



**HERITAGE
COUNCIL**
OF WESTERN AUSTRALIA

REGISTER OF HERITAGE PLACES

Assessment Documentation

11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

Cultural heritage significance means aesthetic, historic, scientific, social or spiritual value for individuals or groups within Western Australia.

In determining cultural heritage significance, the Heritage Council has had regard to the factors in the *Heritage Act 2018* and the indicators adopted on 14 June 2019.

PRINCIPAL AUSTRALIAN HISTORIC THEME(S)

- 3.5 Developing primary production
- 3.9 Farming for commercial profit
- 3.16 Struggling with remoteness, hardship and failure
- 5.8 Working on the land
- 8.10.5 Advancing knowledge in science and technology
- 8.14 Living in the country and rural settlements

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 106 Workers (Aboriginal)
- 107 Settlements
- 301 Grazing, pastoralism and dairying
- 402 Education and science
- 501 World wars and other wars

11(a) Importance in demonstrating the evolution or pattern of Western Australia's history

Wallal Downs Station Group hosted an important international scientific observation expedition to test Albert Einstein's General Theory of Relativity during the 1922 total solar eclipse. The data recorded here was at that time the most accurate measured.

Wallal Downs Station Group hosted a group of Dutch refugees fleeing Japanese attack during World War II. The evacuation of refugees, women and children from the place demonstrates the isolation and fear of Japanese invasion and attack felt by pastoralists north-west coast of Western Australia during World War II.

Wallal Downs Station Group is associated with the pastoral settlement of the Kimberley region of Western Australia, and in particular the successful management of a Kimberley station by returned servicemen from the World War I.

11(b) Importance in demonstrating rare, uncommon or endangered aspects of Western Australia's heritage

The place is a rare successful example of the soldier settlement scheme enacted on a pastoral lease.

The place is likely to include archaeological deposits and structures that are associated with the early twentieth century occupation of the *Wallal Downs Station Group*, including the syndicate of World War I returned servicemen and their families. Archaeological investigation has the potential to provide rare information regarding successful settlement by these groups in the Kimberley region.

11(c) Potential to yield information that will contribute to an understanding of Western Australia's history;

Wallal Downs Station Group was the site of an important international scientific expedition observing the 1922 total solar eclipse. The data recorded here was at that time the most accurate measured and was pivotal in confirming Albert Einstein's General Theory of Relativity.

Wallal Downs Station Group is likely to include archaeological deposits and structures that are associated with the early twentieth century occupation of the *Wallal Downs Station Group*, including the syndicate of World War I returned servicemen and their families. Archaeological investigation has the potential to provide rare information regarding successful settlement by these groups in the Kimberley region.

11(d) Its importance in demonstrating the characteristics of a broader class of places;

Wallal Downs Station Group is representative of pastoral stations in the Kimberley region of Western Australia. The spatial arrangement of the buildings within the group demonstrates the relationship between the residential and working functions of the station.

A number of the earlier structures within the place are constructed with local stone, a common feature of Western Australian settlement at the time.

11(e) Any strong or special meaning it may have for any group or community because of social, cultural or spiritual associations;

Wallal Downs Station Group has social value for the Nyangumarta people who lived and worked at the Station, and also their families and descendants for whom the station is located on Native Title land.

11(f)¹ Its importance in exhibiting particular aesthetic characteristics valued by any group or community;

The elevated position and stonework of the Stone Water Tanks and Aqueduct is a landmark within *Wallal Downs Station Group* and the surrounding flat pastoral landscape.

The buildings within the *Wallal Downs Station Group* create a visually cohesive pastoral group.

11(g) Any special association it may have with the life or work of a person, group or organisation of importance in Western Australia's history;

Wallal Downs Station Group has associations with many Nyangumarta people who worked and lived on the property.

11(h) Its importance in demonstrating a high degree of creative or technical achievement;

Wallal Downs Station Group was the site of the successful establishment of buffel grass as pasture in the North-west region, first introduced by pastoralist and manager Harley Lacy.

12. DEGREE OF SIGNIFICANCE

12.1 CONDITION

Overall, *Wallal Downs Station Group* is in fair-good condition. However, the main Homestead building is in fair-poor condition.

The Aqueduct and Stone Water Tanks are in sound condition, with some repair work undertaken to cracking.

¹ For consistency, all references to architectural style are taken from Apperly, R., Irving, R., Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture. Styles and Terms from 1788 to the Present*, Angus and Robertson, North Ryde, 1989.
For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate*, Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

A number of buildings identified in 1994 have been completely destroyed due to cyclone damage. Rubble and other building debris have been removed, including above ground structural elements as well as sub-surface archaeological deposits. Structural elements including walls and roofs have been replaced, and additional buildings, including cyclone-rated temporary buildings (dongas) have been established within the precinct.

12.2 INTEGRITY

This section explains the extent to which the fabric is in its original state.

Since its establishment in 1900, *Wallal Downs Station Group* has undergone repeated cyclone and other damage and consequently has been altered considerably over the years. The 1920s stonework is still identifiable in the Homestead and other residential buildings, as well as the Aqueduct and Stone Water Tanks. Additional outbuildings have been constructed to replace damage and to suit changing functional requirements. All new work is clearly identifiable from the original fabric. Generally, the place has moderate integrity.

12.3 AUTHENTICITY

This section explains the extent to which the original intention is evident, and the compatibility of current use.

Originally established as a sheep station, *Wallal Downs Station Group* now operates as a cattle station, and has done for at least sixty years. The place has high integrity having retained its original grazing use since its establishment.

Several of the associated outbuildings retain their original function. The Homestead is currently (2019) vacant due to its fair-poor condition. Replacement buildings to those destroyed or removed following the cyclone damage also retain the original function. The associated outbuildings are not currently being utilised. It is unlikely that the property will again be used for sheep grazing and wool production. Overall the place has moderate authenticity.

13. SUPPORTING EVIDENCE

The documentation for this place was prepared by Senior Heritage Officer Karina Williams of the Department of Planning, Lands and Heritage, with amendments and/or additions by the Department and the Heritage Council.²

13.1 DOCUMENTARY EVIDENCE

Wallal Downs Station Group comprises a small collection of stone buildings and structures, archaeological deposits and structural remains dating from the 1920s as well as more recent permanent and temporary buildings and sheds, which form part of the homestead complex associated within the large 600,000 acre pastoral station of Wallal Downs, the southernmost station in the Kimberley region. The station originally grazed sheep but is now a cattle station.

Wallal Downs Station is located adjacent to the Great Northern Highway, and less than five kilometres from Eighty Mile beach, originally named Ninety Mile Beach, approximately 380 kilometres southwest of Broome.

The Nyangumarta people are the traditional owners of the land comprising *Wallal Downs Station Group*. The boundary of Nyangumarta traditional country borders the Karajarri to the north and Nyamal and Ngarla to the west. Following the establishment of pastoral enterprise in the region, many Nyangumarta people have been displaced from traditional country. However, strong ties to law and country remain in the area.³

A government well had been established at Wallal in approximately 1896, and formed part of the Northern stock route between Pardoo Station and Gordon Bay.⁴ Wallal was reportedly the local Aboriginal name for fresh water.⁵

The district was regularly hit with strong storms during the wet season, and many pearling and other vessels were destroyed or damaged along the coastline.⁶ A telegraph and postal station established near the well provided a convenient point of contact to exchange information on weather and shipping news and the movement of stock and travellers along the inland routes.

The first lease of *Wallal Downs Station* was taken up in about 1900 by Messrs Piper⁷ and Galbraith who were joined in partnership by Charles Somerset, an

² The original interim documentation was based on the National Trust of Australia (WA) assessment of the place.

