

Northern Territory

Department of Primary Industry and Fisheries

THE STORY
OF
BERRIMAH FARM

Graham Calley
1997

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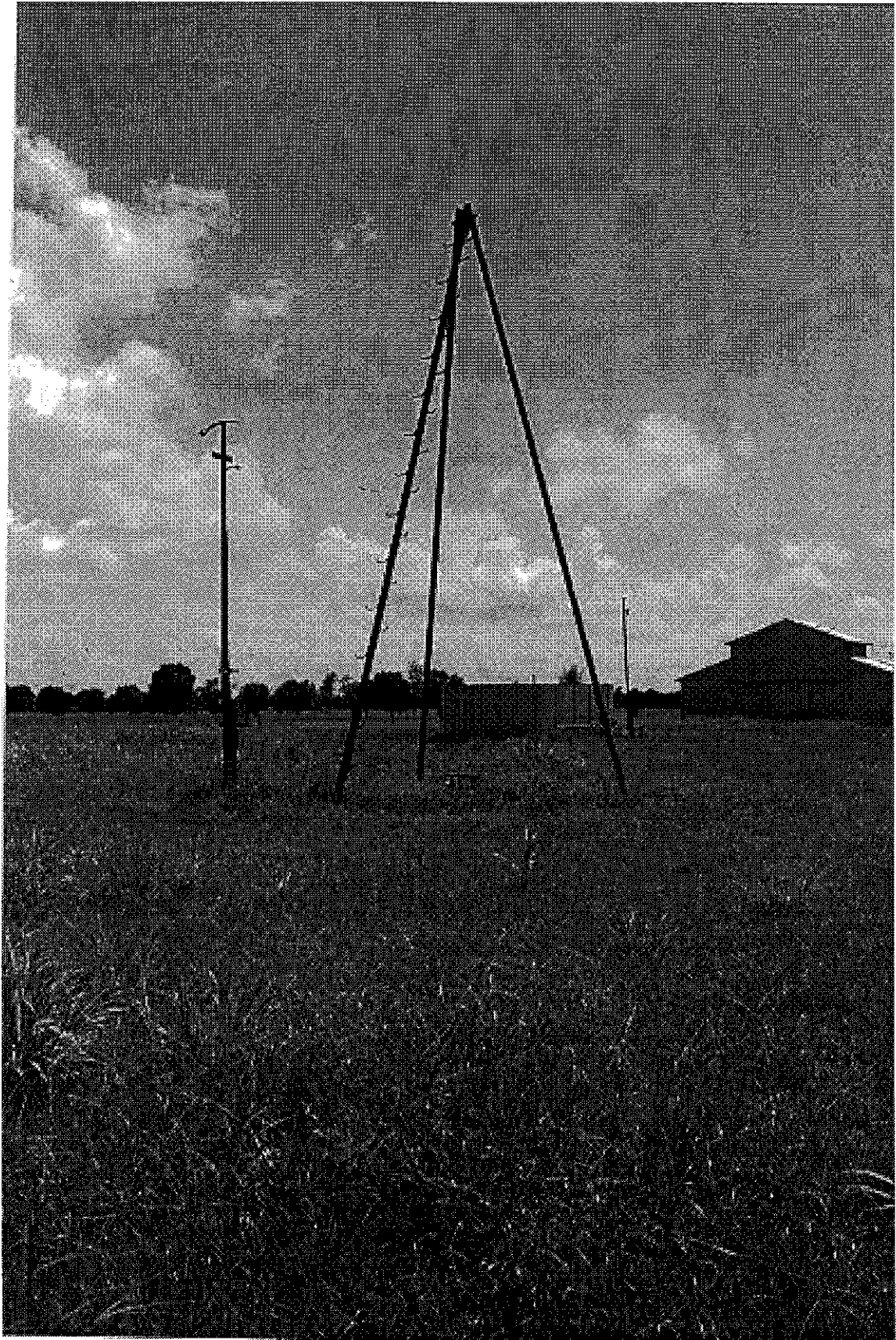
PREFACE

In the years that I have worked on Berrimah Farm I have never failed to appreciate it as an attractive and pleasant environment. I have also found great pleasure in the company of the people with whom I have worked.

This book is dedicated, therefore, to Berrimah Farm and to all those who work on it or have done so in the past. I hope this account of the Farm may give to others some of the interest and enjoyment that I have had in researching the story.



