

Appendix E - Heritage Advice

Ucharonidge Station Number 1 Bore and 1949 Comet Windmill

Background Historical Information



Prepared by the Heritage Branch, April 2010

If you require further information about this background historical information, please contact:

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Disclaimer:

The material presented in this report is believed to be correct at the time of writing and is provided for information purposes only.

Cover Photo: Ucharonidge No 1. Bore, Comet Windmill and Turkey Nest
(Source: Robin Gregory, Heritage Conservation Services, Alice Springs)

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1. Introduction

This background historical information was compiled in January 2007 as part of a heritage assessment report prepared on the number 1 bore and comet windmill located on Ucharonidge Station for the Heritage Advisory Council, as per the requirements under the *Heritage Conservation Act*.

2. Location

The number 1 bore and Comet windmill on Ucharonidge Station are located on NT Portion 307, Perpetual Pastoral Lease 1072. Ucharonidge Station is located on the Barkly Tableland and situated 19 kilometres south of Elliott and 77 kilometres east on the Barkly Stock Route (see map 1).

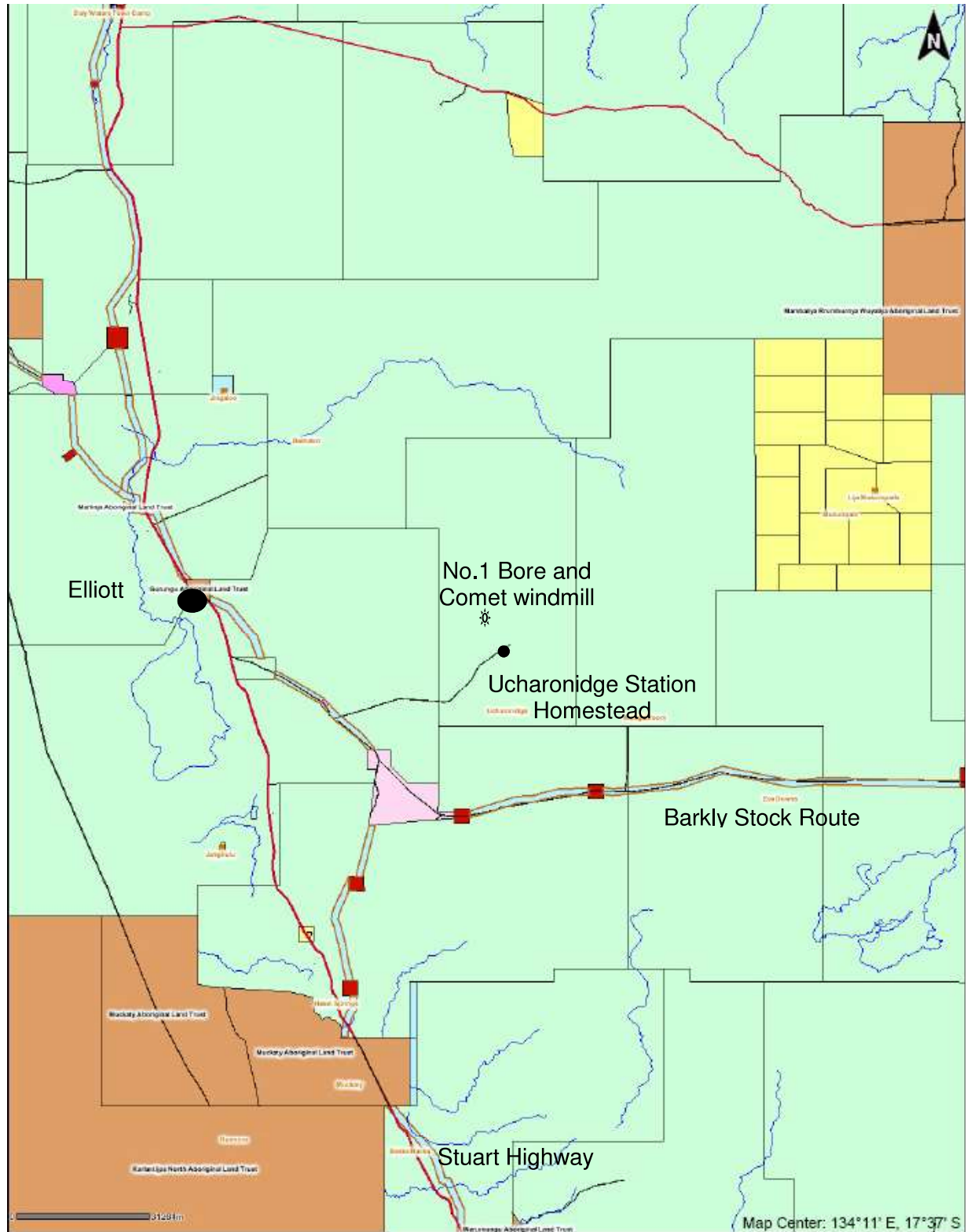
3. Historical Overview

NT Portion 307, Pastoral Lease 468, was created out of a large area of unoccupied vacant land and advertised for leasing in the Commonwealth Gazette on 4 December 1947. The land would be allocated via the ballot system and offered to the first person drawn. Five people applied for the land and the ballot was won by Paul and Florence Ann Beebe, graziers from Woorabinda in Queensland. The annual rental for the 958 square mile (2,481 square kilometre) property was set at three shillings and sixpence per square mile until 13 June 1958 (Department of Planning & Infrastructure).

The agreement, which was signed on 1 July 1948, stated that within the first five years Beebe must stock the property with five head of cattle per square mile and at the end of ten years there must be ten head per square mile. Also within the first five years the owner must make improvements to the property valued at £3 per square mile. By the end of ten years the improvements had to total £6 per square mile and the property had to be securely fenced (DPI Land Information).

The majority of Ucharonidge Station consists of open downs covered with Mitchell and Flinders grass with the remainder being thick Lancewood scrub fringed by desert with Spinifex and Turpentine grass. It was estimated that the country could carry approximately 10,000 head of cattle (CoA Gazette No. 233).