³ *'The people and their traditional country'*, Wanka Maya Pilbara Aboriginal Language Centre, <https://www.wangkamaya.org.au/pilbara-languages/nyangumarta-overview>

⁴ Other stock routes, including Kimberley De Grey and Davis River stock routes also utilised the well. *The W.A. Record*, 14 March 1903, 'Odds and Ends from Everywhere', Source: <http://trove.nla.gov.au/ndp/del/article/212350605>, *The West Australian*, 4 August 1896, 'The Northern Stock Route. Particulars of Water Supply', Source: <http://trove.nla.gov.au/ndp/del/article/3097172>; Accessed 24 December 2015

⁵ Selsmark, M, 1994, 'Wallal 1942 The Year of the Japanese', In Helen Weller (ed.) *North of the 26th A collection of paintings, drawings and photographs from the Kimberley, Pilbara and Gascoyne regions. Volume Two*, Access Press, Northbridge, p. 303.

⁶ *The West Australian*, 14 December 1908, 'Another Pearling Disaster', Source: <http://trove.nla.gov.au/ndp/del/article/26215964>, Accessed 24 December 2015.

⁷ Also reported as Pipe by Mrs Gray Lacy. Lacy, G, 1989, 'The Wallal of Yesterday', In Helen Weller (ed.) *North of the 26th A collection of paintings, drawings and photographs from the Kimberley, Pilbara and Gascoyne regions*. Access Press, Northbridge, pp. 31-46.

Englishman then working at Pardoo.⁸ The original homestead comprised two small rooms constructed of corrugated iron and local limestone, located on 'a pindan sand and limestone rise overlooking the coastal plain'.⁹

In December 1908, it was reported that the homestead belonging to Galbraith and Piper was completely wrecked, and a considerable portion of the Wallal post office and telegraph station destroyed in a 'hurricane' (cyclone) in which over 37 pearling luggers and schooners and their crews were lost.¹⁰ Piper drowned during a cyclone, sometime before Somerset bought Galbraith out in 1910.¹¹ The remains of the original homestead were utilised as an oil room and men's bedroom, while Somerset constructed a 'roomy homestead, surrounded by a wide verandah, with separate kitchen and store in the usual north-west Australian fashion.'¹² A well was constructed between the house and kitchen, and a rainwater tank was also constructed.¹³

In 1913, Wallal Station briefly became a place of interest in Perth, when William Jackman was accused of murdering grazier Griffiths Boyer, his partner in a grazing lease at Wallal.¹⁴ Jackman had originally claimed Boyer had drowned while bathing, but subsequent investigations showed that his body had been partially burnt.¹⁵ Jackman later admitted that he had accidentally shot Boyer, and fearful of repercussions, had burned the body to destroy the evidence and dumped it in the well.¹⁶ Jackman was found guilty and sentenced to death in January 1914.¹⁷ In March 1914, Jackson successfully appealed his sentence and his conviction was quashed.¹⁸ He subsequently left Wallal.¹⁹

Somerset sold *Wallal Downs Station Group* to a syndicate of ten men, most returned soldiers, in 1919.²⁰ The active partners included brothers Harley and Edward Lacy, George Davidson (Manager) and Reg King. The remainder were Frank McAdam (Chairman), Geoffrey Wyndham (bookkeeper), Harold Beasley,

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- 8 The National Trust Register of Built Heritage of Western Australia, 1996, File 3/29 'Wallal Downs Station Group'
- 9 Lacy, op cit., p. 31.
- 10 *Kalgoorlie Miner*, 14 December 1908, 'A North-West Hurricane', Source: <http://trove.nla.gov.au/ndp/del/article/90661507>; *The West Australian*, 14 December 1908, 'Another Pearling Disaster', Source: <http://trove.nla.gov.au/ndp/del/article/26215964>, Accessed 24 December 2015.
- 11 Lacy, op cit., p. 31.
- 12 Lacy, op cit., p. 31.
- 13 Lacy, op cit., p. 31.
- 14 *The West Australian*, 6 November 1913, 'The Wallal Tragedy. Charge of Wilful Murder', Source: <http://trove.nla.gov.au/ndp/del/article/26889455>, Accessed 17 December 2015.
- 15 *The Argus*, 6 December 1913, 'Shot in the Back. Charge of Murder', Source: <http://trove.nla.gov.au/ndp/del/article/7230411?searchTerm=Jackman>; *The West Australian*, 6 November 1913, 'The Wallal Tragedy. Charge of Wilful Murder', Source: <http://trove.nla.gov.au/ndp/del/article/26889455>, Accessed 17 December 2015.
- 16 *Sunday Times*, 18 January 1914, 'The Wallal Tragedy. Jackman Sentenced to Death.', Source: <http://trove.nla.gov.au/ndp/del/article/57819292>, Accessed 17 December 2015.
- 17 ibid.
- 18 *The Black Range Courier and Sandstone Observer*, 4 March 1914, 'General', Source: <http://trove.nla.gov.au/ndp/del/article/204802069>, Accessed 8 January 2016.
- 19 In 1915 Jackman enlisted in the Light Horse Brigade, before taking up a position with P&O in Port Said on his discharge at the end of World War I.
- The West Australian*, 20 July 1935, 'Mediterranean Trade', Source: <http://trove.nla.gov.au/ndp/del/article/32872015>, Accessed 14 January 2016.
- 20 Lacy, op cit., p. 43.

Harold Kevan, Leofric Wake and Ned Stirling, all ex-servicemen who contributed their £2,000 War Service payment to the venture.²¹

In 1920, another group of returned soldiers purchased the neighbouring Mandora Station.²² In the years following World War I, considerable numbers of soldiers participated in returned soldier settlement scheme in Australia, with varying degrees of success.²³ The legislation and management of the settlement of returned soldiers and sailors after World War I varied between the different states. In Western Australia, the Soldier Settlement Scheme operated with regard to the *Agricultural Lands Purchase Act 1909* and the *Discharged Soldiers Settlement Act 1919* which allowed for the acquisition of land, including pastoral land, for the use of discharged soldiers.²⁴ Rent on a pastoral lease comprising less than 100,000 acres could be remitted for the first five years. The Group Settlement scheme was a similar initiative supported by the Western Australian government which ran from 1921 to 1930 and aimed to settle groups of migrants and their families, including former British and Australian soldiers.

In Western Australia the vast majority of settlers, including all Group Settlers, were established on small farms in the south east of the state. Dairying was the common activity for the Peel Estate, and Northcliffe and Harvey districts, as well as in areas deemed to have poor soils.²⁵ Wheat and sheep were also cultivated across the State, in the Mid West, North Eastern Goldfields and Wheatbelt regions.²⁶ The settlements at *Wallal Downs Station Group* and Mandora Station appear to be relatively early and rare examples of successful endeavours by returned soldiers in the Kimberley region. By 1923, pastoral properties made up only 4.5% of the properties settled by ex-servicemen since the inauguration of the scheme.²⁷

The success of *Wallal Downs Station* is likely to have been due to the experience of the active members of the syndicate. Harley and Edward (Ted) Lacy were the sons of Edward Frederick Lacy, a well-known and successful owner of Gabyon Station, and later White Peak Station near Geraldton.²⁸ Harley Lacy²⁹ was the only

21 Lacy, op cit., p. 33.

22 *The Pilbara Goldfield News*, 28 September 1920, 'Personal', Source: <http://trove.nla.gov.au/ndp/del/article/146334984>, Accessed 8 January 2016.