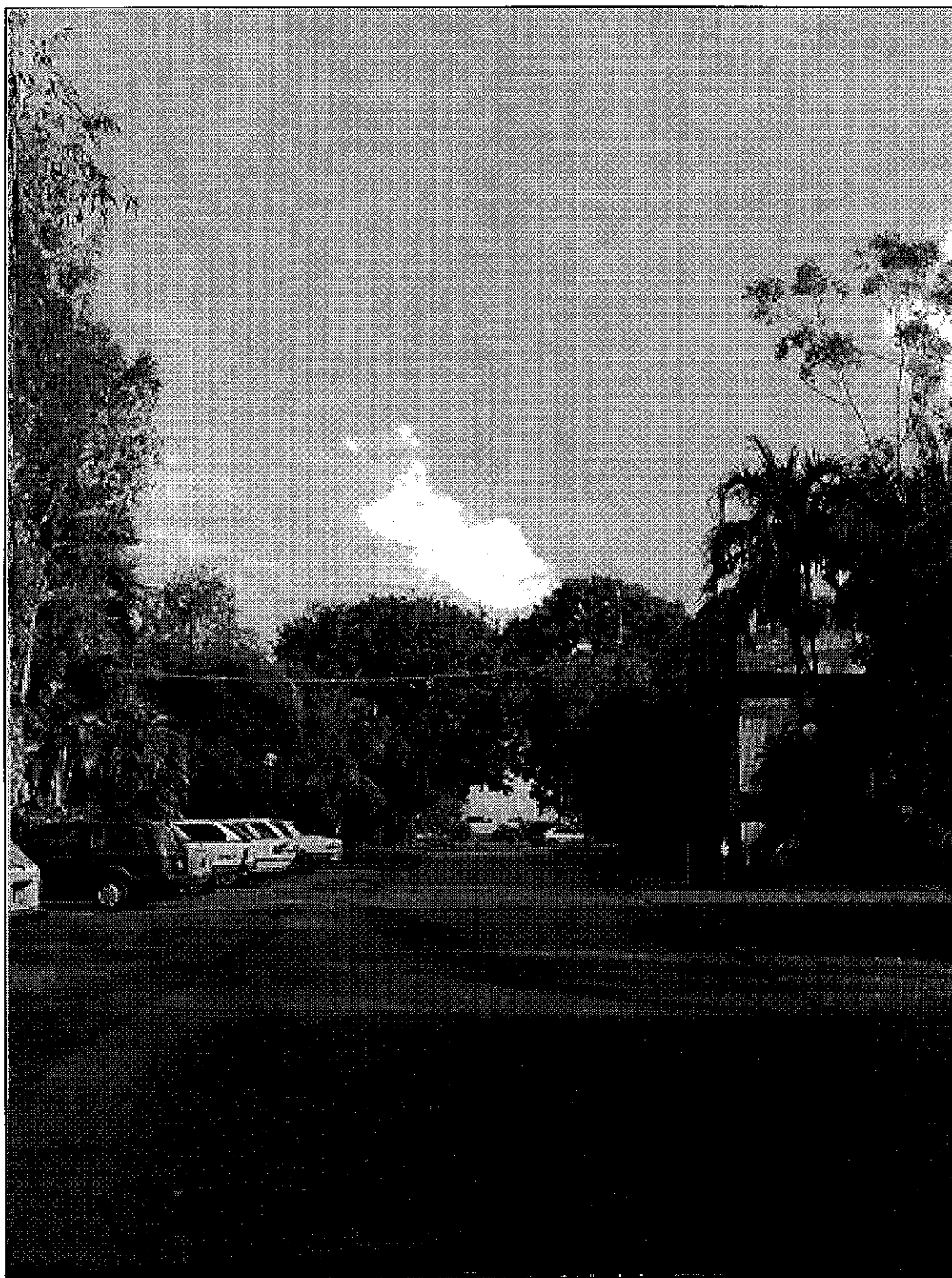
This sweeping view from the site of the former Farm house helps to make Berrimah Farm a most attractive headquarters for the Department of Primary Industry and Fisheries



Bore 1720 ,the only one of the Farm's many bores to work well (see page 22)

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Ross Place is named for Stock Inspector Noel Ross (see page 47)

INTRODUCTION

Berrimah Farm is one of the research farms of the Department of Primary Industry and Fisheries, Northern Territory and it also houses the administrative centre of the Department and all its laboratories other than those of Fisheries. It is located some fifteen kilometres east of central Darwin, beside the Stuart Highway.

This account of the history of the Farm has been assembled from an examination of old files, diaries and reports and from extensive questioning of people who have worked on the Farm or have had dealings with it. The files that have been examined are held by DPIF Records Management, the Northern Territory Archives Service and Australian Archives, in Darwin and in Canberra. Annual reports of the Department and its predecessors have been consulted as have Farm diaries and the reports of various branches of the Department and of past and present employees.

Also consulted for the war time history of the Farm have been the archives of the Australian War Memorial, Canberra; the curators of the the RAAF Museum, Point Cook, Victoria; RAAF Historical and Archives Service, Canberra; and Information and Historical Records, Department of Defence, Canberra. Following an advertisement in an exservicemen's newspaper a number of men who were associated with RAAF activity in the Berrimah area during the War made contact with valuable information.

For the Aboriginal Compound phase I have consulted files from the sources above and officers of the then Native Affairs Department.

The oral history has suffered, as might be expected, from some lack of precision, particularly as to dates and the sequence of events. I have endeavoured to ensure accuracy by cross checking between informants and by referring incidents to the file record but such records are themselves, in some cases, very inadequate. Some of the incidents described are from the oral record of a single person, without corroborative confirmation and a few of these may be, to an extent, apocryphal. I have considered what was probable in recording some of the more colourful tales that were told to me.

It is apparent that a great deal of valuable research in a variety of plant and animal fields has been undertaken on Berrimah Farm over the forty five years since the first small beginnings were made. I have not recorded this in any detail because such is not the object of this study. I have only touched on aspects which appear to me to stand out for their particular importance or colour or quaintness.

I have mentioned the names of some but not all people who have been part of the Farm's story. There has been no broad criterium for selection, only that a name seemed appropriate in the context. It was suggested to me that I should have a section mentioning all those who have worked on the Farm but I did not pursue this path because the number of people is large and there is always the danger of leaving

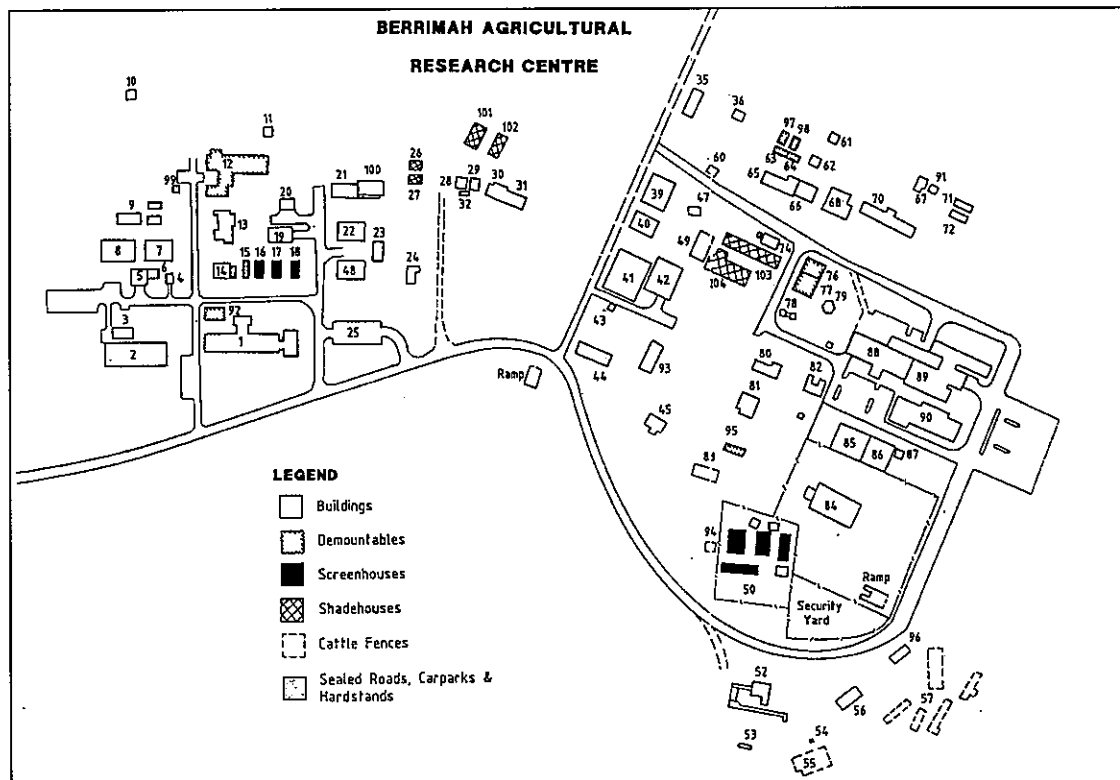
someone out. The only persons whose stories I have recorded outside the main text are those whose names have been perpetuated by roads, buildings and other features on the Farm.