Paul Beebe's family emigrated to Australia from Oregon in the United States early last century and settled near the Burnett River in Queensland. The family also had property in the Dawson Valley near Rockhampton. After securing Ucharonidge Station Paul moved his family to the Northern Territory after the 1949 wet season and started the difficult job of establishing and developing the cattle station. (Parliamentary Record No. 29).



Map 1. Location of Ucharonidge Station, NT Portion 307, Perpetual Pastoral Lease 1072.

According to Abbott, Administrator of the Northern Territory 1937-1946, even new settlers with good financial backing faced a tremendous task:

The Northern Territory Administration officers considered that the expenditure over the first two years would be £15,000, and this appears to be close to the minimum (1950, p: 182).

Abbott was a strong supporter of the recommendations made in the Payne Committee's Report, which had earlier looked into the possibilities of further land development in the Northern Territory. In numerous annual reports Abbott strongly urged the Commonwealth Government to establish a fund to help the Territory's primary producers establish and develop their properties. Abbott suggested that financial assistance should be provided for stockyards, fencing, water supplies and buildings:

And also the establishment of at least two fully equipped bores upon each block, the cost to be repaid over a period of twenty years. This last recommendation was approved, though Treasury hoped that I would keep the proportion of "dud" bores as low as possible (Abbott, 1950, p:185).

Some idea of the costs faced by pastoralists were outlined in a survey compiled in 1952. It suggested that the cost for fencing was £150 per mile, a new bore and pumping equipment £3,000, a stockyard with dipping facilities £2,000 to £3,000 and the construction of an earth dam (turkey nest) £2,000 to £4,000 (Longmans Australian Geographies, 1961).

Phelts suggests that since its commencement, the Territory's pastoral industry had been constrained by water shortages. The constraints included "limiting the carrying capacity of stations, affecting the movement and transportation of stock, contributing to disease, forcing capital and labour into stock agistment and water procurement" (2006, p:91).

Many of the Territory's early pastoral properties relied heavily on natural waterways and hand dug wells for watering stock. Obtaining water from wells was both time consuming and laborious as it had to be raised by either a hand operated windlass or a whip system pulled by a camel or horse and then transferred to troughs. The reliance on well water limited stock numbers and properties were not being used to their full potential. In times of drought any stock strong enough for the journey would be driven to the coastal regions until conditions improved. Some relief came with the introduction of transportable steam engines driving pumps, as they had the capacity to supply large volumes of water to large holding tanks and dams.