23 ABC Rural, Emma Brown, 16 April 2015, 'First World War veterans faced 'ongoing battle' with farm resettlement scheme', Source: <http://www.abc.net.au/news/2014-11-11/first-world-war-veterans-faced-ongoing-battle-on-the-farm/5881216>, Accessed 12 February 2016

24 Australian Bureau of Statistics, November 2012, 1301.0 - Year Book Australia, 1925 — Settlement of Returned Soldiers and Sailors 1914-18. Source: <http://www.abs.gov.au/ausstats/abs@.nsf/featurearticlesbytitle/72BB159FA215052FCA2569DE0020331D?OpenDocument>, Accessed 12 February 2016.

25 Department of Lands and Surveys, 1986, *Western Australia. An Atlas of Human Endeavour*. Neil Jarvis (Ed.), Department of Lands and Surveys & Education Department, Western Australia, p. 79.

26 Jarvis, N. (ed), op cit., pp. 79-81; *Sunday Times*, 13 February 1927, 'Farm, Field and Station', Source: <http://trove.nla.gov.au/ndp/del/article/58322993>, Accessed 14 January 2016; *Western Mail*, 23 August 1923, 'Soldier Settlement', Source: <http://trove.nla.gov.au/ndp/del/article/44763011>, Accessed 12 February 2016.

27 *Western Mail*, 23 August 1923, 'Soldier Settlement', Source: <http://trove.nla.gov.au/ndp/del/article/44763011>, Accessed 12 February 2016.

28 *Sunday Times*, 17 February 1929, 'Peeps at People', Source: <http://trove.nla.gov.au/ndp/del/article/58423233>, *The West Australian*, 2 January 1935, 'University Degree', Source: <http://trove.nla.gov.au/ndp/del/article/32803827>, Accessed 8 January 2016.

29 It is noted that independent newspaper accounts and the heritage citations for Wallal Downs Station spell the surname 'Lacey', however the Obituary for Harley Lacy, and his own wife and daughter's accounts of their life at Wallal, spell his name as 'Lacy'.

member of the syndicate that did not fight during the war. While Ted enlisted in the AIF and was a member of the Royal Flying Corp during World War I, Harley worked on numerous stations as a jackeroo.³⁰ Harley and Davidson had worked together previously in Leonora, and again worked as overseer and manager of *Wallal Downs* until Davidson returned south.³¹ Harley took over as Manager and by 1927 Ted was also managing Gnaraweeda Station in Meekatharra, which was used by the syndicate as a stopping point for Wallal stock.³² Reg King undertook machinery and windmill maintenance³³ and was responsible for much of the early stone work that is still extant, including the stone section of the Homestead, the Stone Water Tanks and the Aqueduct. Roof structures were often replaced following cyclone damage.³⁴ Frank McAdam (Chairman) worked at the Lands Department and Geoffrey Wyndham was bookkeeper.³⁵ The remaining members of the syndicate contributed skills and input as required.

The Wallal Post Office was located three miles north of the Homestead, on a small area of Government land which comprised a cattle dip, water bore, trough and yards used in operation of the 'Wallal Tick Line'.³⁶ The cattle dip was erected at Wallal, the southernmost station in the Kimberley, to compulsorily treat cattle travelling into the Pilbara region.³⁷ After the Wallal Homestead was established as the official Post Office, the Stock Inspector used the empty office as his residence.³⁸

In common with other north-west pastoral stations, *Wallal Downs Station Group* housed a large number of Aboriginal workers and their families. In 1922 the station comprised six white men, including Davidson, King, Harley and Ted Lacy, and approximately fifty Aboriginal men and women attached 'more or less informally to the Government station and the sheep station'.³⁹ Harley Lacy's daughter Mary Selsmark noted that, aside from occasional white contractors and the annual visiting shearing team, *Wallal Downs Station* was primarily worked by Aboriginal people from the Nyangumarta Tribe who undertook stock and mechanical work as well as housework.⁴⁰ The runway was also built by the *Nyangumarta* workers.⁴¹

Obituaries Australia, National Centre of Biography, Australian National University, 'Lacy, Harley M. P. (1898–1956)', Source: <http://oa.anu.edu.au/obituary/lacy-harley-m-p-1358/text1356>, accessed 8 January 2016; Lacy, op cit; Selsmark, op cit.

30 Gray, op cit., pp. 31, 33.

31 Gray, op cit., p. 33.

32 Lacy, op cit., p. 33; *Sunday Times*, 17 February 1929, op cit.; *The West Australian*, 2 January 1935, op cit.; *The West Australian*, 6 May 1927, 'Weddings', Source: <http://trove.nla.gov.au/ndp/del/article/32027890>, Accessed 15 January 2016; *Western Mail*, 15 September 1938, 'Overland Cattle', Accessed 20 January 2016.

33 Gray, op cit., p. 33.

34 The National Trust Register of Built Heritage of Western Australia, 1996, File 3/29 'Wallal Downs Station Group'

35 Lacy, op cit., p. 33.

36 Lacy, op cit., p. 43.

37 P14197 Cattle Dip, Wallal Station (Shire of East Pilbara) is on the Shire of East Pilbara Municipal Inventory List. *Albany Advertiser*, 21 April 1926, 'Tick Fever', Source: <http://trove.nla.gov.au/ndp/del/article/70659502>; *The Queenslander*, 6 July 1918, 'Cattle Tick in Western Australia', Source: <http://trove.nla.gov.au/ndp/del/article/22362707>, Accessed 17 February 2016.

38 Lacy, op cit., p. 43.

39 Campbell, op cit., p. 29.

40 Lacy, op cit., p. 33; Selsmark, op cit., p. 306.

41 Lacy, op cit., p. 41.

By 1956, it was reported that the majority of local Aboriginal people lived and worked across the homestead, stock camps and out-camps of Wallal Station.⁴²

The Elders and old people lived in their own group in the Native Camp, behind the Homestead. Fishing, hunting the wildlife, and frequent walk abouts to nearby stations provided their recreation. As a result the Aboriginal Tribe at Wallal was a very successful and happy community and they lived in a perfect environment, so did we.⁴³

There are at least four known Nyangumarta people, who were associated with *Wallal Downs Station*, buried in close proximity to the place. Due to cultural sensitivities, their identities are known only to the Nyangumarta community, but their contribution at *Wallal Downs Station* is important and needs to be acknowledged.⁴⁴

Solar Eclipse Observation Point

In late 1922, *Wallal Downs Station* briefly became internationally significant due to its location along the path of totality of a solar eclipse. In August and September 1922, *Wallal Station* was the site of an important scientific astronomic expedition led by the University of California's Lick Observatory.⁴⁵ The group included the team from the USA, led by W.W. Campbell, as well as contingents from Australia, the University of Toronto, India, and a private party from England.⁴⁶

The expedition was one of several across the world that sought to measure the deflection of starlight by the sun during a total solar eclipse.⁴⁷ It was thought that the subsequent calculations might help to support or disprove Albert Einstein's General Theory of Relativity. Earlier attempts to detect light deflection during eclipses in 1912, 1914 and 1918 had been unsuccessful.⁴⁸ In 1919 successful measurements had yielded significant measurements for only a few stars, and results from different observations appeared to both prove and disprove Einstein's theory.⁴⁹

Calculations showed that the eclipse of 21 September 1922 would pass across Australia. The sheep station at *Wallal Downs*, which was also a post and telegraph

42 Traves, DM, Casey, JN, & Wells, AT, 1956, *Report No. 29 The Geology of the South-Western Canning Basin, Western Australia*, Bureau of Mineral Resources, Geology & Geophysics, Commonwealth of Australian, Department of National Development, p. 3; Selsmark, op cit., p. 306.

