

SA Heritage Register

Nomination form

South Australian HERITAGE COUNCIL

To help your nomination be successful, please fill out this form with as much information as possible.

Feel free to expand the answer fields as much as you require or append information to the form.

Please note that places which have been nominated during past three years will not be reconsidered by the South Australian Heritage Council unless you can provide significant new information not provided through the previous nomination and assessment.

For assistance with this form you may contact:

Your local historical society or heritage adviser may be of assistance OR you may telephone an assessment officer in Heritage South Australia on (08) 8124 4960.

A. Nominated Place

1. Name	
Name of Place / Object:	Bretag/Green Farm Village (Part Monarto Safari Park)
Any other or former name(s):	George Green's "Trial Farm", Hugo Bretag's "Wendura Stud"
Is the place already on another heritage list?	Currently under consideration for listing by the National Trust SA.

2. Location					
Street Address:	63 Monarto Road				
	Suburb / Town: Monarto			Post Code: 5254	
Local Council Name:	The Rural City of Murray Bridge				
Land Description: (if known)	Title:	Volume:	Folio:	Parcel Type:	Parcel No:
	Plan Type:	Plan No:	Section: 253	Hundred: Monarto	
GPS Location/s: (If known)	Longitude / Easting / X 139°09'37"E See GIS map in Attachment 1		Latitude / Northing / Y (Datum =) 35°05'55"S See GIS map in Attachment 1		

3. Ownership	
Name of Owner(s):	
Contact person: (if different from owner explain relationship)	
Postal Address:	Street Address: Suburb / Town: Post Code:
Phone Number:	
Ownership History:	Ngarrindjeri People before 1836, Government of South Australia from 1836, George Green from 1867, James Hutton from 1906, Friedrich August Bretag from 1921, Friedrich Wilhelm Bretag from 1927, Hugo Wilhelm Bretag from 1945, Government of South Australia Monarto Commission from 1973, Royal Zoological Society of South Australia (ZoosSA) from 1983.

4. Nominator (your details)	
Your Name/s:	
Organisation/Position:	

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Daytime Phone:	[REDACTED]		
Fax:	N/A		
Postal Address:	Street Address: [REDACTED]		
	Suburb / Town: [REDACTED]	Post Code:	[REDACTED]
Email Address:	[REDACTED]		

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B. Description

5. Description of nominated place or object	
Description of the nominated place or object and its current condition:	Rural industrial area and farm including: two lime kilns (very good external condition), blacksmith shop (ruins), two bake ovens (one in ruins, one internally sound), surrounding original 19 th Century farm buildings (mostly limestone and lime mortar walls – roofs removed) and house.(part ruins and two- roomed cottage restored to original condition).
Are you aware of any modifications or additions to the place or object? Can you provide dates for these changes?	The two lime kilns were in existence by 1899. They were excavated and partly restored in 2009-2010. The horse stable was converted to a cow shed/dairy in 1947 with the addition of a milk separator room (creamery). The adjacent grain store was converted into a small house in 1950. Decaying lime mortar and falling masonry walls were restored in 2009-2010.
Do you believe there may be historical items under the ground? Should an archaeological investigation be considered?	The area in and around the blacksmith shop/bake ovens could have buried historical items. An archaeological investigation should be considered. There is an unusual double hole surrounded by masonry at the rear of the lime kilns that requires archaeological investigation. This could have contained a gantry for swinging loads of mallee into the kilns.
Date you inspected the place or object:	I lived there from 1943 and visited if many times after it was resumed by the SA Government in 1973. I last visited the site 7/12/2021.
Have you had any contact with the Owner?	On many occasions from 1973 to 2022.
Current use of the place or object:	Unused. Considered a set of ruins.
Original or former use(s):	Lime kilns for burning lime used in masonry construction in the local area and in many of the early buildings in Murray Bridge. Blacksmithing for the local community. Mixed farming. Baking for the family and for the farm and lime kiln workers.
Are there any current or long term threats to the nominated place or object?	Most built structures are in danger of deterioration from weathering. Some that were excavated and renovated in 2009-2010 have been deliberately filled with rubble, others have been neglected to the point where they are in serious danger of collapse.
Name of Builder:	George Green is understood to have been the builder of the 19 th Century buildings. Whether any structures were built by James Hutton who owned the property between 1906 and 1921 is unknown. Members of the Bretag Family have made additions and modifications. It is understood that Bill Bretag and his son Fred extended George Green's small square room into the two-roomed cottage in about 1927. It was fully restored to original condition in 2019-2020. The rear part of one room of the two-roomed cottage dates to George Green's ownership before about 1892. Fred Bretag also built a large, round, masonry, above-ground tank adjacent to the horse stable in 1931.
Any other information:	Please see Attachment 1 and [REDACTED] Story Map: https://storymaps.arcgis.com/stories/965569ce506b4e0498dd70df43e1dc81

C. History

6. Origins and history	
Years of Construction:	Start: 1867 Finish: Restoration 2020
Name of Designer / Architect:	George Green (1867–1905), James Hutton? (1906-1921), Bill Bretag (1927-1944), Fred Bretag (1927-1935), Hugo Bretag (1947-1973)

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History of the nominated place or object:	<p>For a general history and description of the entire site please visit the following URL which links to a StoryMap by [REDACTED], entitled "The Bretag/Green Farm Village: At Monarto Safari Park", August 11 2020:</p> <p>https://storymaps.arcgis.com/stories/965569ce506b4e0498dd70df43e1dc81</p> <p>Please also see an "Assessment of George Green's Trial Farm" according to the criteria set out in Historical Themes for South Australia (final December 2022), in Attachment 1.</p>
Historical sources used to support your nomination: Please attach copies of pages from publications or newspaper articles as appropriate.	<ol style="list-style-type: none">1. Lands Titles Office documents showing land ownership.2. George Green's Farm For Sale Notice: The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser (SA : 1880 - 1954) Fri 14 Apr, 1899, Page 2, Advertising.3. Numerous other references as listed in Attachment 1 and its Appendices.