Although the steam powered pumps were an improvement the financial outlay and the employment of men (pumpers) to keep them operational could only be met by the larger pastoral companies. Millar states that "if the bores they serviced were heavily loaded with stock, the bore had to pump 24 hours a day and two or three casual pumpers were employed to tend each bore" (1984, p:59-60). The introduction of reliable wind powered pumps soon replaced the

steam engines.

In 1890 the first sub-artesian bore in the Barkly Tableland region was put down on Rocklands Station in Queensland.

Graziers welcomed this new development, which offered them freedom from droughts, the capacity to more efficiently stock and graze their properties (McLaren & Cooper 2001, p:17).

With an average seasonal rainfall of around 400mm, and little surface water, the success of Ucharonidge Station depended on sub-artesian bore water and wind powered pumps. The Beebes could not rely on using the natural Ucharonidge Waterhole as this would become dry in the latter parts of the year.

After the Beebe's arrival they found out that the Department of Works and Housing had already issued a requisition for the installation of two bores and pumping equipment under the twenty year payback scheme. Paul Beebe advised the Administrator of the Northern Territory that he intended to drill his own bores and had already purchased a new truck to transport a boring plant to Ucharonidge Station. Paul Beebe's sons, Owen, Roy and Mick submitted tenders to the government for the drilling of the first two bores on their property but were unsuccessful. There must have been some further negotiations between the two parties as approval was eventually given (Parliamentary Record No. 29 & Pastoral Homestead Lease No. 5).

The boring process relied heavily on water to lubricate the head of the punch and rods, and Paul and his sons had to cart water 96 kilometres to pour down the hole. For some unknown reason they only put down the No. 1 Bore and later agreed to take advantage of the government's assistance scheme for a further two bores.

As they had not yet completed a homestead, and the road to the station became impassable, the family stayed at Elliott during the next wet season. In 1951 they were ready to start stocking the property and purchased 1,500 head of cattle from Tom Quilty. Owen, Roy and Mick overlanded the cattle from Springvale in Western Australia via Flora Valley, Gordon Downs, Wallamunga, Inverway down the Victoria River to Wave Hill, past Top Springs and down the Murrniji Track to Ucharonidge. (Parliamentary Record No. 29 & Pastoral Homestead Lease No. 5)

It was well into the dry season when they arrived at Ucharonidge, and as there was no paddock fencing, they had to contain the cattle at No. 1 Bore for several days to settle them at the watering point. From this small beginning, and years of dedicated hard work, the Beebe's herd would grow to 7,000 by 1963.

The family acquired earthmoving equipment and commenced installing earth tanks (turkey nests) adjacent to their bores. Turkey nests were an essential part of the stations infrastructure and are still widely used on many pastoral

properties. They are designed to store large volumes of water ready for use when the pumps are either not operating through the lack of wind or during maintenance procedures.

The Beebes supplemented their income by contracting their services and equipment to other property owners and built dams, drilled bores and erected windmills. All the money made from these ventures went to finance further developments on Ucharonidge. Roy and Mick came to an agreement with their parents and took over ownership of the station, and in 1963 they sold all but 1,500 head of cattle and the proceeds of the sale went to pay out all family interests in the property (Parliamentary Record No. 29 & Pastoral Homestead Lease No. 5).



Plate 1. Erecting the Comet Windmill at
No.1 Bore, Ucharonidge Station
(Source: Coral Beebe).



Plate 2. 'D' pattern windmill nearing
completion, Ucharonidge Station.
(source: Coral Beebe)

In order to upgrade the quality of their stock in 1964 they introduced Droughtmaster bulls and later in 1966 Braham bulls. Roy and Mick Beebe are credited for introducing Braham cattle to the Barkly Tableland and by the mid 1970s their stock numbered 25,000. The Beebe's became successful pastoralists and soon expanded their interests by purchasing the Murrarji, Buchanan, Kalala and Tanumbirini Stations, thus controlling 70,000 head of cattle (Parliamentary Record No. 29 & Pastoral Homestead Lease No. 5). Although Roy and Mick Beebe have now passed away, Ucharonidge is still in family hands and is considered a model station with a well designed

homestead precinct, over 300 kilometres of fencing, 19 equipped bores with turkey nests and pumping equipment, 5 sets of steel drafting yards and 3 sets of post and rail yards (Parliamentary Record No. 29).