I have endeavoured to arrange this account in a chronological manner by dealing with each decade separately. In some cases, however, it seemed more satisfactory, for the sake of clarity, to follow a particular farm feature right through its history and this I have done. This has led to some repetition, not, I hope, too much.

In recording the story of individual buildings I have referred to them by

their numbers as appearing on the map prepared for the Department in 1988 by Gutteridge, Haskins and Davey as part of a report. This map, in modified form, is reproduced below for reference.

I have met great enthusiasm and interest for this project from all those I have approached and I trust that the finished account does justice to their contributions and is reward for the time they have given me. I am very grateful to all those who delved back into their memories to answer my many questions. I have listed all informants together with other references.

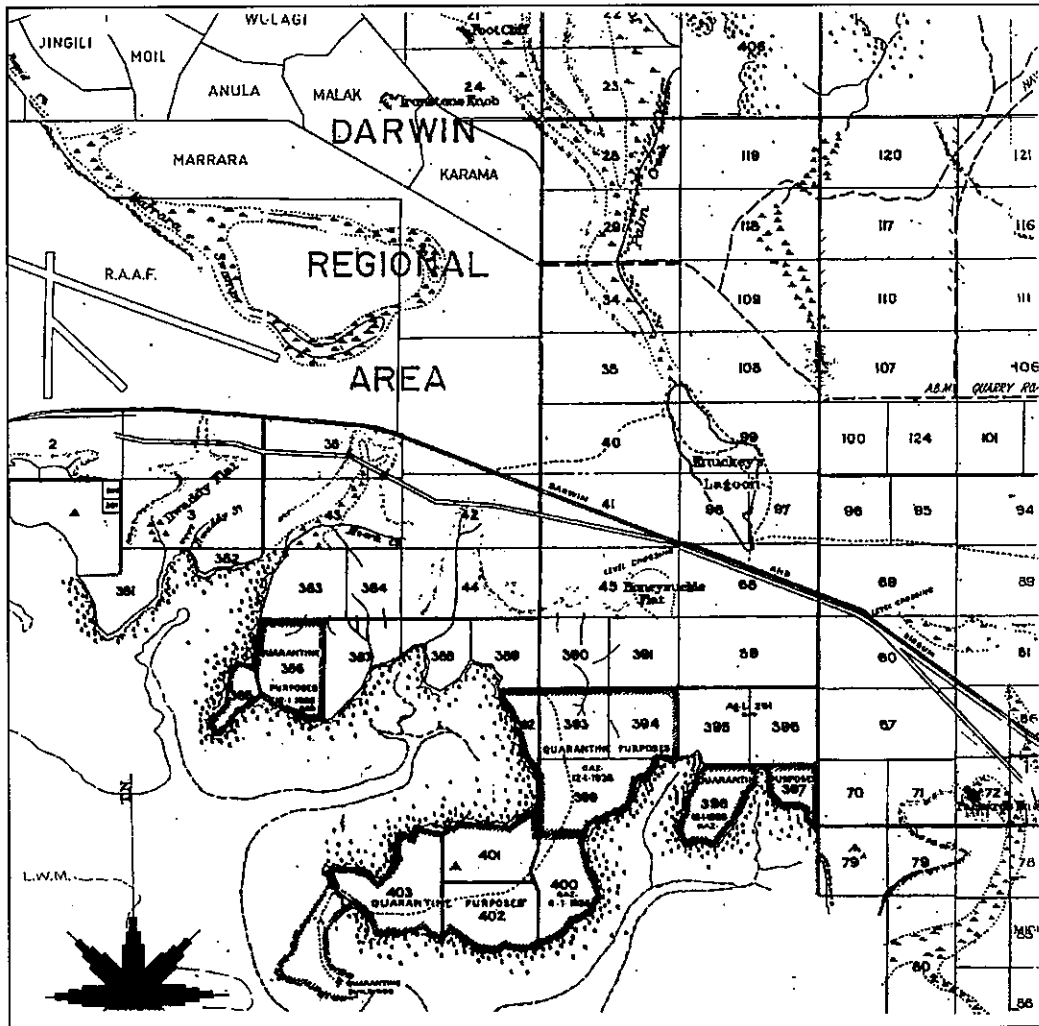


Building numbers appearing throughout the text refer to those on this map.

THE INITIAL SURVEY

The Berrimah area was surveyed, along with most of the rest of the present Darwin area, in 1869 under the direction of William Goyder. Goyder had been commissioned by the South Australian Government to lay out the town of Palmerston, later to become Darwin (from its inception Palmerston was commonly known as Port Darwin and, yielding to this popular usage, the name Darwin was adopted officially on 3 March 1911). Berrimah fell, as did all of the town, in the Hundred of Bagot, County of Palmerston.