43 Selsmark, op cit., p. 306.

44 Stephen Morgan, Senior Anthropologist for Yamatji Marlpa Aboriginal Corporation on behalf of the Nyangumarta people, personal communication, 10 April 2019.

45 *ABC Kimberley* (Mills, Vanessa), 30 July 2015, 'Einstein's Theory of Relativity and how the Nor' West's 80 Mile Beach has a place in scientific history' Source: <http://www.abc.net.au/local/stories/2015/07/30/4284056.htm>, Accessed 17 December 2015.

46 Robins, J, undated, 'Wallal: the 1922 Solar Eclipse Expedition to Test Einstein's Theory', *History of The Department of Physics at UWA*. Issue No. 9, Source: http://newt.phys.unsw.edu.au/~jkw/phys3550/Eclipse/Robins_UWA_PhysHist9.pdf, Accessed 21 December 2015, p. 3.

47 A total solar eclipse occurs when the Moon passes between the Earth and the Sun and blocks all direct sunlight, effectively turning day into darkness.

48 Burman, R. R. & Jeffery, P. M., 1990, 'Wallal – the 1922 Eclipse Expedition', *Journal: Proceedings of the Astronomical Society of Australia*, Vol. 8, Issue 3, p. 312

49 Burman & Jeffery, op cit., p. 312; Powerhouse Museum, (Barker, Geoff), 22 August 2012, 'Einstein's Theory of Relativity Proven in Australia, 1922', Source: <http://www.powerhousemuseum.com/insidethecollection/2012/08/einsteins-theory-of-relativity-proven-in-australia-1922/>, Accessed 17 December 2015.

station, was ideally located along the computed path of the Moon's shadow, the 'path of totality'.⁵⁰ There, the 'predicted duration of totality, at five minutes and nineteen seconds, would be longer than for any other possible observing site'.⁵¹ Additional advantages were provided by past weather records, which suggested optimal weather conditions, with little cloud cover and no wind. Other observation points were also identified elsewhere in Australia at Goondiwindi, Queensland and Cordillo Downs in north eastern South Australia, each of which had shorter periods of totality.⁵²

Professor A Ross, of the University of Western Australia and Father Edward Pigot, Director of Sydney's Riverview College Observatory were among those who championed Wallal as the primary observation post in Australia, and persuaded the Australian Government such an expedition was viable.⁵³ The importance of the mission in terms of scientific endeavour and international diplomacy is demonstrated by the Australian Government's offer of a naval vessel to transport the USA party from Sydney to Perth.⁵⁴ Teams from the Perth Observatory, led by C. Nossiter, and Sydney Observatory (W.E. Cooke), as well as representatives from New Zealand (Government Astronomer C. Adams), and Melbourne Observatory also boarded the vessel at Fremantle and proceeded to Wallal.⁵⁵ Several women, including Mrs Campbell, Mrs and Miss Chant, Mrs Evershed and Mrs Adams, and a small naval party also accompanied the group and assisted in the observations.⁵⁶

Mr Hannett and his assistant Mr Owns, who ran and maintained the Wallal post office and 200 miles of telegraph line, as well as Davidson, King, Harley Lacy and approximately fifty Aboriginal men and women of *Wallal Downs Station* were also present and participated in the observations.⁵⁷

On arrival, the American, Canadian and Indian parties established observation posts within a group of wattle trees, approximately 200 yards east of the Wallal Government Well, east-north-east from *Wallal Downs Station Group*.⁵⁸ A series of naval kitchen, dining and sleeping tents were erected near the observation posts, in addition to purpose built structures and cameras erected for the purposes of the observations.⁵⁹

The Perth Observatory party established their observation post adjacent to the Homestead building within the *Wallal Downs Station Group*. Although the specific objective of the expedition was the measurement of light deflections for the purpose

50 Burman & Jeffery, op cit., pp. 312-3

51 Burman & Jeffery, op cit., p.312

52 Burman & Jeffery, op cit., pp.312-313

53 Robins, op cit., p. 1, 7; National Archives of Australia A457, 1503/1

54 Burman & Jeffery, op cit., pp.312-313; National Archives of Australia A457, 1503/1

55 Burman & Jeffery, op cit., pp.312-313; Powerhouse Museum, op cit.; Robins, op cit., p. 3.

56 Campbell, W. W., 1923, 'The Total Eclipse of the Sun, September 21, 1922', *Publications of the Astronomical Society of the Pacific*, Vol. 35, No. 203, pp. 31; State Library of Western Australia, 4131B/1/24

57 Campbell, op cit., p. 29.

58 Campbell, op cit., p. 28.

59 This included timber towers, one measuring up to 40 feet, constructed to fit large telescopes and cameras to track movement during the exposure.

Campbell, op cit., pp. 29, 32-33; Robins, op cit., p. 5.

of testing Einstein's theory, the Perth team also took the opportunity to study the solar corona as well as other visual observations of eclipse phenomena.⁶⁰

Following the advice of some of the most experienced eclipse observers, to spread out parties as much as possible, Mr Nossiter states, he located his camp at the homestead of Wallal Down's sheep station. One of the main reasons for doing so was that in the event of cloudy weather, whilst one camp was clouded, it might be possible to get observations at another camp. "We were very fortunate in our location," Mr Nossiter states. "At the other camp the conditions were anything but good... Those who were situated in this camp had a most uncomfortable time." On the other hand, Mr Nossiter was permitted by the station owners and the manager, Mr Davidson, who were most kind, to pitch his camp in the garden, where there was an excellent limestone foundation, and a perfect breakwind of trees which rendered it unnecessary to erect any shelters. The members of the party were allowed to sleep on the verandahs, use the kitchen and bathroom and were very comfortable indeed.⁶¹

The Perth team constructed a 'substantial concrete pier at Wallal Downs upon which an excellent meridian instrument was mounted' providing data on star transits used by all expedition teams during the observation period.⁶² Harley's wife Gray Lacy and their daughter Mary Selsmark, both recalled that two concrete blocks used as stands for the telescopes were still present in their garden in the 1940s and used as conversation pieces, lamp stands and outside seats.⁶³ A plaque was also presented to the Wallal owners commemorating the eclipse and affixed to one of the blocks near the kitchen, but this was later lost.⁶⁴ In 2010, a concrete block adjacent to the Homestead and partly obscured by a date palm was recorded, with the words 'solar eclipse' etched onto it.⁶⁵ Other markings are not clear as the block was degraded, however it is likely that this block was associated with the Perth team's structures.

The Aboriginal workmen at the station assisted with movement of equipment, and more crucially, assisted in dust suppression prior to and during the eclipse.⁶⁶ One evening 'the local Aborigines performed a folkloric show and hosted a banquet for the astronomers'.⁶⁷

The recordings undertaken at *Wallal Downs Station* were at the time the most accurate measurements that had been achieved.⁶⁸ The resultant data provided conclusive evidence that space was curved by showing that light passing through space did not travel in a straight line but followed a curved path.⁶⁹ Verified by astronomical observations undertaken at *Wallal Downs Station* and elsewhere (and

60 Robins, op cit., p. 5

61 *The West Australian*, 30 October 1922, 'News and Notes', Source: <http://trove.nla.gov.au/ndp/del/article/23878231>, Accessed 8 January 2016.

62 Campbell, op cit., pp. 33-34.

63 Lacy, op cit., p. 33; Selsmark, op cit., p. 315.

64 Lacy, op cit., p. 33.

65 Email correspondence, Kate Schubert to Jenni Williams, 15 October 2010.

66 Pearson, JC, Orchiston, W, McKim Malville, J., 2011, 'Some Highlights of the Lick Observatory Solar Eclipse Expeditions', In Orchiston, W, Nakamura, T, Storm, RG, (ed.), *Highlighting the History of Astronomy in the Asia-Pacific Region: Proceedings of the ICOA-6 Conference*, Springer, pp. 309, 311.

