everted lip

Late 19th to early 20th century

Cat 076

Complete globe-stoppered bottle (Codd bottle) in pale aqua, embossed 'J.A. Reid, Chemist, Helensburgh' and carrying Reid's Pure as a lily trademark. This has probably been a soda water bottle and was made by Ryland's of Barnsley, information on whom is also embossed on the bottle: 'Reliance patent 4, Dan Rylands Ld, Barnsley'

Late 19th century

Cat 077 bag 1

Wine/ale bottle base possibly early 19th century

Whisky flask aqua late 19th century

Cat 077 bag 2

Wine/ale bottle slightly belled early 19th possibly late 18th century

Pale aqua 19th century

Cat 078

Pimple kick mid 19th century

Various 19th century shards

Cat 079

Various 19th to early 20th century shards, aqua, clear, pale copper blue, apple green.

3 piece moulded

Possible Kilner jar base

Yorkshire relish

Whisky flask

Coffee essence

Square and oval section bottles

Two late 18th/early 19th century wine/ale bottles

Two shards rich green wine bottle, early 18th possibly late 17th century

Cat 080

19th century shards

Cat 082 bag 1

Mixed bag with probably late 18th to early 19th century wine/beer bottle bases, all dark, some with belling

4 pre mould necks, one aqua

Drinking glass, clear, ground facets, stem has rounded knop.

6 shards pressed glass

Two egg bottles, mid 19th century (see discussion)

Rolled rough plate glass, late 19th century

Various body shards 19th century

Cat 082 bag 2

Neck and lip wine bottle in dark olive, enhanced lip over downturned string ring

Post c1760 but probably still late 18th century

Further shards possibly same bottle

6 amber shards probably 19th century

Cat 083

Cobalt blue ink shear lip

Clear bottle, fruit embossing

Various 19th to possibly early 20th century shards

Symington's

Cat 086 bag 1

Two dark pimple kicks embossed '6 to the gallon', different moulds

Dark plain conical kick

Dark plain conical kick embossed 'S & GS'

Square section coffee and chicory

Various clear jars and bottles late 19th to early 20th century

Cobalt and copper blue

Flashed red/pink

White 'milk' glass handle

Upright lip

Aqua whisky flask

Clear whisky flask

All mid 19th to early 20th century

Drinking glass base, clear, smoothed pontil, 1780 onwards.

Cat 086 bag 2

Reverse kick wine

Lamp glass

Flashed red/pink two shards, one pouring rim, one base (unfinished pontil) (see discussion)

10 shards pressed glass

Ricketts type lip (see discussion)

Pimple kick

Late 18th/early 19th century wine/ale with belling

Shear lip ink

Base for stemmed dish?

Whisky flask

Cat 086 bag 3

4 upright lips, 3 aqua one clear

Whisky flask clear

Drinking glass, round bucket bowl, clear,

Shear lip copper blue
Two inks, aqua
Various bottle shards, aqua and dark olive
Cobalt blue
Two wine/beer bottle bases
5 shards pressed glass
Stemmed bowl
Milk glass handle
Lamp glass shards

Cat 087

Two black beer bottle bases moulded kicks mid 19th century
Shard wine bottle with belling, early 19th century
Various colours 19th century bottles including two piece mould (see discussion)
Part wine glass stem with angular knop (see discussion)

Cat 088

Two upper neck and lip shards wine bottle, triangular string ring, significant splay, probably 1st half 18th century (see discussion)
Further shards with belling possibly also 18th century
Other shards look to be 19th century

Cat 091

Shard Wine bottle with belling, late 18th/early 19th century
3 shear lips mid cobalt blue inks (see discussion)
Shards lamp glass
Shards two bucket bowl drinking glasses (see discussion)
Various shards medicines
Coffee essence
Small size Kilner jar lid embossed 'John Kilner, Wakefield' (see discussion)
Upright lip bottles
Clear strap handle from flashed red/pink vessel (see discussion)

Mostly mid to late 19th century

Cat 091 Bag 2

5 shards press moulded dish, hexagonal with handles (see discussion)
Lamp glass shards
Moulded glass stopper
Early crown closure neck, post 1892, (see discussion)
Shear lip ink
Various bottle shards mid 19th to possibly early 20th century

Cat 092

Part base square section bottle, round kick, clear glass, possible Reg No 239655, embossed anchor

Late 19th century

Cat 094

Whisky flask in greenish aqua

Cat 095

Beer or ale bottle bases
Fluted clear press moulded bowl (see discussion)
Small shards lamp glass?
Pale aqua upright lip.