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D. Heritage Significance

<p>7. Statement of State Significance - Why is the place or object important to South Australia?</p> <p>It is of State heritage significance because George Green's Lime Kilns are a rare and well-preserved example of their type. The whole site including the blacksmith shop exemplifies an early attempt at "industrialisation" to supplement income from a poorly productive farming property (see Attachment 1 for further details).</p>
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<p>8. Significance Criteria</p> <p>The South Australian <i>Heritage Places Act 1993</i> lists seven criteria by which places are assessed as 'State significant.' Please tick the criteria you feel the place demonstrates and explain your reasons.</p>	
<p>✓ It demonstrates important aspects of the evolution or pattern of the State's history.</p>	<p>Many areas of the state had poor quality soil with shallow limestone kunkar, were covered in mallee scrub had low rainfall and were unsuited to broadacre farming. George Green showed considerable ingenuity and innovation in overcoming these obstacles (see Attachment 1 for further details).</p>
<p>✓ It has rare, uncommon or endangered qualities that are of cultural significance.</p>	<p>George Green's Lime Kilns are not simple lime pits but show considerable skill in their underfloor ventilation system, and their construction using a double layer lining of fire bricks (see Attachment 1 and StoryMap for further details). This structure is rare, if not unique, in South Australia. The kilns are endangered by neglect allowing them to be filled with wind-blown detritus and decaying lime mortar in their walls.</p>
<p>✓ It may yield information that will contribute to an understanding of the State's history, including its natural history.</p>	<p>The entire site, especially near the lime kilns and surrounding the blacksmith shop/bake oven building are worthy of detailed archaeological investigation. A cursory archaeological investigation of the property has already been undertaken (see Attachment 1). Within living memory, the blacksmith shop was fully equipped with a wide variety of woodworking and metal working tools remnants of which could be buried under crumbling walls and in the floor. A fragment of an occupational health and safety statement relating to working hours at the blacksmith shop presumed to have been written by George Green has been preserved (see Attachment 1). The bee-hive oven is also unusual and could be unique in South Australia for its time (see Attachment 1). It was used within living memory with the method of temperature measurement being remembered.</p>
<p>✓ It is an outstanding representative of a particular class of places of cultural significance.</p>	<p>George Green's "Trial Farm" with its blacksmith shop, understood to have been capable of building buggies, along with its lime kilns, that provided lime for the surrounding district and for the early buildings of Murray Bridge were certainly of local cultural significance and outstanding and unusual examples of their kind (see Attachment 1).</p>
<p>✓ It demonstrates a high degree of creative, aesthetic or technical accomplishment or is an outstanding representative of</p>	<p>As above, George Green's lime kilns demonstrate a high degree of technical accomplishment in their construction. The four (now lost) iron doors at the front of the kilns, that could be locked closed, each contained adjustable openings that allowed air into the under-floor ventilation system.</p>

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particular construction techniques or design characteristics.	As well, the whole structure is constructed in a design that is aesthetically much more pleasing than other lime kilns that are currently State Heritage listed.
✓ It has strong cultural or spiritual associations for the community or a group within it.	There is oral history to indicate that the site has cultural and possibly spiritual significance to Ngarrindjeri and Peramangk People. Oral history has reported an Aboriginal track from Pomeruk on the Murray River to Mount Barker through the site. The track has been described as running immediately past the southern side of the horse stable from where an excellent panorama of the Mount Barker can be seen across the intervening country (see Attachment 1).
✓ It has a special association with the life or work of a person or organisation or an event of historical importance.	Please see the brief biography of George Green contained as Appendix X within Attachment 1. George Green was a significant citizen of Monarto. The lime kilns, bake ovens and blacksmith shop make an excellent historical record of his achievements.

E. Additional Information

9. Images/Maps/Diagrams/Site Plans

A full range of images including maps, site plans, and photographs will help your nomination.

Please provide:

- a clear outline of the place or object being nominated within any maps or plans provided
- high quality images of the place or object (please list the total number of images being provided)
- the subject of each image
- the date each image was created
- the author of each image, and
- the copyright holder of each image (if known)

Paste images here:

Please see images within Attachment 1 and the StoryMap.

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The South Australian Heritage Council is committed to transparency in relation to the listing process and wishes to enhance public confidence in the nomination, listing and decision-making process. The Council's policy is to make nominations for State heritage listing and submissions on provisional entries publicly available via webpage or to interested parties. The Council will adhere to the Privacy Principles and your name and personal details will not be released.

I/we, [REDACTED] nominate George Green's "Trial Farm" (The Bretag/Green Farm Village) to be heritage listed.

The information I/we have provided is correct to my/our knowledge.

Your Signature/s:

Date: 3rd February 2023

Nomination Form Checklist

Please check that your nomination includes:

- ✓ A clear indication of the location of the place or object (including map/s). Where a number of features are nominated, show the location of each and/or a boundary surrounding the significant elements of the site.
- ✓ A history of the place or object explaining important aspects relevant to the nomination.
This should generally help support arguments of cultural significance.
- ✓ A clear description of the nominated place or object/s.
- ✓ A statement of significance and indication on how the place or object satisfies one or more of the significance criteria.
- ✓ Have you taken the opportunity to discuss the nomination with a heritage assessment officer? It is strongly advised you to do so prior to submitting this nomination.

Email: DEWHeritage@sa.gov.au

Post: Executive Officer, South Australian Heritage Council
Department for Environment and Water
GPO Box 1047, Adelaide SA 5001

ATTACHMENT 1. THE PLACE FOR HERITAGE NOMINATION

NAME: Former George Green's "Trial Farm", the Bretag/Green Farm Village

ADDRESS: Ngarrindjeri Country (see Appendix 1)

South Australia, Hundred of Monarto, Section No. 253

Monarto Safari Park

Entrance at 63 Monarto Road, Monarto

This assessment of the property suggests that the place could meet criteria outlined in Sections 2, 3, 4 and 5 of Historic Themes for South Australia (final December 2022)¹. Relevant themes and sub-themes are outlined further below.

ASSESSMENT OF THE HERITAGE SIGNIFICANCE OF THE PLACE

Statement of Heritage Significance

George Green's former "Trial Farm" is a rare surviving example of a 19th Century rural industrial complex. George Green built his house (Fig. 1, image below, dated in Appendix 2) at the black arrow on Section No. 253 in the Hundred of Monarto, as shown in the GIS Polygon (Fig. 2, overlain on Google Earth view) and on the map² (Fig .3. further below). An Aboriginal track is understood to have passed through the property (see Appendix 1)



Fig. 1. George Green's house (at left), blacksmith's shop (at right) and farm buildings in the background (image taken about 1892)



Fig. 2.