67 *ibid.*, p. 312.

68 Robins, op cit., p. 1.

69 Australian Screen, National Film & Sound Archive, 2016, 'The Sun Worshippers (1922)', Source: <http://aso.gov.au/titles/documentaries/sun-worshippers/clip1/>, Accessed 12 February 2016.

in all later observations and experiments to date)⁷⁰, general relativity is considered one of the best confirmed principles of physics theory.

The far-flung pastoral centre of Wallal, on the Nor'-West coast, will always be associated with the visit of a coterie of distinguished scientists from all parts of the world, who assembled at that centre a couple of years ago to take observations in connection with an eclipse of the sun.⁷¹

Destruction, Construction and Expansion

In June 1928, it was reported that the *Wallal Downs Station* Homestead had been destroyed by fire. Harley Lacy suffered severe burns to his arms and legs in the fire, which originated in an adjacent store building when stored petrol fumes were ignited by the flame of a hurricane lamp. The adjacent post office building was also destroyed.⁷² Only the concrete foundations of the building constructed by Somerset remained.⁷³

In 1929 when Harley brought his new wife Gray to Wallal, he and Reg King had been living in the original 1900 two-room homestead established by Piper and Galbraith, while overseeing station work and the construction of new buildings.⁷⁴ Soon after Gray's arrival, the shearer's kitchen and dining rooms and the Stone Tank nearest the Homestead, and Aqueduct were completed, providing piped water to the Kitchen building and bathroom.⁷⁵

Gray Lacy provides the following summary of the works undertaken to the homestead building in the 1930s.

During my first ten years to 1939, we built four more rooms around Pipe and Galbraith's two small ones for our homestead. Two of these were unlined limestone, joined by a mixture of red sand and cement, so that the pink colour prevailed throughout. These were surrounded by wide-shuttered verandahs, so that in future cyclones, we could be battened down, and thus remain waterproof inside. An office and bookkeeper's room were built on one end of the concrete foundations of the Somerset homestead. The rest of it became a patio.⁷⁶

...Two 'bough sheds' were also built facing the sea, and consisted of iron frames with double wire netting walls.⁷⁷

World War II

The threat of enemy invasion during World War II was particularly real for the people of the Kimberley. Prime Minister Menzies' identification of the 'Brisbane Line', in which the northern part of Australia from Geraldton to Brisbane would be

70 Burman & Jeffery, op cit., p. 313; Robins, op cit., pp. 8-9.

71 *The Daily News*, 7 April 1925, 'Historic Wallal', Source: <http://trove.nla.gov.au/ndp/del/article/84255264>, Accessed 8 January 2016.

72 *Albany Advertiser*, 21 June 1928, 'Station Destroyed. Wallal Homestead Guttled by Fierce Blaze', Source: <http://trove.nla.gov.au/ndp/del/article/70173604>; *Northern Times*, 30 June 1928, 'Port Hedland, June 27. The Fire at Wallal', Source: <http://trove.nla.gov.au/ndp/del/article/74906368>, Accessed 8 January 2016.

73 Lacy, op cit., p. 35

74 Lacy, op cit., p. 35

75 Lacy, op cit., p. 35

76 Lacy, op cit., p. 37

77 Lacy, op cit., p. 37

left undefended, demonstrated the close proximity of the Japanese war front to Australia's North.⁷⁸

The isolated station at Wallal prepared for the worst. Food and other supplies were hidden in 40-gallon drums and stashed at various locations throughout the station.⁷⁹ Harley Lacy established a Coast Watch Patrol, and the Aboriginal stockmen regularly patrolled the coastline for suspicious vessels and sightings.⁸⁰ The Stone Water Tanks were used as lookout points.⁸¹ Air raid trenches were also dug and the station occupants and workers were well drilled for evacuation.⁸²

For several weeks during the worst period of the war, when a Japanese invasion was expected on the 80 mile beach, we evacuated from the homestead every night. We slept in a special camp out in the bush, approximately a mile inland from the homestead...At dawn every morning, we were notified the 'O.K.' by our aboriginal messenger boy, on foot from the aboriginal night watchman, who took shifts, before we could return safely to the homestead and resume the day.

We were glad when we received this 'all clear' from War Operations, and could sleep in comfort once more, even though during that time of the war, Japanese submarines used to come inshore at night and pirate our sheep and fresh water.⁸³

Some time after, a Japanese submarine was identified sitting off the shore opposite the Homestead. Harley Lacy was away from the station, and the Army decided to evacuate Mrs Gray Lacy and her two daughters to the adjacent Mandora Station until the danger passed.⁸⁴

On 3 March 1942, two Dornier Flying Boats arrived unexpectedly at Wallal.

Because both planes were almost out of fuel, they had just come straight in from the north without making a circuit after sighting Wallal homestead and airstrip.

They were part of a group of Dorniers that had evacuated from the Japanese advance on Batavia in Java, escaping only just in time and heading for Broome to re-fuel before heading south. These two were lucky to have lost their way, and finally found us instead of Broome for the Japs had found out that they were landing at Broome and a group of Zeros had followed them down. That evening on the wireless news report we heard that Broome had been bombed soon after dawn, and all the Dorniers which had reached the Bay in Broome had been destroyed and the Dutch refugees on board (mostly women and children) had all been massacred! Three Dorniers were missing. The other one had landed at Anna Plains.⁸⁵

Wallal Station hosted the refugees for nearly four days, accommodating women and children on the verandahs of the homestead and the men on the verandahs of the office, men's quarters and bough sheds.⁸⁶ During that time, another Dutch military plane from Batavia arrived, also having lost its way on route to Broome and also carrying refugees.⁸⁷ While waiting for fuel to be flown in for the aircraft, the

78 O'Brien Planning Consultants, Shire of Wyndham East Kimberley 1996 Municipal Heritage Inventory, p. 17
79 Lacy, op cit., p. 39; Selsmark, op cit., p. 311.
80 Selsmark, op cit., pp. 308-9.
81 Selsmark, op cit., p. 314.
82 Selsmark, op cit., p. 311.
83 Lacy, op cit., p. 39.
84 Lacy, op cit., p. 41; Selsmark, op cit., pp. 315-316.
85 Selsmark, op cit., p. 320.
86 Selsmark, op cit., p. 320.
87 Selsmark, op cit., p. 323

Station was on high alert, with the presence of the flying boats a clear indicator of the location of the refugees.⁸⁸ Following the successful evacuation of the Dutch refugees, a document of thanks was sent to the Lacys from the Dutch government.⁸⁹

A few days after the Dutch refugees left Wallal, the Army advised all women, children and elderly to evacuate away from coastal areas.⁹⁰ Gray Lacy and the children left Wallal for Warragine Station and stayed there for three months.⁹¹

Shearing, droving and station management continued during the war, and for at least five years, Harley Lacy's entire workforce was Aboriginal men and women⁹², most likely *Nyangumarta* people.