The area now occupied by Berrimah Farm was divided, in the original survey, into three Sections: 45, 390 and 391. Such Sections of land in the vicinity of the town were made available as land grants to private individuals and Sections 45 and 390 were given respectively to Thomas Waterhouse of Adelaide on 12/10/1871 and to Florenz August Carl Bleeser, Assistant Postmaster, Darwin on 13/5/1919¹. The third Section, 391, was never granted.



This part of a 1937 map of Darwin Regional Area shows sections 45, 390 and 391 which were later combined to form Berrimah Farm. The Stuart Highway was not completed into Darwin and Berrimah Road is marked as only a track.²

Section 45 was transferred in 1886 to another member of the Waterhouse family and in 1913 to Giles Cooper. In 1941 it was transferred by Ruben Cooper to William Allcorn an Englishman who had been in Australia since just after the First World War.

Florenz Bleeser was, apart from his postal duties, a keen amateur botanist. He assembled a major collection of Territory botanical specimens, with a duplicate specimen going in every case to Botanischer Garten und Botanisches Museum, Berlin, and the names of the Territory bloodwood, *Eucalyptus bleeseri* and some other species, commemorate his work as a taxonomist. He had other land and a hut on Bleeser's Creek west of Berrimah Farm and accounts tell that, after the Post Office in Darwin closed at mid day on Saturday he would walk the fifteen kilometres to his farm, work on it for the remainder of the weekend and return in time for the opening of the post office on Monday morning. He was evacuated south in 1941 after transferring Section 390 to a John George Luff and died shortly after learning that his collection of specimens, gathered over a lifetime, had been thrown out and destroyed when his house was looted during the chaos that followed the first bombing of Darwin. A query in 1996 to the Botanischer Garten und Botanisches Museum yielded the information that all of Florenz Bleeser's specimens and correspondence were destroyed in the bombing and capture of Berlin during the Second World War².

The three Sections are shown on a map drawn by the Lands and Survey Branch of the Northern Territory Administration in 1937 (page 3) and it is of interest to note that the road out of Darwin was then the Fred's Pass Road, the Stuart

Highway having been surveyed only to a point some five kilometres south east of Berrimah crossroads (and not gazetted as the 'Stuart Highway' until 1954). Fred's Pass Road did not follow the path of the present Stuart Highway from Berrimah to Darwin but ran a crooked course some distance further south. When war came this road was not adequate as an access road for Darwin and the Stuart Highway was extended into Darwin alongside the railway track, where it runs today, as a hurried war time measure and without the benefit of survey.

What is now Berrimah Road was then a track from the Freds Pass Road to a quarantine station which had been present on East Arm since before the turn of the century.

There is no indication that any of the lessees made any use of their blocks and prior to the Second World War there was no development in the Berrimah area. The country was uncleared and was covered by light forest and scrubland with pockets of denser rainforest. The map on page 3 gives the name 'Honeysuckle Flat' to what is now the northern part of the Farm but what plant, if any, this refers to is not known. There is a native species called cape honeysuckle (*Tecoma* sp.) whose range includes the north of Australia.

BERRIMAH AND WORLD WAR II

In 1937 a survey was undertaken for an RAAF aerodrome in Darwin but the earliest reference to development in the area of Berrimah appears in the Field Book Register of the Lands and Survey Branch.³ The Register records the work of surveyor R.D.Tidy in March 1939 and lists, among other activities in that month, a survey in the Hundred of Bagot:

'SURVEY WESTERN HALF OF SECT 69 FOR DEFENCE PURPOSES. CONTOUR AND DETAIL.'

Section 69, as depicted on maps of that time, is east of the present Berrimah Farm but subsequent defence activity in the area of the Farm suggests that the survey work probably encompassed the Farm area. Another entry in the Field Book Register of the work of surveyor, G.R.L. Rimington, records that, on January 26 1940 he had surveyed Section 60, immediately south of Section 69, for the 'LAYOUT OF RAAF MASTS'.

This was, of course, the period immediately preceding the entry of Japan into the Second World War and Australia was examining its northern defences. Other entries in the Field Book Register over the following year describe considerable survey work for the Army, Navy and Airforce, including the survey of Larrakeyah Barracks, Coonawarra and the Naval Reserve, an explosives area and expansion of Ross Smith Airport (the old airport, now Parap).

In 1941 a 1200 bed military hospital, Australian General Hospital (AGH) 119 was built on what is now Berrimah

Road and the name 'Berrimah' appears first when the Military Board, chaired by Brigadier Steele, adopted it as the name for the new hospital. The word means "place where sick man gets better" in the language of the Mulluk Mulluk people⁴. It was subsequently adopted as the name of the district but was not gazetted as such for a further forty years, until 4 April 1984, although Berrimah Road had been gazetted in September 1952. After the first bombing raid on Darwin the medical staff and patients were moved to a safer location at Adelaide River.

The first attack on Darwin by Japanese planes occurred on 19 February 1942 and bombing over the Top End continued intermittently for the next two and a half years. In response to this an air defence network of observation posts, radar stations, anti aircraft batteries and fighter airstrips was established.

To control the activities of this widely scattered network a control centre was required to collect information about approaching enemy planes from the observation posts and radar stations, collate and assess it and order the appropriate response. Six days after the first raid, on 25 February, Number 5 Fighter Sector Headquarters was formed as a separate air force unit within the North Western Command Area. The name was changed in October 1943 to No. 105 Fighter Sector Headquarters and later again, in 1944, to Number 105 Fighter Sector Control Unit.⁵ This unit, under its various names, was responsible for the air defence of northern Australia and controlled activity from all the airstrips

which were hastily established in the Top End. The headquarters was established in the buildings of Berrimah Hospital (AGH 119) after they were vacated by the patients and medical staff in early March 1942.

The heart of 105 Fighter Sector Control Unit was its Operations Room and this vital centre was located about one kilometre east of Berrimah Hospital in what is now Berrimah Farm. From 1942 to 1944, while Japanese bombing was active, the operations room was functioning around the clock. Personnel staffing it were initially housed close to the hospital and they walked to the Operations Room along a winding foottrack which roughly follows the route of the present Strath Road and Curteis Road. The track is just visible in a 1944 aerial photograph of the area taken from 10 000 feet.