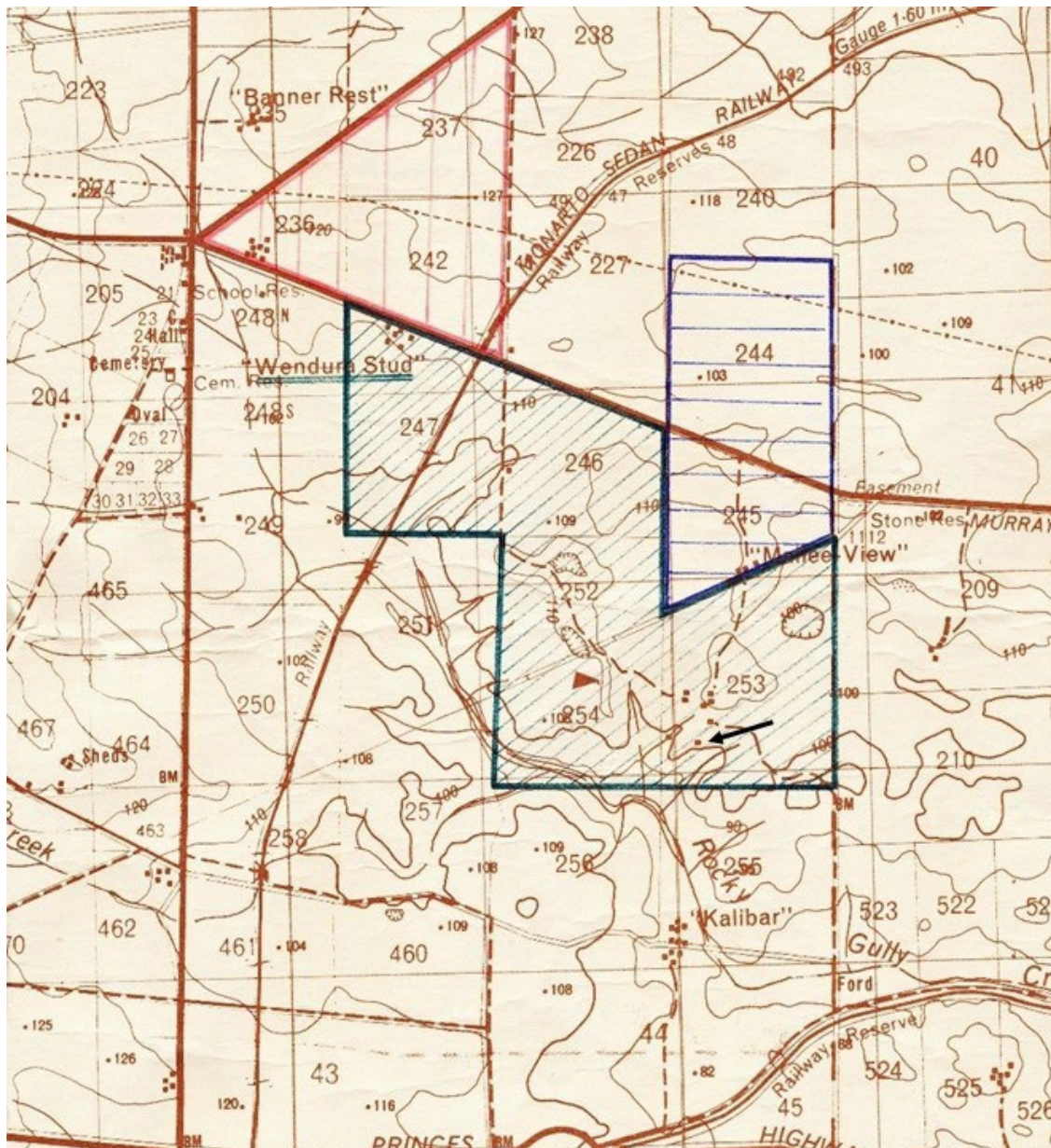


Fig. 3. Bretag Family properties outlined in red, green and blue. George Green originally took up Section No. 253.

George Green's farm eventually encompassed also Section Nos 245, 252, and 254 as well as Section No. 210 in the Hundred of Mobilong immediately to the east³. He built his blacksmith's shop, limekilns, and farm buildings to the north, east and northeast of his house. Several tanks were dug and erected and at least two wells were dug on Section 253.

Building and agricultural industries were significant to the industrial, economic and social development of South Australia in the nineteenth century and both lime-burning and blacksmithing played crucial roles in the state's economic viability.

George Green's Lime Kilns

Nineteenth century lime burning in South Australia typically employed the burning of layers of mallee wood with intervening layers of limestone (usually calccrete kunkar collected from farmland after clearing mallee and ploughing). Often lime burning was simply carried out in

a pit, or, requiring some building, in a dugout in the side of a hill paved and lined with brick⁴. George Green's two lime kilns (Fig. 4), however, were relatively sophisticated, with solid walls to the front and sides and an opening at the rear to allow loading of the mallee logs or roots and limestone. Arched doorways in the front wall (Figs 5 and 6) were originally closed by iron doors with adjustable vents to control the entry of air and hence the rate and temperature of firing via underfloor ventilation.



Fig. 4. George Green's two double-doored lime kilns built approx. 1880s (image July 2020)

Access to the burnt lime and residual ash were then gained by opening the iron doors and using long handled iron scrapers (presumed to have been forged by George Green in his blacksmith shop⁵) to remove the individual layers of lime and ash. The whole structure was lined with a double layer of J. S. Watts white clay firebricks (Appendix 3) which also comprised the underfloor ventilation compartment and the floor. Many of the firebricks from the kiln on the right have since been scavenged to be used in later farm buildings (see interior view of scavenged righthand kiln, Fig. 5, below). A mortar lined large, figure-of-eight hole at the rear of the lefthand kiln possibly originally contained the upright post and reinforcement of a gantry (Fig. 7) for lifting and loading mallee logs into the kiln. Limestone calcrete (kunkar) was probably poured into each kiln from a tip-dray.

George Green's lime kilns from, perhaps the 1880s (see explanation, Appendices 2 and 3), comprise the best-preserved and most aesthetically pleasing example of rare, late nineteenth century lime kilns in South Australia.



Fig 5. Interior view of George Green's rightmost lime kiln showing detail of floor and underfloor ventilation (June 2010)



Fig. 6. Door-opening and ventilated floor at the front of the kiln



Fig. 7. Figure-of-eight masonry-lined large round post hole (and adjacent reinforcement?) for gantry? behind lime kilns

The South Australian State Heritage listed lime kiln ruins for comparison:

Few other South Australian limekilns from the 19th Century and early 20th Century are known and most are totally derelict or in an advanced state of decay compared to the two of George Green, which have their outer fabric largely intact. Only the inner double layer of white clay firebricks has been scavenged from one of the kilns to use in more recent building work on the farm, e.g., in the two-roomed cottage from about 1927 and the new milk-separator room (creamery) at the horse stables when they were converted to be the farm's cow-milking shed. The second kiln retains most of its double lining of fire bricks, coated with slag from the intense heat of the lime burning process. After being thoroughly excavated, cleaned and having had some external masonry restoration in 2010, both kilns are currently suffering from the accumulation of wind-blown debris, weed growth and fretting of mortar. They require attention to prevent the kind of dereliction seen in the three early lime kilns elsewhere in South Australia that have been State Heritage listed⁶ (see following images, Figs 8, 9 and 10).