Post-World War II

In the early 1950s electricity was installed at Wallal Station, soon followed by a new bathroom and septic system for the Homestead.⁹³ Around the same time a new bulk store was constructed, along with Mens' Quarters, Shearers Quarters, Overseer's house (now known as the Cottage, the former Married Quarters building) and a three-car garage. Houses with ablution blocks were also constructed for each Aboriginal family.⁹⁴

Geoffrey Wyndham was a returned soldier and member of the syndicate of owners. A bookkeeper, he was usually based in Anna Plains, although he regularly visited the station.⁹⁵ On his death in 1952, he apparently chose to be buried on the station. A small fenced grave site with a marble headstone is located north of the majority of buildings that comprise the *Wallal Downs Station Group*. The headstone is engraved

'In Loving Memory of Geoffrey Wyndham. Husband of Margaret, Father of Alex, Marjorie, Alward⁹⁶ and Frank. Died 11th August 1952'.

Harley Lacy continued to manage the station until his death at the age of 58 in 1956.⁹⁷ He is also remembered for his championing the use of buffel grass, a coastal veldt grass native to South Africa, in Western Australia.⁹⁸

He had discovered the buffel grass growing on the Port Hedland common. It had been brought over from Africa by the Afghan camel drivers in their packsaddles. He had it tested and classified at the Agricultural Department, then introduced it to as the main pasture grass right along the Wallal frontage country. After observing its improved

88 Selsmark, op cit., pp. 322-3

89 Lacy, op cit., p. 39; Selsmark, op cit., p. 323.

90 Lacy, op cit., p. 41.

91 Lacy, op cit., p. 39; Selsmark, op cit., p. 330.

92 Lacy, op cit., p. 41

93 Lacy, op cit., p. 41

94 Lacy, op cit., p. 41

95 Lacy, op cit., p. 33; Selsmark, op cit., pp. 309-310.

96 Alward, although now an unusual name, is an Anglo-Saxon name which has a variety of spelling variations. It is more commonly seen as a surname.

97 Obituaries Australia, National Centre of Biography, Australian National University, 'Lacy, Harley M. P. (1898–1956)', Source: <http://oa.anu.edu.au/obituary/lacy-harley-m-p-1358/text1356>, accessed 8 January 2016

98 Lacy, op cit., p. 37.

carrying capacity, other pastoralists followed suit. This grass was later introduced to the Pilbara and the Kimberleys, originating from Harley's experiments at Wallal.⁹⁹

Reg King had left the station in 1936 to marry and manage another station, but on Harley Lacy's death, he returned to manage Wallal with Gray Lacy.¹⁰⁰

In 1967, the pastoral lease for 386,036 acres encompassing Wallal Downs Station held by Wallal Downs Pastoral Company Pty Ltd was renewed for the period of 48 years with a yearly rent of \$741.80.¹⁰¹ With the downturn in wool prices, the station began a transition from sheep to cattle station.¹⁰² Following the death of Reg King in 1972, the remaining members of the syndicate sold Wallal Downs Pastoral Company Pty Ltd to Rowell Pty Ltd (of Derby), PA & A Murray (of Queensland) and R.S Maxsted.¹⁰³ In 1978, the last sheep left Wallal Station and it became a cattle station.¹⁰⁴

The property has passed through several hands in the intervening period.

Cyclone Damage

Located on the western coast of the Kimberley region, *Wallal Downs Station Group* is prone to severe weather attacks during the cyclone season. Roof and other structural elements have repeatedly been lost and replaced over the years.

In 1984, *Wallal Downs Station Group* was classified by the National Trust. In 1992 it was listed on the State Register of Heritage Places, with specific reference to the structures built as part of the Soldier Settlement Scheme purchase of the property in about 1922. The Homestead, Stone Water Tanks, stone wall (Aqueduct) and shearers' kitchen/dining room were identified as of architectural interest, being built of limestone/coral rock.

In 1994 a photographic record was taken of the place, noting the location of thirteen buildings, as well as an 'Old Stone Building (Ruins)', a stone wall 'Aqueduct' and three Stone Water Tanks.

In December 2009, Eighty Mile Beach and *Wallal Downs Station* were hit by a category 5 storm, Cyclone Laurence. The storm wrought severe damage across the Kimberley and along the Pilbara coastline, including considerable damage to the *Wallal Downs Station*. Several buildings were completely destroyed during the storm, including the 'Old Stone Building (Ruins)' and the shearers' kitchen/dining room, and others required considerable repair works.¹⁰⁵ The structural debris and

99 Lacy, op cit., p. 37.

100 Lacy, op cit., p. 46.

101 Pastoral Lease Number 3114/634, C.L. 190/1967

102 Lacy, op cit., p. 46.

103 Lacy, op cit., p. 46; Pastoral Lease Number 398/574, C.L. No. 52/1973; Pastoral Lease Number 398/575, C.L. No. 51/1973; Pastoral Lease Number 3114/1079, C.L. No. 155/1974; Shire of Broome Municipal Inventory, Wallal Downs Station, Source: <http://inherit.stateheritage.wa.gov.au/Public/Inventory/Details/1d54ac67-a2e9-4026-91b1-9d511cd1fa9d>, Accessed 21 December 2015.

104 Lacy, op cit., p. 46.

105 *ABC Kimberley*, (Reed, Lana), 12 January 2010, 'Cleaning up Cyclone Laurence', Source: <http://www.abc.net.au/local/videos/2010/01/08/2788471.htm>, Accessed 17 December 2015; *ABC Kimberley*, Updated 25 May 2011 'Debris lies scattered over a property in Wallal Downs', Source: <http://www.abc.net.au/news/2009-12-22/debris-lies-scattered-over-a-property-in-wallal/1187826>, Accessed 18 December 2015.

rubble was removed by machinery soon after the cyclone to reduce the snake hazard.¹⁰⁶

In 2016, *Wallal Downs Station* continued to run as a cattle station under the ownership of the Mills family.

13.2 PHYSICAL EVIDENCE

Wallal Downs Station Group comprises a small complex of utilitarian sheds and farm buildings and residential buildings surrounded by open landscape. The structures date from the 1920s through to the present, with a number of later cyclone rated residential and operations structures built after the devastation of Cyclone Laurence in 2009.

The main homestead building (Homestead) and adjacent ablutions block, Kitchen, and Single Quarters (North), are located in a cluster in the eastern side of the group. The group is separated from the garage building and car parking area to the west by a fence.

The Homestead building is partially built with local coral limestone pieces set in red mortar. These elements have undergone some cyclone damage, with some cracking having been repaired. The use of cement mortar on walls and concrete additions are contributing to the deterioration of some fabric through rising damp. The remainder of the building is constructed in large limestone blocks and weatherboard cladding, with a moderately pitched corrugated iron roof. The original core of the building is likely to date to the 1900 building established by Piper and Galbraith, although it is unclear how much of this remains. The building is aligned in a northeast-southwest orientation, with the long front façade, which contains all the windows and doors, facing north-west onto a full length verandah looking onto the garden, 'Bough Shed' and swimming pool.

The 'Bough Shed' is steel framed under-cover area, with concrete paving, located in the garden area used for social gatherings. Small sections of coral stone walling are located along one end. Although a bough shed was in use as a 'summer living room' in this approximate location during the mid-twentieth century¹⁰⁷, a shed was not identified in this location in the 1994 photographic survey of *Wallal Downs Station Group*, and the current structure appears to have been a relatively recent addition to the homestead complex.

The current Kitchen and Single Quarters buildings are recent cyclone rated buildings of limestone brick and steel with moderately pitched gable corrugated iron roofs. Both buildings also face into the garden area and are located on the sites of earlier structures built for similar purposes. A stone 'Aqueduct' at the rear of the Kitchen building extends approximately fifteen metres from the building towards a large Stone Tank located due east from the homestead cluster. The Stone Tank and Aqueduct are both constructed with local coral limestone blocks. The tank is sited on a slightly elevation position overlooking the Homestead located due west and is approximately four meters high. It was used as a lookout point during the

¹⁰⁶ Email correspondence, Kate Schubert to Jenni Williams, 15 October 2010; Personal Communication, Linda Mills, 17 October 2015.