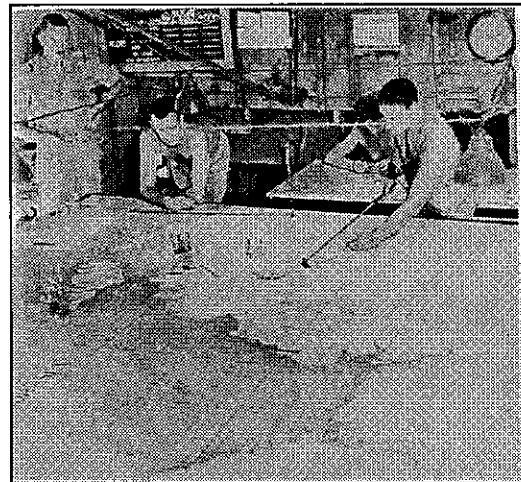
I can find no record of the actual building of the room nor any documentation of its design or location. We must rely for a description on the memories of men who were there.

The Operations Room was of wooden frame construction with some of the frame being of unfinished 'bush' timbers. It had a concrete floor about half a metre below ground level with a rampart of sand bags rising around the sides and steps leading down into it. The rampart was held back from the edge of the pit by logs.

It was located in uncleared country and men who were there record that they were less concerned by Japanese bombs than by the danger of fire from a dropped cigarette.

Initially the radio aerials were strung through surrounding trees and a memorandum of 27/4/43 suggests that wireless masts should be built. All structures were heavily camouflaged and not visible in the 1944 photograph.

The illustration below is probably of the interior of the Operations Room. It was recognised by some of the men contacted but not by others, depending perhaps on the period of their stay at Berrimah. The plotting table map is of the north coast of the Territory, however, and the reference to Bachelor in the wall notice places it in the Top End where there was only one such facility.

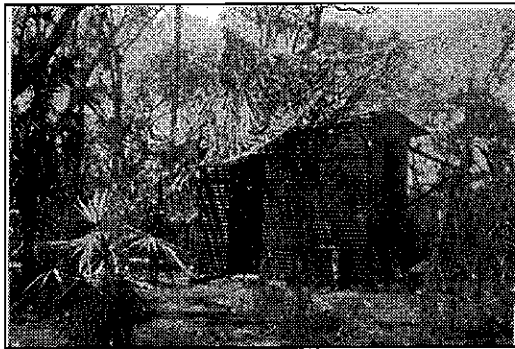


This photo is probably of the interior of the Berrimah Operations Room ⁶

A teleradio shack stood near the Operations Room and information coming in from island and coastal observation posts by radio, morse and telephone was relayed to the plotters around the table.

Information also came in from radar stations, a very new technology at this time. The first radar station operated in combat by the RAAF was set up on the cliffs at Dripstone and received its

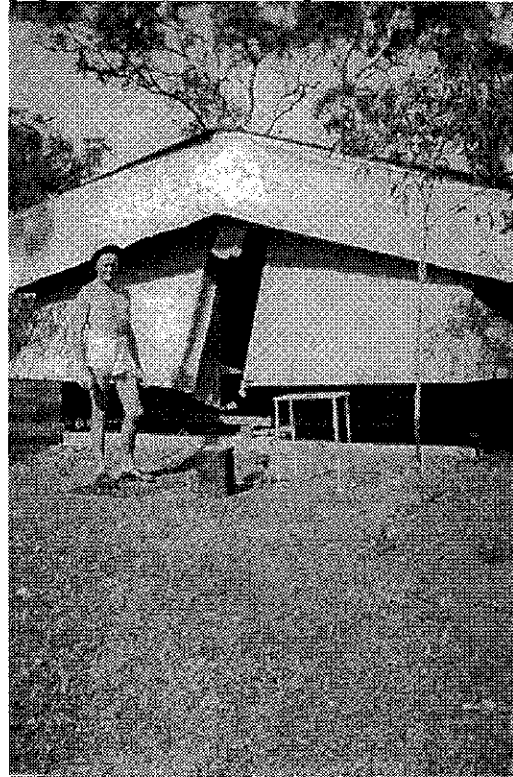
first signal of approaching enemy planes on 22 March 1942. Radar stations were later set up at Nightcliff and Knuckey's Lagoon. Information was processed in the Operations Room to give a picture of aircraft locations and direction and appropriate orders were then sent to the numerous airstrips across northern Australia and to searchlight and anti aircraft gun batteries.



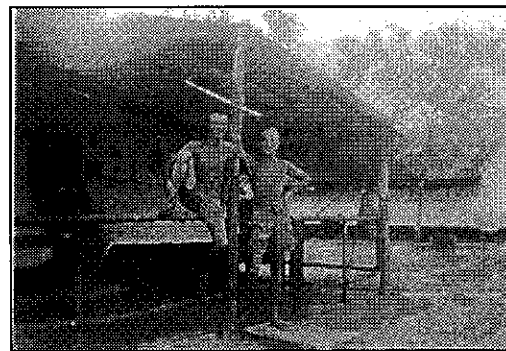
The Teleradio Shack was close to the Operations Room, buried in the trees and also heavily camouflaged. (J.Lynn)

There were 58 raids over the Top End in the two and a half years that the Japanese threat was present. Raids extended as far south as Katherine and targets in north west Western Australia were also bombed. The Operations Room controlled fighter defence over this whole area and staff were on constant alert in the early years. By the middle of 1944, however, Japanese air raids had become much less of a threat and the last one occurred in November of that year. The need for security and concealment was no longer there and the complex at Berrimah was expanded to become the headquarters, with the addition of a great many more buildings and tents, about 80 in total, visible in the 1945 aerial photograph on page 8. Many of the buildings were, at least initially, very insubstantial structures, with walls and roof of wire

netting and sisalcraft, a thick tarred paper much used during the War.