Fig. 8. State Heritage listed lime kiln ruins at Bower built approx. 1920s (image March 2022)



Fig. 9. State Heritage listed lime kiln ruins at Stansbury built 1897 (image February 2013)



Fig 10. State Heritage listed Woodside lime kiln ruins built 1871 (still image from a 3D YouTube video of 2015 at: https://www.youtube.com/watch?v=n_eqaKym_II)

A more modern structure can be seen above and at the rear of the lime kiln.

George Green's Blacksmith Shop and Bakery (Figs 11 - 14)

George Green's blacksmith shop was also unique, including not only the usual bellows, forge, large iron vice and anvil but also a large wooden bench set up for woodworking and two white clay firebrick-lined bake ovens. Oral history indicates that the blacksmith shop had all the necessary tools and equipment necessary to build a buggy⁷ including its iron-rimmed wooden-spoked wheels as well as to undertake the typical blacksmithing work of shoeing horses and manufacturing or repairing items of farm machinery and those necessary for lime burning. As well, unusually, the building housed an arched bread baking oven capable of baking a dozen high-topped loaves of bread at the one time⁸ and a beehive oven for cake and biscuit baking. It is believed that the beehive oven is also most unusual for the time (probably pre-1890). No other examples of beehive ovens are known from South Australia before the advent of pizza baking in the latter part of the 20th Century. All South Australian State Heritage listed bake ovens⁶ are corbel-arched, tunnel-shaped or undescribed.

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Fig. 11 Blacksmith Shop/Bakery complex, black above-forge vent at left of chimney



Fig. 12. Blacksmith Shop ruins - interior: forge at left and then entrances to small beehive oven (with the iron lintel) along corridor wall and to the fireplace (with the wooden lintel) for the large bread baking oven further towards the end of the corridor



Fig 13. The entrance to the large bread-baking oven (interior now collapsed, image August 2020)



Fig 14. The ceiling of the beehive oven (image July 2019)

George Green's Trial Farm demonstrates the following themes and subthemes as listed in Historic Themes for South Australia (final December 2022)¹:

2. Peopling Places and Landscapes

2.3 Adapting to diverse environments

Irrigation schemes and water management sites such as tanks, wells, pumping stations, aqueducts, weirs and drainage schemes; land clearance, managing drought, subterranean housing such as at Burra and Coober Pedy¹

Large Mallee trees, *Eucalyptus odorata* and *Eucalyptus porosa*, seen in the photographs near the tanks, as well as Native Cypress Pines, *Callitris preissii* (aka *Cupressus gracilis*), especially on the sandier soil, were also common covering most of the property. These were cleared for crop growing and grazing with the timber utilised in lime burning and for fires in baking and blacksmithing. Much of George Green's land was unsuitable for ploughing and cropping due to shallow reefs of limestone calcrete (kunkar) which forced him to adapt his "Trial Farm" to include the sidelines of blacksmithing and lime burning using the cleared timber and ploughed-up kunkar. With only about 300mm of rain per year, water conservation was also paramount leading him to dig an underground tank and two wells. The underground tank, at the horse stables (Fig. 16), never held water due to a large crack. An apocryphal story from one of the Green descendants claimed that this was due to lightning striking the tank via an iron downpipe from the adjacent grain store roof⁷. It was probably due to earth subsidence or an absence of metal reinforcement in its walls.

[Bill Bretag later sank two bores near the Lime Kilns, one of which struck water that was assayed as brackish, contaminated with arsenic and non-potable for humans or stock]



Fig. 16. George Green's unsuccessful square underground tank (filled in) between the horse stables and the grain store

3. *Governing South Australia*

3.3 *Establishing and implementing federal, state and local governments*

*Parliamentary buildings, council chambers, town halls and civic buildings*¹

George Green was a prominent member of the Monarto community from 1867 until his death in 1905 (see Appendix 4). He was a Member of the Monarto District Council from its inception in 1882. He was its Chairman from 1885 until 1889 and continued at a Council Member until 1891. In January 1889 he was appointed Chairman of the Local Board of Health. He was newly appointed as a J.P. for Monarto in 1891, one of two J.P.s in the Monarto area.

As a burner of lime from around that time, he possibly also contributed the lime for the construction of the Council Chamber (Fig. 17) which was completed in 1885.

George Green was a Trustee of the Monarto Methodist Church (built in 1871) and may have been one of its founding members.



Fig 17. Monarto Council Chamber built 1885 (image courtesy of the Monarto Development Commission, about 1974)

4. *Building Settlements, Towns and Cities*

4.4 *Making regional centres*

Development of towns into regional centres through growth of primary industries, industrialisation, and remaking communities post-industrialisation¹

It has been written and is well known from oral history that George Green contributed to the development of Murray Bridge and the Monarto district through the industrialisation of his lime burning and his provision of lime for buildings. His involvement in local government, blacksmithing and farming also contributed to development of the Monarto area.

4.8 *Making homes for South Australians¹*

Houses including model and display homes, quarries, brickworks, timber plantations and factories and workshops for developing houses, fixtures and fittings. Homes ranging from grand mansions to tiny cottages, including row houses and apartments and places representing notable periods of house design.

George Green built the second part of his house in thatched “Isle of Skye” crofter’s cottage style (the first part had been wattle and daub). This was an uncommon design for South



Fig. 18. George Green's Isle-of-Skye Crofter's-Style Thatched Cottage (section of at image Fig. 1, approx. 1892)



Fig. 19. Ruin of the Crofter's Cottage (image 1973)

Australia (Figs 18, 19, 20). The tapering walls of the Crofter's Cottage walls were constructed of limestone kunkar using mud mortar, then plastered with lime mortar and whitewashed (compare Isle of Skye internet images, Fig. 20, below). Prior to the approx. 1892 photograph of the Greens at their house (Fig 1), George Green constructed an additional small square room (Fig 21, below) with attached half-cellar on the south side that can be seen at the left behind the horse and rider in that image. The construction was now quite sophisticated, using kunkar and lime mortar with quarried fossil-containing freestone from the neighbouring hill to the south that was attractively chiselled and squared for the corner stones. Bretag Family oral history indicated that the freestone was soft enough to saw with a hand saw when freshly quarried but hardened on exposure to the atmosphere. This room was eventually enlarged to the south after filling in the half-cellar and was incorporated into Bill Bretag's two-roomed cottage (restored in 2019-2020).