¹⁰⁷ Selsmark, op cit., p. 315.

Second World War.¹⁰⁸ Pipes are still connected to the tank which is in good condition.

A number of concrete pads are located in the area between the Homestead building and the Stone Tank, in the general location of the former outbuilding, shed and generator shed buildings. These buildings were present during the 1994 photographic record of *Wallal Downs Station Group*, but are no longer extant. A garden, two large aluminium water tanks and a shipping container are also now located in the vicinity.

A 2010 photograph shows the engraved words 'Solar Eclipse' on a stone wall, which was thought to have been the Homestead wall. The location of the engraving was not found during the 2015 inspection of the place. However, as the Homestead in use during the 1922 solar eclipse was destroyed in the 1928 fire, it is more likely the engraving was on one of the concrete plinths left by the Perth contingent.¹⁰⁹ The concrete pads in the vicinity of the Homestead may also be associated with the contingent, possibly relate to the 1910 Somerset homestead destroyed by fire, or much later structures.

The large Garage/Workshop building is a large steel framed shed clad with corrugated iron, much of which was replaced following the destruction of Cyclone Laurence in 2009.

The Cottage (former Married Quarters) (c.1952) is located adjacent to the Garage to the west. The Cottage comprises a small single storey painted limestone brick and steel building with gable corrugated iron roof and verandahs located on the south, north and eastern sides. A small fence surrounds the building and a rear lawn, and a demountable is located on the western side.

A trio of demountables are located south of the Garage and are used as Single Quarters. A second former Single Quarters building was located south of these demountables but is no longer extant. A small raised mound is still present in this location. The location of the Old Stone Building (Ruins) is also still identifiable, located north of the Stone Water Tanks located on an elevated position southwest of the complex, although the majority of the above ground elements were removed after the cyclone to reduce the snake hazard.¹¹⁰

The westernmost Stone Tank is approximately four metres high and constructed with local coral limestone and mortar on a concrete mortar base. The adjacent Stone Tank has concrete render and a concrete cap. The Stone Tank is approximately 3 metres high, topped by corrugated iron tank approximately 2.5 metres. Both Stone Tanks exhibit some cracking and repair work and appear to still be in use.

A small fenced grave site (1952) with marble headstone is located approximately 80 metres north of the Married Quarters building. It is the only known grave site on the station and commemorates Geoffrey Wyndham, one of the 1919 syndicate partners.

108 Selsmark, op cit., p. 314.

109 The Old Stone Building (Ruins) had already been destroyed by 2009.

110 Email correspondence, Kate Schubert to Jenni Williams, 15 October 2010; Personal Communication, Linda Mills, 17 October 2015.

There are also at least four known Nyangumarta burial sites within the place. Their exact locations are known to the Nyangumarta knowledge-holders.

Also located on the station, although not in the vicinity of the *Wallal Downs Station Group*, are the remains of the old cattle dip.¹¹¹ Comprising metal fencing posts and some timber slats, the former cattle dip and yard is associated with the management of cattle ticks in the Kimberley and the maintenance of the 'Wallal Tick Line'.¹¹² The cattle dip was erected at Wallal, the southernmost station in the Kimberley, to compulsorily treat cattle travelling into the Pilbara region.¹¹³

Archaeological Assessment

Following the destruction of Cyclone Laurence, associated flooding, and the removal of debris from the damaged buildings by front loader,¹¹⁴ it is likely that some subsurface artefacts and deposits were removed in those areas. Despite these operations, and the construction of new buildings within the *Wallal Downs Station Group*, there is a considerable likelihood for archaeological deposits and artefacts to be present in some areas.

It is unlikely that removal of debris by machinery removed all traces of building foundations in relation to the Old Stone Building (Ruins). Trace evidence of footings corresponding with the 1994 plan of the building were identified during the 2015 inspection of the place. Similarly, evidence of building pads or footings were identified in the former locations of the Generator shed, Shed and Single Quarters (South) which suggests they comprise some remnant building rubble, with some possibility for below ground deposits. These areas are considered to be of moderate archaeological potential. If intact, any artefacts located in proximity of the sites of Old Stone Building (Ruins) and the Single Quarters (South) might be considered of exceptional significance for their potential to provide information regarding the early and continued occupation of Wallal Station. Internal room deposits might be expected to include artefacts associated with the use of the house, including small domestic items or fragments that may be lost underfoot. Such information might confirm the age of the stone building, and provide further information regarding its provenance.

The building pads located at the rear of the Homestead building may be associated with the 1922 Wallal Solar Expedition, or possibly the original 1910 Somerset homestead building.

It is also likely that archaeological artefacts and deposits might also be present in the vicinity of the residential buildings the Homestead and The Cottage (fmr Married Quarters). Archaeological deposits are often found around the doorways of dwellings as a result of the practice of sweeping internal house debris out of the doorway. These areas are considered to be of High archaeological potential.

111 P14197 Cattle Dip, Wallal Station (Shire of East Pilbara)

112 Lacy, op cit., p. 43

113 *Albany Advertiser*, 21 April 1926, "Tick Fever", Source: <http://trove.nla.gov.au/ndp/del/article/70659502>; *The Queenslander*, 6 July 1918, 'Cattle Tick in Western Australia', Source: <http://trove.nla.gov.au/ndp/del/article/22362707>, Accessed 17 February 2016.

114 Pers comm Geoff and Lynda Mills, 17 November 2015.

13.3 COMPARATIVE INFORMATION

Wallal Downs Station Group comprises a small complex of utilitarian sheds and farm buildings and residential buildings surrounded by open landscape. The structures date from the 1920s through to the present, with a number of later cyclone rated residential and operations structures built after the devastation of Cyclone Laurence in 2009. The place has historical significance associated with its status as a rare example of World War I soldier resettlement in the region. In addition it was the site of an important scientific expedition associated with testing an internationally significant physics theory in 1922.

A search of the Historic Heritage database for farming/pastoral properties in the Kimberley region returns 31 entries, including ten places which are on the Heritage Council's Assessment Program, or the State Register of Heritage Places. The following list includes the most relevant examples.

- P694 *Liveringa Homestead Group* (1904, 1988) (RHP): Federation Bungalow stone homestead and associated buildings, associated with the beginnings of settlement in the Kimberley district in 1881.
- P1174 *Ord River Station Homestead (fmr) & Cemetery* (1984, 1890) (RHP): homestead built of local stone and small graveyard comprising local identities.
- P11738 *Air Beef Abattoir and Aerodrome (ruins) and Glenroy Homestead Group* (RHP): includes the ruins of the Air Beef Abattoir (1949-51) and Aerodrome (1947), and the Glenroy Homestead Group (1949/50, c.1951).
- P3691 *Lillimilura Ruins and Grotto* (1887, 1898) (RHP): limestone ruins built as a homestead and later served intermittently as a police outpost.
- P697 *Fossil Downs Homestead Group* (1939, 1948) (RHP): two-storey homestead of concrete block construction.
- P2986 *Oscar Range Station* (1895) (Assessment Program): contains the ruins of a stone homestead

The above list demonstrates the frequent use of local stone in the construction of homestead and other buildings on farming properties, reflecting the ease and convenience of using local materials in regional areas. The use of local materials in construction is a common feature of Western Australian settlement at the time.