No.1 Bore and Comet Windmill

No. 1 Bore and Comet Windmill is located approximately 24 kilometres northwest of the station homestead and was the first sub-artesian bore and windmill installed on Ucharonidge. The original bore drilled by the Beebe family in 1949 is no longer in use and a new bore has been developed adjacent to the original. The original bore, registration number 1622, is listed as being 101 metres deep and supplied 1.54 litres per second. In 1949 the Beebs installed a 24 foot (7.3 metre) 'D' pattern Comet Windmill to pump water from the bore to a 1.5 million litre turkey nest holding dam (NTA Water Resources).

The first Comet Windmill was produced by the Sidney Williams and Company in 1910 to meet the ever increasing demand on the sub-artesian water supply. Because a majority of the mills would be located in remote regions the company's aim was to manufacture a mill that could operate efficiently with minimal maintenance and be easily repaired by the owners. The company produced a uniquely designed, direct acting mill, that could have fans ranging from 8 foot (2.4 metres) to 35 foot (10.6 metres) in diameter (Troppo Architects, 1992).

The mill heads were made of cast iron and contained a minimum of working parts and one complete revolution of the fan would produce one stroke of the attached water pump. With no complex gearing, less moving parts and a self contained oiling system, the mills were extremely reliable. The company produced two patterns, 'D' and 'C' models and these could be positioned on variable height, prefabricated galvanised iron towers. The mills remained in production by Sidney Williams until 1988 and according to Troppo Architects the company also made a selection of water handling equipment including "pumps, hoses and valves, jetting equipment, tanks and troughs" (Troppo Architects, 1992 : section 5).

Today the windmills are manufactured by Comet Windmills Australia Pty Ltd who still use the original design and model types (Comet Windmill Australia).