Fig. 20. Isle of Skye Crofter's Cottages (internet images)



Fig. 21. George Green's Small Square Room with attached Half-Cellar – Half-Cellar entrance door and sloping roof at far left (section of image at Fig 1)

5. Developing South Australia's economies

5.3 Developing primary production (pastoralism, agriculture, bio-security)

*Pastoral station complexes and associated infrastructure; farms including agricultural buildings; mills, distilleries, agricultural schools, institutions and research centres, agricultural and horticultural show grounds*¹

Farm buildings dating back to George Green's ownership of the farm can be seen in the images below (Figs 22, 23 and 24)



Fig. 22. Straw-roofed shed with forked-mallee uprights and broom-bush walls behind horse and dray with straw (image approx. 1932)



Fig. 23. Horse Stable and Grain Store Complex with Fred Bretag's Round Masonry Tank in the foreground (image 1973)



Fig. 25. Straw-roofed shed with Mallee-root walls from far right of the George Green homestead (photograph of approx. 1892)

5.8 Developing manufacturing, engineering and construction and service industries

Types of places represented under this theme include: Factories, workshops, industrial buildings and sites, quarries, manufacturers¹

With two lime kilns (Fig. 26) constructed and used beginning in the mid-1880s, George Green was expanding the burning of lime from that for his own personal use to industrial scale production for the surrounding Monarto district and for Edwards' Crossing (since known as Murray Bridge) which was rapidly expanding in population. The town was becoming a river and rail transport hub after construction of the bridge across the Murray completed in 1879 and rail connection between Adelaide and Melbourne in 1886, linking with paddle steamer navigation up and down the Murray and Darling Rivers.



Fig. 26. George Green's Lime Kilns, 2020

5.9 Supporting workers and workplaces

Places demonstrating the experiences of workers, including: diverse working conditions, union buildings and worker's federations, work health and safety, paid and unpaid work, volunteering, childcare/caring for dependents, and working in a white-dominated economy¹

George Green seems to have been the author of the requirements for his own occupational health and well-being as a blacksmith from a fragment of surviving document (Figs 27 and 28) that may well have been tacked up at the window to his blacksmith shop where it could be seen by customers. This document, written on cardboard, was found by the current members of the Bretag Family at the Crofter's cottage in the late 1950s. It had been used as backing for the framed 1901 confirmation certificate of Caroline Louise Schmaal, wife of Friedrich Wilhelm (Bill) Bretag, who lived in that house with their children from 1927.

The document is attributed to George Green because he was known to have established the blacksmith shop⁷ at the property by 1892 (the approximate date of the photograph shown in Figs 1, 11 and 12). Subsequent owners, James Hutton and Bill Bretag are known not to have been blacksmiths.

unavoidable, where the goods are
 in risk for loss and rec'd by
 the smith, which will be
 if required, up to end of the year, price
 on Cash 5% Discount, if paid
 within 3 Month
 All Goods in the shop
 must be paid Cash within 3 months from
 date of delivery, or 5% discount will be given

Account Booked accounts must be paid at the
 end of Year, if not called for

Business hours
 For my own protection, of health
 well being I am bound to give notice
 that in future no more Black work
 will be done here, before Sun rise, and
 after Sun set, unless double pay is a
 to, and also from 12. to 1. o'clock noon
 Blacksmith Shop will be closed
 and on Saturdays will close at 4 o'clock
 in the afternoon in future, everyone who
 has an interest in this Business to be kept in mind
 to be

Some Prices

Fig. 27. George Green's Blacksmith Shop Rules, Regulations and Occupational Health and Safety statement (date unknown)

.....
 . are unavoidable where.....
 ... (o)wn risk for loss and breakage
 {Blacksmith, works will be
 {if required, up to end of (Year ofing??) price
 {on Cash 5% Discount (will be allowed,) if p(aid)
 {within 3 Month
 {All Goods in the B.....and..... (your list)
 {must be paid Cash within 4 weeks from
 {date of delivery, (or 5, will be)

Account

Booked..... (as) from
 end of Year, if not collect.....

Buisness hours

Fore my own protection, of health (and)
 well being, I am bound to give notice
 that in futhure no more Blacksmithing
 will be done here, before Sun rise, and
 after Sun set, unless double pay is a(greed)
 to, and also from 12. to 1. o. clock noon (the)
 blacksmith Shop will be closed d(ayly)
 and on Saturdays will close at 4. o. c(lock)
 in the afternoon in furture, everyone who (has)
 an interest in this Buisness to be kept...in (th)is re(gard)
 to No.....Regulations.....

Some Prices for

En..t..t..s (we)ldings

5.10 Developing creative Industries

Comparability / Rarity / Representation¹

George Green's "Trial Farm" Rural Industrial Complex in the Bretag/Green Farm Village is probably unique. It is the only known place in South Australia where industrial-scale lime burning and community blacksmithing were carried out side-by-side along with subsistence farming on poor land with a low annual rainfall.

Ancillary buildings and areas included horse stables, chaff house, harness room, hay yard, grain store, water tanks, crane site?, farm sheds, bake ovens, houses, etc.

The full extent and layout of underground structures is unknown and represents "a considerable task" to investigate archaeologically (see Appendix 5 which contains a superficial and largely incorrect archaeological survey of the site by Flinders University academics from 2001).

On the southern boundary of Section 253 there is a dry stone wall constructed of limestone kunkar from both the surface of the land and from shallow quarries that are still evident in places. Some of the stones must weigh several tons. The wall still extends for some 450m in relatively intact condition to the eastern boundary of Section 253. It is thought to have extended along the entire southern boundary of the Section but much of it was removed after deterioration, the stone sent to Guerin's Lime Burners in Murray Bridge, and was replaced by a wire fence within living memory [REDACTED]. Who constructed the wall and when is unknown.

22



Fig. 29, Views of the Great Stone Wall along the southern boundary of Section 253.