Soldier Settlement

The 1984 assessment of *Wallal Downs Station Group* noted that the place was rare due to its purchase by a group of 1914-1918 war veterans under the Returned Soldiers Settlement Scheme, which was not commonly applied to pastoral leases. The Returned, or Discharged, Soldier Settlement Scheme and the Group Settlement scheme were two facets of ex-servicemen settlement in Western Australia. The Group Settlement scheme operated primarily in south west Western Australia. The Returned Soldier Settlement Scheme did allow for settlement on pastoral properties although this was less common, with pastoral properties

comprising less than 5% of properties settled by ex-servicemen between 1919 and 1923.¹¹⁵

A search of the Historic Heritage database for places associated with the soldier resettlement scheme is difficult, as there is no specific category for this type of place and there are a range of different names for the phenomenon. Searches for places associated with soldier settlement sites also return entries associated with Group Settlement Schemes located in the south west regions, and later settlement schemes established for those returning from World War II. A search of the Historic Heritage for places associated with soldier settlement returns 36 entries, including seven places on the State Register of Heritage Places or Assessment Program. None, including the comparable examples listed below, are located in the Kimberley region.

- P3322 *Martinup*, Broomehill (RHP): the place was among the earliest properties taken up and developed by European settlers in the Broomehill-Gnowangerup district. Following World War I, it was among the established estates the State purchased for sub-division into farms for the Soldier Settlement Scheme.
- P1743 *Tambrey Station Homestead Ruins*, Roebourne (1885–1973): comprises the ruins of a dwelling and associated outbuildings, which was incorporated into the adjacent Collawanyah Station, which is the only known example of a World War I Soldier Settlement station in the district, and was run by a team of three, Parsons, Jones and McMullan.
- P4877 Cyprien, Dangin (1925): a fine example of a stone house of the period and significant as an example of a World War I soldier settlement on the Dangin estate.
- P5124 Yoting Springs, Quairading (1911): the property and original dwelling was purchased by the Government after World War I, and subsequently allocated as a Soldier settlement property.
- P5215 Edward Gifford Parker's Property – Site, Quairading (1861): Mt Stirling was the easternmost pastoral lease in Western Australia in 1861. The 1860s dwelling was acquired for post-World War I soldier settlement.
- P10344 *Edenside Cottage*, Bickley: 1924 residence home of a returned soldier who acquired land under the Piesse Brook Soldier Settlement Scheme after WW1.
- P12092 Soldier Settler Homes, Mandogalup: a (discontinuous) row of three single-storey residences on the west side of Mandogalup Road, established as part of the post-World War I soldier settlement scheme in the Peel Estate.
- P15188 Trigwell Soldier Settler Estate, Boyanup: Established in 1893, Trigwell Estate was sold to the government and divided into 9 blocks to be offered to ex soldiers at £2 per acre.
- P12874 *Glentromie Farm Group*, Victoria Plains (RHP): a substantial mid-nineteenth century pastoral station established in 1850. Following World

¹¹⁵ *Western Mail*, 23 August 1923, 'Soldier Settlement', Source: <http://trove.nla.gov.au/ndp/del/article/44763011>, Accessed 12 February 2016.

War II, a portion of the station was subdivided and reallocated to the War Service Land Settlement Scheme, and purchased by the Commonwealth government.

- P16654 *Watermark Kilns, Northcliffe* (RHP): a collection of tobacco farm buildings, including sheds, single and twin kilns adapted for holiday accommodation, worker's quarters (fmr), and a framed and asbestos clad soldier settler's homestead (fmr). The place was first developed as part of the Group Settlement Scheme in the World War II period and provides evidence of Group Settlement land clearing and farming.
- P4884 Nungunia (Sunrise), North Quairading: the property and original dwelling was purchased by the Government after World War II, and allocated under the Soldier Settlement Scheme.

The above examples indicate that there are other examples of pre-existing farms and homesteads that were incorporated into soldier settlement ventures in Western Australia. However *Wallal Downs Station Group* does appear unusual as a large pastoral property acquired by a syndicate in the Kimberley Region.

The WWI soldier settlement scheme was also widely considered a failure, which greatly influenced the planning and organisation of later attempts following World War II. The successful long term management of *Wallal Downs Station Group* by the Lacy brothers and their partners also appears to have been a rare occurrence in the scheme.

Wallal Solar Expedition, 1922

In August and September 1922, several expeditions were organised across the world seeking to measure the deflection of starlight by the sun during the total solar eclipse of 21 September 1922, to test Albert Einstein's General Theory of Relativity. This eclipse passed across Australia and *Wallal Downs Station Group*, was ideally located along the computed path of the Moon's shadow. Other Australian observation points were established at Goondiwindi, Queensland and Cordillo Downs in north eastern South Australia.¹¹⁶

The expedition to *Wallal Downs Station Group* was the largest of those undertaken in Australia, including representatives from the USA, Australia, India, Canada, New Zealand and England.¹¹⁷

A search of the Historic Heritage database for places associated with the eclipse is difficult, as there is no specific category for this type of place. Combined keyword searches for places associated with astronomy returns only two relevant examples

- P2240 *Old Observatory*, (RHP) West Perth is a unique example of a building developed especially for use as an Observatory. Constructed in 1896, the building was designed by George Temple Poole, and is historically significant with its links to the West Perth area, Parliament House, Kings Park and the recording of astronomical and meteorological data from the

¹¹⁶ Burman & Jeffery, op cit., p.312-313

¹¹⁷ *ABC Kimberley* (Mills, Vanessa), 30 July 2015, 'Einstein's Theory of Relativity and how the Nor' West's 80 Mile Beach has a place in scientific history' Source: <http://www.abc.net.au/local/stories/2015/07/30/4284056.htm>, Accessed 17 December 2015; Robins op cit., p. 3.

early 1900s to the 1960s. The Perth team who attended the Wallal eclipse were based at the Perth Observatory.

- P10551 *Perth Observatory* (RHP), Bickley comprises a complex of buildings constructed after 1964 to accommodate the equipment and functions of the Perth Observatory. The place is the sole remaining State astronomical observatory in Australia and is one of the most important scientific research and educational institutions in the State, having an ongoing role of great significance in international astronomical research and expeditions (including those like the 1922 expedition).

Wallal Downs Station Group is a rare example of a place associated with astronomical observations in the field in Western Australia. Further, the results of the observations undertaken at the site had far reaching consequences for the scientific community.

Refugees

During World War II, Dutch refugees from Batavia, in Java landed at Wallal Station, while fleeing Japanese attack. The two Dornier flying boats narrowly avoided the same fate as the rest of the fleet that landed in Broome, who were bombed by the Japanese. The flying boat refugees, and another group of refugees that arrived the following days in a military plane, were cared for by the family and staff of Wallal Downs before being evacuated.

A combined keyword search for places on the Historic Heritage database associated with refugees during World War II returns 24 entries. This group includes migrant camps, airfields, and residences. Only one place was located in the north-west region (Kimberley and Pilbara regions).

P4859 *Flying Boat Wreckage Site* (RHP) consists of two groups of fifteen World War Two Flying Boat wrecks lying on the mudflats and in the waters of Roebuck Bay, Broome. Bound for Perth with the last of nearly 8000 refugees fleeing the Japanese advance into the Netherlands East Indies (NEI), the aircraft were delayed in their take-off by a combination of low tide and the need to refuel. Caught unprepared, they were subsequently destroyed by Japanese warplanes.

Wallal Downs Station Group is associated with this event, but reflects a different aspect, that of the surviving refugees and the fear and isolation felt by pastoralists along the north-western coast of Western Australia, before and after the Japanese attack.

Associations

A search of the Historic Heritage database for places associated with Harley and or Edward Lacy (or Lacey) or Reg King return no relevant entries.

13. 4 KEY REFERENCES

13. 5 FURTHER RESEARCH