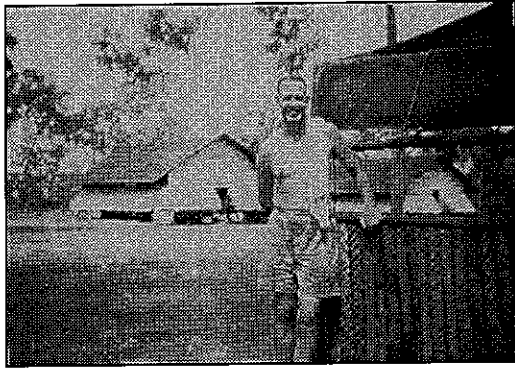


This camp building had a roof and walls of sisalcraft. (W.Duncan)



This 1944 photo and the next one show the very simple construction of the RAAF buildings - bush timber and black iron. (W.Grant)

Although all the staff now lived at the complex the track to the hospital was still used regularly to get to a cinema attached to the hospital. It was by then a vehicle track and clearly visible in the 1945 photograph



The wall of the building in this photo is of pandanus logs. (W.Grant)



Washing and laundry facilities were also very rudimentary. (W.Duncan)

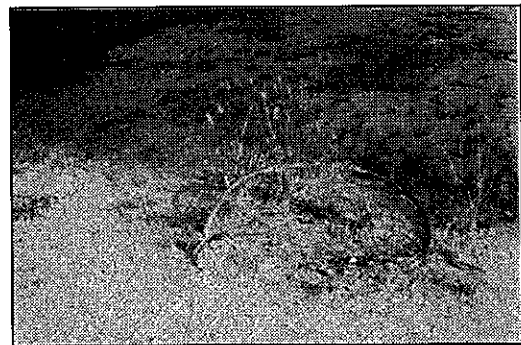
Following the end of the Pacific War, Air Defence Headquarters, Darwin was disbanded. The last entry in the Unit Record Sheets is dated 30/3/46 and states: 'Unit disbandment processing satisfactorily. Expected date of completion 13 April'⁷.

In 1947 the buildings of Air Defence Headquarters were sold to the Department of Native Affairs for £503

by the Commonwealth Disposals Commission. Eighty four buildings were listed one of which was the Operations Room.⁸

The Operations Room controlled all the air defence of northern Australia during the period of Japanese bombing in 1942, 1943 and 1944. It was one of two operations rooms active in defence of the Australian mainland (the other one was at Townsville) and no other military facility in the country has ever played a more vital, front line role than did the Operations Room at Berrimah.

Although the place where it stood may thus claim to be one of Australia's most important historical sites it remained un-noted after the War until a determined effort to locate it was made in 1996. The floor of the building was unearthed close to the quarantine block in the dry season of 1997 and it is to be hoped that a suitable memorial can be erected to mark the site of this very important World War II building.



This short length of telephone cable projecting from the ground near the site of the old farm house was the only evidence of the RAAF presence and led to the discovery of the floor of the Operations Room. It was cut off and removed in 1996.



Much of the excavation of the Operations Room was done mechanically.



Some of the more detailed work was performed by hand.



The highway, Berrimah Road and the military hospital are clearly visible in this aerial photo, taken in 1945 from 10 000 feet. It also shows a large number of huts and tents on the ridge about one kilometre east of the hospital, at the place where the Berrimah Farm buildings are now located .

BERRIMAH ABORIGINAL COMPOUND

Legacy of the War

At the end of the war the developed features present at Berrimah were the 80 buildings of the headquarters complex, including messes and administrative buildings in the vicinity of the present cattle yards with accommodation huts east and north of them. There was a bore on the escarpment south of the present Curteis Road, probably not working and another, which was working, about 300 metres east of the Operations Room (these two bores are described later). As military activity wound down a large dump of equipment, from weapon parts and motor parts to personal equipment items, was established where the CS Robinson car park is now located. This was later buried.

A report on the Farm ten years later claimed that the Farm area had 'suffered very severely from Service occupation during World War 11', presumably referring to the scars left by roads and buildings.⁹

In the vicinity of the present Farm there was an anti-aircraft gun emplacement where the naval base is now located and a machine gun emplacement on the hill immediately south of the Farm. There was also the military hospital on Berrimah Road (later to be taken over by QANTAS as its stopover accommodation) and a graveyard for Allied and Japanese servicemen, opposite the hospital. (The Allied dead were later moved to Adelaide River Cemetery and the Japanese to Cowra in NSW to join those of the Cowra breakout). Stuart Highway was not yet named and

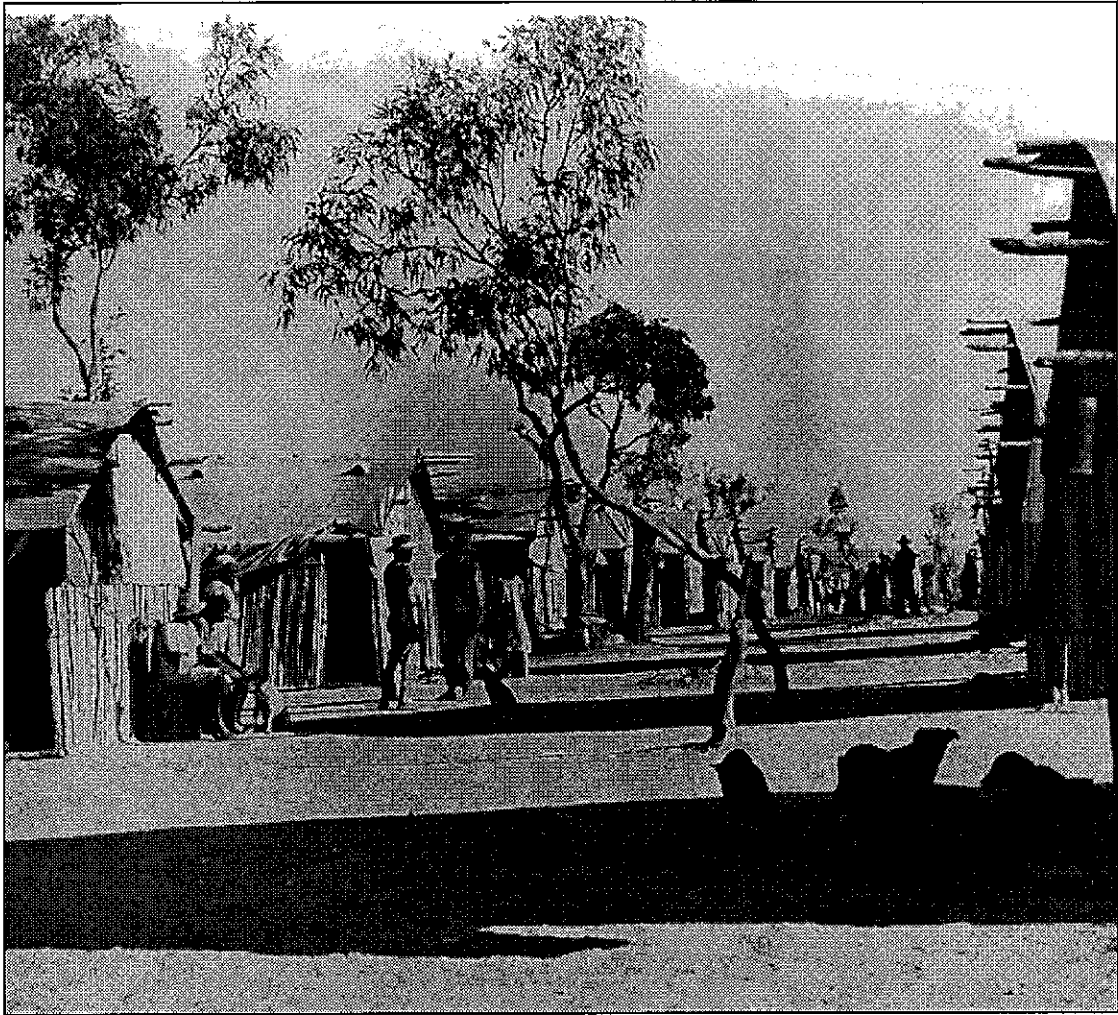
was only a narrow bitumen road. Berrimah Road, also not named, was narrow and unsealed. The road into the Headquarters area from the highway was little more than a track wandering in from a point about one kilometre from the Berrimah Road crossing.