References and Comments:

1. SA Department of Environment and Water. 2022. Historic Themes for South Australia (final December 2022)

2. Monarto Commission. 1973. Part Map of the Area for the Proposed City of Monarto.
3. Advertising, Important Sale of Valuable Farming and Grazing Land. 1899. The Mount Barker Courier and Gumeracha Advertiser, Friday 14 April, Page 2
4. https://www.geocaching.com/geocache/GC1ZPJ7_lime-kiln?guid=d2a8791d-fe49-458e-b9b6-5526b0c2d2fc (viewed 15-01-2023)
5. These hand-forged tools were still present at the lime kilns and in farm sheds in the 1950s – last used to remove burnt lime and ash from the kiln in about 1950.
6. <https://cdn.environment.sa.gov.au/environment/docs/state-heritage-places-list.pdf> (viewed 16-01-2023)
7. Oral History passed to Bretag Family members by Green Family descendants in about 1950.
8. Oral History passed [REDACTED] by Caroline Bretag in the 1950s
9. SA Births Deaths and Marriages Records
10. SA Lands Titles Office Records
11. [REDACTED]. 2020. The Bretag/Green Farm Village: At Monarto Safari Park
<https://storymaps.arcgis.com/stories/965569ce506b4e0498dd70df43e1dc81> (viewed 16-01-2023)

Notes:

Yellow highlighting indicates components of Historic Themes (and subthemes) for South Australia that are addressed in this assessment.

All images, except for that of the farmstead/blacksmith shop area from about 1892 (Fig. 1, photographer unknown), the GIS map (Fig. 2, modified from Google Earth), map showing Bretag and Green land holdings (Fig. 3, modified from a 1973-1974 Monarto Commission Map), the Bower Lime Kiln in 2022 (Fig. 8, courtesy of Philip Jones), the Stansbury Lime Kiln in 2013 (Fig. 9, from a blog by Stephen L, “Four Great Days on the Yorke Peninsula”):

https://www.exploroz.com/Members/58567.500/2/2013/Four_Great_Days_on_the_Yorke_Peninsula.aspx

the Woodside Lime Kiln 2010 (Fig. 10, a still from a YouTube video by “Customspatial”):

https://www.youtube.com/watch?v=n_eqaKym_II

the Monarto Council Chamber (Fig. 17, Monarto Development Commission about 1974), the Isle of Skye houses (Fig. 20, from the internet). and the Dray Loaded with Straw in front of a Straw-Roofed Farm Shed about 1932 (Fig. 22, unknown photographer, original provided by Audrey Thompson, daughter of Frank Chamberlain the farm worker on the dray), are from photographs taken by [REDACTED].

APPENDICES:

Appendix 1. Ngarrindjeri¹ Country: Notes [REDACTED] 2023

Queen Monart² (Monarte, Monarta, Monarto) was a Peramangk³ woman and wife of John Mason Snr.³ (King John⁴).

Ngarrindjeri: An extensive article on the Ngarrindjeri People can be found in Wikipedia¹.

In early colonial times, the country of the Ngarrindjeri People extended from about Murray Bridge southwest to the Fleurieu Peninsula, south to the lakes at the Murray Mouth and southeast along the Coorong to Cape Jaffa. Whether Monarto Safari Park actually falls within what was originally Ngarrindjeri Country is uncertain as it lies on the border of Peramangk Country over which King John and Queen Monarto had rights³. Certainly, the Ngarrindjeri People claim “Monarto (also known as Queen Monarta) and her husband ‘King’ John”, as apical ancestors (National Native Title Tribunal 2017⁴).

Queen Monart:

Although there are some recent magazine articles^{5,6} about “Queen Monarto”, nothing extensive or scholarly appears to have been written and almost everything known about her is based on newspaper reports written during her lifetime and memories of her that were recorded, often many years later.

It has been suggested in many modern accounts that the Hundred of Monarto (proclaimed in 1847) was named after an aboriginal woman, the wife of “King John”, who was known as “Queen Monarto”⁷, although this has not, apparently, been officially recorded. The first historical mention of a Queen “Monart” is in several newspaper articles describing her presence at the laying of the foundation stone for the bridge across the River Murray at Edwards’ Crossing (subsequently named Murray Bridge) in 1873, e.g., in the Adelaide Advertiser⁸. From then onward, her name, Monart (Monarte, Monarta, Monarto), occurs in many newspaper reports and articles, e.g., in an anonymous account by a “Correspondent” in 1885⁹, in an anonymous piece in 1888¹⁰, in a quotation from Friedrich Wilhelm Jaensch in 1911¹¹, in articles by Thomas Paine Bellchambers^{12, 13}, and in historical accounts, e.g., by Charles C. Jaensch in 1968¹⁴. She is reported to have been an excellent swimmer and diver, saving the lives of people who had fallen from boats on the river and retrieving drowned children^{10,11}. Queen Monart is reported as having no surviving children⁵ but an adopted son, Munchaool¹⁴. The date of Monart’s death is unknown but it has been suggested that it was in about 1900. It has been reported that she died in a wurlie on the left bank of the Murray at Mannum and that she was buried in the Aboriginal burial ground near “the old racecourse” at Mannum¹². Queen Monart’s successor is reported to have been a “Mrs Carpenny” (perhaps actually Karpany) who had a son named George¹⁵. Another account has Louisa Karpany as a close friend of Monart and dying in 1922¹⁶.

Peramangk: An extensive article on the Peramangk People can be found in Wikipedia²:

At the time of the Proclamation of the Colony of South Australia in 1836, the Peramangk People occupied country, roughly from around the present Echunga and Mount Barker in the

Adelaide Hills north to Angaston in the Barossa Valley, east from there to the River Murray and then south to Murray Bridge.

John Mason Snr. (King John):

King John is seldom mentioned in historical accounts of the time⁵, but his prior existence was inferred by Queen Monart, herself, in her interaction with Governor Musgrave at the laying of the foundation stone of the Murray bridge when she said in part of her speech, “my ole man dead....”⁸. Later, in his *Early Recollections*, John Bull writes of visits by King John and Queen Monarto to his property in the Adelaide Hills². Also, Mr. Charles C. Jaensch in an interview recorded in the book, *Across the Mighty Murray*, states that King John “was buried somewhere near Webb’s old place in a small hollow”¹⁵, which was just to the northwest of the present Sturt Reserve. It has been reported that John Mason Snr. (King John) and subsequently Queen Monart had rights to the country from Mount Barker east to Wall and Mypolonga on the Murray, encompassing the Monarto and Rockleigh districts³. The name “John Mason Snr.” implies that there was also a John Mason Jnr. Since Queen Monart apparently had no surviving children⁵, John Mason Jnr. may have been a son by a wife other than Monart or an adopted son.