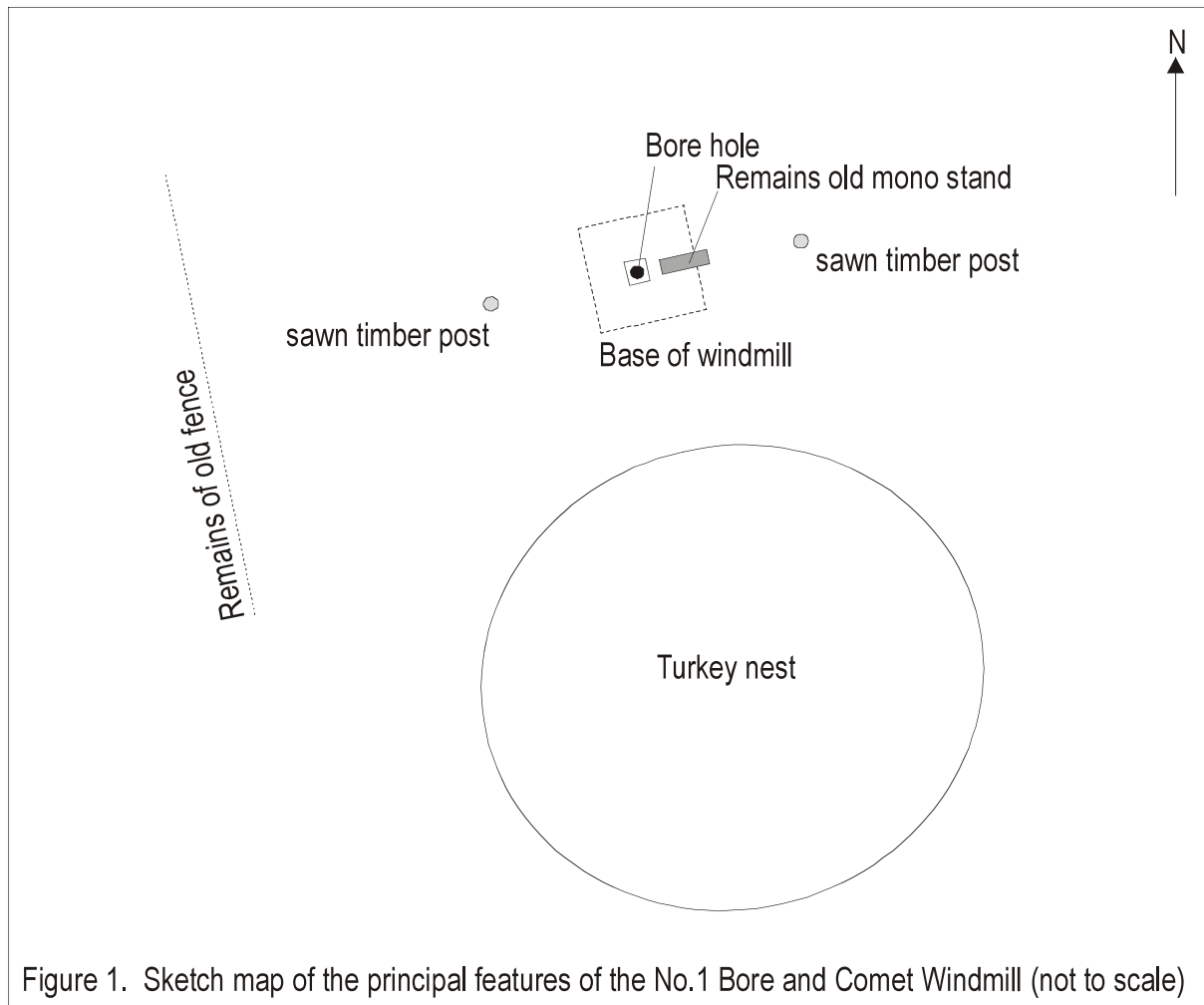


Figure 1. Sketch map of the principal features of the No.1 Bore and Comet Windmill (not to scale)

(Source: Robin Gregory, Heritage Conservation Services, Alice springs)



Plate 3. Upper section of the tower showing the windmill head and fan. Note the tail has been positioned to stop the fan moving into the wind.

(Source: Robin Gregory, Heritage Conservation Services, Alice springs)

Plate 4. Lower section of the tower with bore hole directly in the centre.

(Source: Robin Gregory, Heritage Conservation Services, Alice springs)



Plate 5. Composite photo – turkey nest at No. 1 Bore and Windmill, viewed from the north-north-west.

(Source: Robin Gregory, Heritage Conservation Services, Alice springs)

4. Site Description

Although they are no longer used for their original purpose the No. 1 Bore and 'D' pattern Comet Windmill on Ucharonidge Station are a prominent feature on this part of the Barkly Tableland. For its age the windmill is in a fair condition. The turkey nest (earth dam) is a vital part of the station's water supply infrastructure. The fabric and structure of the No.1 Bore, Comet Windmill and Turkey Nest on Ucharonidge Station have not changed since they were installed in 1949 and the turkey nest is still used for its original purpose.

Bonney Well, located 88km south of Tennant Creek, is the only place listed on the NT Heritage Register to-date that is similar to the No.1 Bore, Comet Windmill and Turkey Nest on Ucharonidge Station. The only difference between them is that Bonney Well has an additional stone dump and well which was later replaced by a bore.

5. References

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Seventh Assembly Session First Session 26/11/96 Parliamentary Record No. 29.

From: Dianne Bensley <Dianne.Bensley@nt.gov.au>
Sent: Tuesday, 17 November 2020 8:58 AM
To: PastoralAssessment DEPWS <PastoralAssessment.DEPWS@nt.gov.au>
Subject: RE: Request for Comment – Pastoral Land Clearing Application, NTP 307 Ucharonidge Station – Due Friday 11th December 2020

Good morning,

I have reviewed the land clearing application for NT Portion 307 Ucharonidge Station and can confirm that there are no heritage or archaeological issues associated with it. The application makes reference to the declared heritage place known as the No.1 Bore and Comet Windmill within the property, which will not be impacted at all by the proposed vegetation clearing as it is enclosed near the homestead itself.

No further comments from Heritage Branch.

Kind regards,

Di

Dianne Bensley

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