Apart from these features the country was still uncleared and when, in 1946, the Commonwealth rescinded all land grants in the Hundred of Bagot which remained undeveloped, sections 45 and 390 were among those surrendered. As previously noted section 391 had not been granted.

The Compound

During the War Aboriginal labour was used extensively by the defence forces and after the War this labour force was retained for government, council and some private work. The Territory was, at this time, governed from Canberra and Aborigines were under the control of the Department of Native Affairs which required that all Aborigines in the vicinity of Darwin live together in a compound. Bagot Road Compound was being prepared but was not ready and it was decided to establish a native compound at Berrimah.

As already noted the 80 buildings of RAAF Defence Headquarters, Darwin were disposed of by the Commonwealth Disposals Commission in 1947 and made over to the Department of Native Affairs for £503 and, on the fourth of March, 1948, by proclamation in the Government Gazette, Section 391 and the eastern half of Section 45 were declared an Aboriginal



The inhabitants of the compound were house partly in the former RAAF buildings and partly in the rough huts shown here. Conditions at the compound were criticised by the *Melbourne Herald*. (Photo courtesy RAAF Sergeant's Mess, Darwin.)

Reserve.¹⁰ This area equates to the eastern half of the present Berrimah Farm and contained the former RAAF buildings.

The establishment of the compound was commenced before the gazettal and a file note of 6 August 1947 mentions the spending of twenty pounds on improvements to a Sydney Williams shed to make it into a residence for the Superintendent of the Berrimah Native Settlement. This building was located where the amenities and training rooms now stand and its amenities, valued at £20, included a huge concrete bath tub

about three metres by two metres and half a metre deep. After the compound was moved to Bagot (see later) the house was rented by Native Affairs but the wash tubs and copper were taken away. After vigorous protest by the tenant they were returned. A later tenant left and went to New Zealand without paying his electricity account and the power was cut off and the line to the house removed. The building later housed the Supervisor of the Forestry Nursery and later again, when it was demolished, the site was used to dispose of a large quantity of arsenic. The arsenic was contained in a 44 gallon drum which was encased in concrete and buried about a metre

below the surface. I can find no record that this was ever removed and it is, presumably, still there beneath the amenities room.

Plans White-anted

In 1949 the compound held one hundred Aboriginal men, seventy women and thirty children and in late 1950 a number of the men became restive over demands for more pay. They were receiving between five and thirty shillings a week and now demanded seven pounds a week, the wage paid to white workers. They refused to work and, on 16 January 1951, Lawrence Urban of the Wagait tribe led a march to Darwin of about fifty men armed with iron bars and sticks. The Superintendent of Police placed a squad of men at Parap Road, the march was stopped, Lawrence Urban was arrested and the men were returned to the settlement in police vehicles.¹¹

The camp was described in a 1950 *Melbourne Herald* article by newspaper correspondent Douglas Lockwood as a place of filth and misery but this was strongly denied by the Superintendent of Aborigines. The settlement would not, however, have been attractive since the buildings were not of a permanent type. The former war time buildings were roofed and clad in 'black iron', corrugated, non galvanised steel sheeting commonly used during the war. Other buildings were even less substantial as shown in the photograph on page 10, identified

by a former Department of Native Affairs officer (Ted Evans) as a photograph of part of the compound. It is also apparent from the files that little maintenance was undertaken because resources were directed towards developing the Bagot Road complex. The roads in the compound were not sealed and there were complaints for over two years from the compound supervisor that the access road, unchanged since the War, was barely usable.

Although the Berrimah settlement was an interim arrangement while the Bagot Road complex was being prepared, a plan was considered for some time to retain the Berrimah Compound as a staging camp for Aborigines moving into Darwin from remote communities. This plan met a sudden end when, in late 1949, one of the buildings collapsed without warning from termite damage and an inspection of the rest revealed that almost all of them were in a similar state.