Mid to late 19th century

Cat 098

Upright lip bottle in brownish olive
Sauce? Bottle in greenish aqua
Clear bottle embossed 'Bonhill'

Late 19th century

Cat 099

4 shards including part base, beer/wine, dark olive, heavy base ring wear, possible slight belling (see discussion)

Early 19th century?

Cat 100

Whisky flask, pale aqua

Late 19th century

Cat 101

Greenish aqua storage jar lid embossed 'Kilner Brothers, Dewsbury and London' (see discussion)
Part lip from second storage jar
Shard from clear Vaseline jar
Two upright lips in dark olive
Base from clear jar/bottle

Mid 19th century

Cat 102

10 shards clear, blow moulded vessel, purpose unknown, very seedy metal.
12 shards amber bottle
Two upright lips. might be 2nd qtr 19th century
Whisky flask
Three piece moulded bottle dark olive

Cat 103

Three-piece moulded bottle mid to late 19th century

Cat 104

Whisky flask, pale aqua
Upright bottle lip

Mid to late 19th century

Cat 105

Pimple kick beer, black glass, 'S90' embossed in kick

Wine bottle kick, small reverse dimple

Copper blue medicine

Olive green body shards

Mid to later 19th century

Cat 106

4 beer or ale bottles, pimple kick, one embossed '6 to the gallon'

Symington's coffee and chicory essence bottle

Small whisky flask

Pale aqua bottle upright lip

Mid to later 19th century

Cat 107

Strap handle from large jug, clear but solarised (see discussion)

Clear moulded dish

Upright lip

Whisky flask

Mid to late 19th century

Cat 108 bag 1

5 pimple kicks, one pale aqua

3 upright lips

Distorted reverse kick from wine bottle.

Multi sided clear bottle part anchor motif in kick, very slightly solarised

Press moulded dish

Part bucket bowl drinking glass and stem with angular knop, wheel engraved foliate design (see discussion)

Cat 108 bag 2

Three pimple kick bases one embossed 'S90', one pale aqua 'C.S & Co 781'

Upright lip with flats section string ring

Cat 108 bag 3

Two bottles, 3-piece moulds, pimple kicks mid 19th century

Square section Coffee and Chicory essence probably Symington's Late 19th/Early 20th century

Cat 108 bag 4

Mainly mid to late 19th century bottle shards various colours

Pale aqua pimple kick

Three upright lips

Symingtons bottle

Medicine embossed ---tocher (Duntocher?)

Cat 108 bag 5

Two complete wine bottles? unusual pale yellowish olive. Blown in two piece moulds with added string ring. Both bottles are slightly tapered and one has flattened base ring with pimple in the kick, diameter 76-82.5mm, very seedy glass with quite large bubbles and the lip is flared out above the string ring.

Bottle shape suggests it may be French.

The second bottle tapers from 73-79.5mm and has a conical kick with small central flat, kick 23.5mm

May also be import

Probably 19th century

Cat 108 bag 6

Two shards wine bottle base in mid rich green, original diameter c140mm, gentle curve through base ring, 53mm pontil, 29mm kick early 18th century at latest possibly late 17th. (see discussion)

Fairly complete T & H Smiths essence of coffee with chicory (Edinburgh and London) late 19th/early 20th century

Very dark olive bottle neck with upright lip 19th century

Cat 109

4 shards, two embossed aqua

Late 19th/early 20th century

Cat 110

Body of small Yorkshire Relish bottle, two piece mould embossed 'Goodall, Backhouse & Co'

Late 19th/early 20th century

Cat 110 bag 1

3 pimple kicks, two dark, one greenish aqua

Reverse pimple wine

Dark conical kick

All look mid 19th century, the aqua pimple kick may have been a spirit bottle

Cat 110 bag 2

Almost complete whisky flask, pale bluish aqua, some large seed, capacity half imperial pint

Mid to late 19th century

Cat 110 bag 4

Whisky flask embossed 'W.T'

Aqua base embossed '1047'

Two shoulder shards three piece moulds

Two upright necks and lips

All mid to later 19th century

Cat 110 bag 5

Two dark pimple kicks, one '6 to the gallon'

Neck and part lip very dark brownish olive, possibly 1st half 19th century

Various 19th century shards

Fairly deep wine bottle kick, pale yellow green some large seed, import?