The Aboriginal Track from Pomberuk (at Murray Bridge) to Mount Barker through what is now the Monarto Safari Park:

In the early 1950s, the old German landowner, Mr G. J. (Johnny) Hartmann and his son-in-law Mr. Hugo Luestner in Monarto spoke of “Queen Monartuh” (possibly the German pronunciation) and that “the blacks” had camped “down the creek” in the past¹⁸. Johnny Hartmann’s property was located on the Rocky Gully Creek that wound east to the Murray River just north of the Murray Bridge town centre at a site that the local Aborigines called “Pomberuk”.



Fig. A1.1 Signage at Pomberuk (Hume Reserve at Murray Bridge)



Fig. A1.2 Photograph of an Aboriginal group at their camp at Pomberuk (image courtesy of the State Library of South Australia, date unknown). It has been suggested, without evidence, that Queen Monart could be present in the photograph.

At about the same time during a visit to the Bretag Family by Green Family descendants the Greens mentioned that the Aboriginal track from Murray Bridge to Mount Barker passed immediately to the south of the horse stables¹⁸. This seemed to fit with an existing track from the east of Monarto Section 253 to the hill on which the Bretag/Green horse stables were built from where an excellent panorama with a very prominent view of Mount Barker could be seen to the west. An origin at Pomberuk following the Rocky Gully Creek to the Rocky Gully Gorge at Kinchina and then bearing just north of due west would bring the track to the horse stable. From there it continued downhill to the next ridge and then along ridges and eventually across the Rocky Gully Creek catchment, over the Bremer Range and so on to Mount Barker. Much of the first portion of this original track was still being used by the Bretag Family and the neighbouring Thomson Family up until the land was resumed by the SA Government in 1973.

References and Comments:

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<https://en.wikipedia.org/wiki/Ngarrindjeri> (viewed 15-01-2023)
2. Bull, John Wrathall. 1884. Early experiences of life in South Australia and an extended colonial history, Second Ed. E. S. Wigg and Son, Adelaide.
3. Peramangk.
<https://en.wikipedia.org/wiki/Peramangk> (viewed 15-01-2023)
4. National Native Title Tribunal

<https://data.environment.sa.gov.au/Content/Publications/Native%20Title%20Extract%20Ngarrindjeri%20and%20Others%20Part%20A.pdf>

5. Schmaal, Jean. 1975. Monarto. Police Journal. August issue, pgs 18,19.
6. Anderson, Max. 2013. The Queen of Murray Bridge. Adelaide Hills Magazine, Spring issue, pgs 164, 165.
7. Anonymous. 1908. Nomenclature of South Australia: Names and their Origin. Evening Journal, June 29, pg 2.
<https://trove.nla.gov.au/newspaper/article/208634650> (viewed 17-01-2023)
8. Anonymous. Laying the Foundation Stone of the Murray Bridge. The South Australian Advertiser, 10 November 1873, pgs 2, 3.
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<https://trove.nla.gov.au/newspaper/article/148109246>
10. Anonymous. Sports at Mannum. 1888. South Australian Weekly Chronicle, 7 January, pg 9.
<https://trove.nla.gov.au/newspaper/article/94727103>
11. Correspondent. 1911. The River Blacks: A Dying Race. The Register, 3 May, pg 9.
<https://trove.nla.gov.au/newspaper/article/59027224>
12. T. P. Bellchambers. 2017. Queen Monarto: The White man's Burden. The Register, 20 November, pg 7.
<https://trove.nla.gov.au/newspaper/article/58864781>
13. T. P. Bellchambers. 2018. Pantonie and Others. The Journal, 2 February, pg 5.
<https://trove.nla.gov.au/newspaper/article/202931776> (viewed 18-01-2023)
14. Anonymous. 1933. Collision of Murray Steamers. Chronicle 22 June, pg 15.
<https://trove.nla.gov.au/newspaper/article/90890715>
15. "The Jaensch Family – Recollections of Charles C. Jaensch 1968", in, Across the Mighty Murray, Murray Bridge and District Historical Society, 1988, pgs 221-223.
16. Anonymous. 1911. Murray Memories. The Register, 10 April, pg 4.
<https://trove.nla.gov.au/newspaper/article/59097813>
17. Murray Bridge and District Historical Society. 1988. Across the Mighty Murray, pg 12.
18. Oral Bretag Family History.

Appendix 2. Dating of the Photograph with George and Jemima Green

Neither of George and Jemima Green's two daughters are present in the photo. Of these, Jane aged 17 was married in 1874¹ and Jemima aged 28 was married in 1883¹ at which times they most probably left the Green's home to live with their husbands.

It is apparent that the blacksmith's shop has its big square chimney built and (perhaps) the storeroom built onto the back. Some of the bricks used in building the fireplace and bake oven of the blacksmith's shop are stamped "J.S Watts" which could date them back as far as 1879 (when J.S. Watts joined his father's brickworks at Nairne) or, possibly, only to 1886 or later after J.S. Watts established his own brickworks at Nairne².

The single-furrow "Stump-Jump Plough" was invented by Richard Bowyer Smith in South Australia in 1876. In August 1876 R.B. Smith and his brother Clarence publicly demonstrated a three-furrow version of the plough. Clarence Smith manufactured stump jump ploughs in Ardrossan between 1880 and 1935³. A three-furrow stump jump plough of this kind is seen in front of the blacksmith's shop at the right of the photo.

George Green's wife Jemima (nee Pearce) died in 1896. Three men other than George Green are present in the photo, probably the Green's sons:

One of the Green's sons, George, died in Adelaide in 1886 aged 29.

Their other three known surviving sons¹ were:

John born 1864, therefore aged 19 to 31 between 1883 and 1895.

Henry born 1867, therefore aged 16 to 28 between 1883 and 1895.

Robert born 1869, therefore aged 14 to 26 between 1883 and 1895.

None of the younger men in the photograph appear to be in their mid-teens but rather to be adults probably at least in their 20s indicating that the photo was taken in or after 1890.

Together, this evidence suggests, therefore, that it is reasonable to date the photo to between 1890 and 1896 and approximately to 1892-1894.