All 19th century

Cat 110 bag 6

4 dark pimple kicks mid 19th century, one '6 to the gallon'

Pale amber shard

Cat 111

Two piece mould ink in pale copper blue

Possible early 19th century wine bottle

Various 19th century shards

Cat 112

2 small beers

1 wine

square section fruit juice?

pale aqua stopper

moulded tumbler base plus two body shards, slightly solarised (see discussion)

amber wide mouthed bottle

several shards clear white bottle

several shards cobalt blue bottle

3 shards flashed red/pink glass (see discussion)

All look to be 19th century

Cat 113

Whisky flask, late 19th century

10 shards clear bottle, same type as **Cat 118**, post occupation c1950

Cat 114

Probable beer bottle dark olive, mid to later 19th century

Cat 115

3-piece mould, mid to later 19th century

Cat 116

Wine bottle, pale dull olive, pontil kick?, base ring wear

Early 19th possibly late 18th century

Cat 117

Bottle dark olive, 19th century

Cat 118

Complete 'lemonade' bottle in clear, embossed 'Garvie, Milngavie', internal screw thread with ceramic stopper.

Post occupation c1950

Cat 119

Two small shards similar colour and condition to Cat 120. Probably part of same item, original diameter c13mm

Cat 120

Small shard possibly part of bead or marble, slightly greenish blue, moderate to heavy denaturing.

Date ?

Cat 121

Black glass bead, good condition, slightly misshapen rounded cylindrical shape, maximum length 13mm, maximum diameter 13mm, offset hole c2.5mm diameter (see discussion)

Cat 172

Probable lamp glass, pale green tinge, some small seed

Cat ?

Substantial part of milk glass press-moulded jug with short stem. The main body carries a moulding of a vine with grapes. Quite crudely made with prominent mould lines, 3-piece mould with integral handle (see discussion)

Six further shards from same, including four of foot.

17 shards milk glass from one or more other vessels.

5 bottle shards dark olive, one with 3-piece mould shoulder line, mid to later 19th century.

**High Morlaggan
Glass Report
Addenda
Pressed glass**

Pressed glass was believed to have been first made in Britain in the Birmingham area in 1836 but it would be the 1860s before it really took off. It was a result of the desire to mechanise industrial processes and the move away from hand-blown glass did exactly that (Thompson 1996)

The main centres of pressed glass production were in the NE of England, Newcastle and Gateshead and also the Manchester area. Once established the companies producing pressed glass turned out millions of pieces since the mechanisation of the process meant quality products could be made cheaply and within the range of a significant part of the population. The late Victorian and Edwardian era households would typically have at least a small amount of pressed glass.

High Morlaggan was no exception, fragments of eight different pressed glass vessels were recovered, a rough description of these is listed below. Some were found scattered across more than one location and the separate catalogue numbers are also listed.

Many pressed glass items carried registration information in the mould design but unfortunately none of the High Morlaggan shards did. Even a limited search through some design information failed to yield any manufacturer identification. The most likely uses of pressed glass at High Morlaggan would be butter or sugar dishes.

List of vessels (figures in brackets bag numbers)

Small hexagonal bowl with handles, predominantly dot pattern, groups of four small dots interspersed with single larger dots, the rim has a rustic log effect.

082(1) 3 shards, 086(2) 4 shards, 086(3) 4 shards, 091(2) 5 shards,

Round shallow dish with scalloped rim and two horizontal rows of diamond-shaped moulding
072 1 shard, 086(2) 2 shards, 086(3) 1 shard

Shallow round bowl, ribbed outer, very small dot matrix inner.
068 1 shard, 082 1 shard, 086(2) 2 shards, 086(3) 1 shard.

Corner with vertical flutes
082 2 shards

Corner with hatched moulding in base plus vertical flutes
086(2) 1 shard

Rounded foot with vertical ribs
086(2) 1 shard

Shard rim with rope/leaf moulding, very slightly solarised
108(1) 1 shard

Fluted wall shard
095 1 shard