References and Comments:

1. South Australian Births Deaths and Marriages Records
2. See Appendix 3. J. S. Watts
3. See, "The Invention and Manufacture of the Stump Jump Plough":
https://en.wikipedia.org/wiki/Stump-jump_plough
and a Clarence Smith Biography
<https://adb.anu.edu.au/biography/smith-clarence-herbert-13314>

Appendix 3. J. S. Watts: Notes [REDACTED] 2023

The earliest date of manufacture of white clay fire bricks stamped J. S. Watts and the 1899 date on which George Green advertises his property (see Appendix 4) for sale, limit the period in which George Green's lime kilns, and bake ovens could have been built using J. S. Watts fire bricks.

Jemima Green's death having been in 1896, the sepia photograph of the Green's farmstead which includes George and Jemima Green along with three men presumed to be their sons but neither of their daughters (married and probably left home in 1874 and 1888) must have been taken before 1896 but probably after 1888 (see Appendix 2). This further constrains the period during which the lime kilns, blacksmith shop and bake ovens must have been built.

From the South Australian Directories we find that J. Watts is listed as a fire brick manufacturer from 1865 indicating that he was making fire bricks from at least that time.

The South Australian Directory for 1870 lists John Watts as a fire brick maker and farmer at Hutchinson Road, Nairne.

According to South Australian State Library Archival History, J. S. (Joseph) Watts joined John Watts's business at Nairne in 1879¹.

An address to the National Trust in 1993 by Ern Watts suggests that J. S. Watts was at John Watts Harrogate Road, Nairne, brickworks from 1882².

It is not known, however, exactly when J. S. Watts took over the works from his father or when he began applying his own stamp to the bricks.

In the SA Directory of 1886 John Watts is listed as brickmaker at Little Hampton and in 1887 both Joseph and Luke Watts are listed for the first time as brickmakers: Joseph at Nairne and Luke at Little Hampton.

It is reasonable, therefore, to presume that J. S. (Joseph) Watts was applying his stamp to the fire bricks he was manufacturing by the mid-1880s (Fig A3.1).



Fig. A3.1, Bricks stamped “J. S. Watts” used in construction of the lime kilns and blacksmith shop bake ovens, 2010.

George Green’s lime kilns must, therefore, date from sometime after 1880 but well before 1899.

George Green’s two lime kilns are understood to have provided much of the lime for buildings in the surrounding district including for many of the early buildings in Murray Bridge (first known as Edwards’ Crossing, then as Mobilong, from 1884, and later as Edwards’ Crossing, again, until 1924 when it was officially named Murray Bridge)³.

Edwards’ Crossing did not really begin to be established as a town until after the completion of the bridge across the Murray at that site in 1879. Even then, the bridge was considered to have been a waste of money and a white elephant, leading nowhere, that no one would use – as a result, it was never officially opened⁴.

By 1885, however, the railway had extended from Adelaide to the growing town and, in 1886, the bridge was converted to combined road and rail use with rail connection through to

Melbourne. As a transport hub linking river steamer traffic and rail, there was rapid advancement in the town.

References:

1. https://archival.collections.slsa.sa.gov.au/brg/BRG128_JSWattsAndSons_history.pdf
2. <https://www.facebook.com/wattsbrickyard/photos/pcb.3193629000666405/3193618970667408/?type=3&theater>
3. https://www.geocaching.com/geocache/GC1ZPJ7_lime-kiln?guid=d2a8791d-fe49-458e-b9b6-5526b0c2d2fc
4. <https://trove.nla.gov.au/newspaper/article/160119146/18907541>

Appendix 4. A brief biography of George Green [REDACTED] 2023

George Green and his family made significant contributions to Monarto and the surrounding communities between 1867 and 1905.

The Greens were “very strong Methodists”.¹ George Green was a Trustee of the Monarto Methodist Church² (built in 1871³) and may have been one of its founding members.¹

He served on the Monarto District Council from its inception in 1882³ and was Chairman of the Council from July 1885⁴ until June 1889 (when James Downing replaced him as chair).⁵ He continued as a council member until June 1891.⁶

In January 1889 he was appointed Chairman of the Local Board of Health.⁷

He was newly appointed as a J.P. for Monarto in 1891.⁸ He was one of two J.P.s in the Monarto area at the time.

By 1899 George Green owned and leased 1020 acres of land (595 acres of Freehold and 425 acres of Scrub Lease) which he then proposed to sell by auction.⁹ As mentioned in his advertisement for the sale⁹, by this time George Green was operating two limekilns^{9,10} and a blacksmith’s shop^{9,11} as well as running his mixed farm which he had named “Trial Farm”.¹²

It has been written that lime from George Green’s kilns “was provided to construct many of the (early) buildings in Murray Bridge”¹⁰.

George Green died at Monarto in 1905¹².

References and Comments:

1. Geoff Green 1992, Personal letter to Hugo Bretag.
2. The Register (Adelaide, SA : 1901 - 1929) Wed 27 Dec 1905 Page 3
3. Anonymous 1986. Monarto 1847-1986, Murray Kwik Print, Murray Bridge.
4. The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser (SA : 1880 - 1954) Fri 31 Jul 1885 Page 4
5. The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser (SA : 1880 - 1954) Fri 3 May 1889, Page 3
6. The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser (SA : 1880 - 1954) View title info Fri 5 Jun 1891 Page 2
7. South Australian Weekly Chronicle (Adelaide, SA : 1881 - 1889) Sat 19 Jan 1889, Page 13
8. The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser (SA : 1880 - 1954) Fri 2 Oct 1891 Page 3
9. The Mount Barker Courier and Onkaparinga and Gumeracha Advertiser (SA : 1880 - 1954) Fri 7 Apr 1899 Page 2
10. https://www.geocaching.com/geocache/GC1ZPJ7_lime-kiln?guid=d2a8791d-fe49-458e-b9b6-5526b0c2d2fc [accessed 20-8-2020, unfortunately its URL links to its sources give error messages]

11. Oral History from descendants of the Green Family has indicated that the blacksmith's shop was so well equipped that even buggies could be, and perhaps were, built there. Certainly, in living memory, the blacksmith's shop contained a large wooden bench, numerous antique wooden planes and spokeshaves, a forge (still present), bellows, a large iron vice, an anvil and many iron working hammers, chisels, tongs, etc. A hard copy exists that states the terms and conditions relating to blacksmithing including working hours believed to have been written by George Green.
12. Births, Deaths and Marriages records for South Australia indicate that George Green's son, Robert, was born at "Trial Farm" on 31 August 1869.

See images of George Green and Jemima Green née Pearce and their Gravestone, below.



Fig. A4.1 George Green at left and Jemima Green at right in front of their house



Fig. A4.2 Gravestone of Jemima and George Green (Monarto Cemetery, Schenscher Road, Monarto, South Australia)