Work at Bagot Road was accelerated and Aborigines living at Berrimah were moved to Bagot in 1951. Evacuation of the Berrimah settlement was completed on 19 October. All materials or fittings of value were taken to Bagot Road and the buildings were written off. The land was resumed from the Department of Aboriginal Affairs by a proclamation of the Governor General, William McKell, in that year (presumably, the proclamation is undated).¹²

THE FIFTIES - BERRIMAH FARM ESTABLISHED

The First Agricultural Activity - 'The Mobile Group'

In the Annual Report of the Northern Territory Administration for the years 1949-1953 (a single report) is recorded the formation, in 1952, of an Agricultural Section within the Lands and Survey Branch of the Administration. This Section established an experimental farm at Katherine (now the Katherine Rural College) and rice research farms at Humpty Doo and the 'Sixty Mile'. It also formed a 'Mobile Group' of three men to undertake research on sites at Coonawarra, Berrimah, Batchelor and Adelaide River. The Mobile Group had only 'light equipment' and it is not clear who were its personnel since the Report lists only a single Agricultural Officer, Walter Nixon-Smith, and a Plant Pathologist in the Lands and Survey Branch. Posts of Agrostologist, Entomologist and Agricultural Chemist had attracted no applicants.

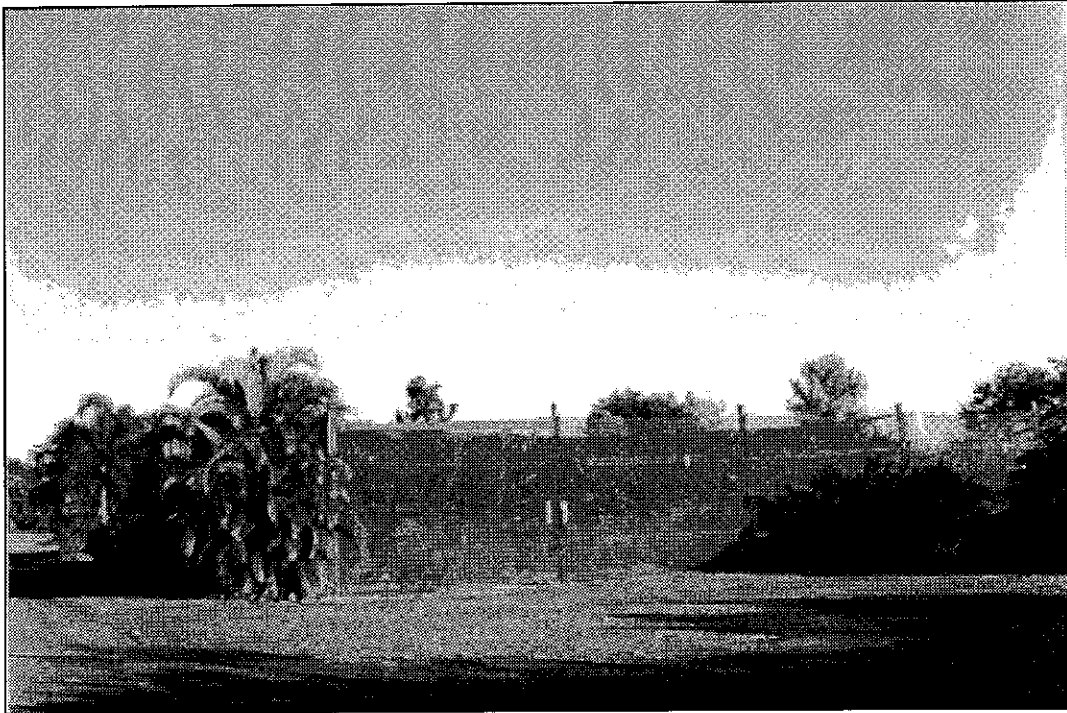
In April 1952 the monthly report of the Agronomist records that the Administrator had approved transfer of 'Berrimah Compound' to the Agricultural Section for use as a Plant Quarantine Station.¹³ Berrimah Compound refers to the former Aboriginal compound which, as already mentioned, had occupied the eastern half of the present Farm. In May 1952 an OIC of the new Plant Quarantine Station was appointed but it would be another fifteen years before a plant introduction screenhouse would be built. Early introductions, mainly of

rice varieties, were propagated in two large war time water tanks, recovered from Nightcliff, in the area close to the present Bio-Weeds building (building 100).

The farm was obviously seen to have a use beyond that of a quarantine station and, in June 1952, some clearing was undertaken and seed beds for tobacco were prepared. This was the first crop planted on the farm and was in the area of the horticulture block now occupied by the heliconia shade house (building 102). The interest in tobacco stemmed from a perception that it could be widely grown by Aboriginal people on their settlements to provide themselves with an income.¹⁴

The planting of tobacco was followed by an acre of pineapples in an adjacent cleared area and later, in January 1953, trial plots of peanuts and sorghum were established. A marsupial proof fence was erected to protect these crops which were, of course, surrounded by largely uncleared land. A small shed and workshop was built in a cleared area where the loading ramp now stands. This was the first farm building and it survived as a store shed, fertiliser shed and poisons shed until Cyclone Tracy.

The tobacco gave only a light harvest in November but the leaf was regarded as being of good quality. The pineapples, which were well watered, fruited well in 1953 and 1954 which encouraged the planting of a further acre. The peanuts and sorghum at Berrimah were also reported as



On this site, where the heliconia shade house now stands, was planted the Farm's first crop - tobacco.

performing well. In 1953-54 pasture plots were established to examine various combinations of grasses and legumes.

The Early Search For Water

The prolonged dry season in the Top End makes water for irrigation a necessity for any horticultural activity. The area selected by the Mobile Group for its trial planting of tobacco, as described above, was probably chosen because a bore was present at the site which offered a sufficient flow to maintain about two hectares of vegetables. Water had been available from the Manton Dam pipeline since the days of the RAAF and Aboriginal Compound but later complaints indicate that this flow was limited so a reasonably good bore supplying water for irrigation would have been a key element for the establishment of vegetable research plots. Since the

Farm appears to have simply grown from this small beginning, it may be claimed that the presence of this bore and the limited amount of clearing around it from the war and Aboriginal compound periods determined the site of Berrimah Farm.

The bore was put down by the RAAF and was completed on 9 March 1945 as 'RAAF No.145' but its name was later changed to 'No1 NTA' and it had the Registered Number of 390. It was drilled to 232 feet (77 metres), lined with a six inch casing to 185 feet (56.4 metres) and, equipped with a Southern Cross motor and pump, it delivered 1.76 litres per second. It was located beside the entrance track to the RAAF buildings, just east of what is now Kent Road and some 150 metres north of the present farm office.¹⁵ It is still present and has an electric motor attached but is no longer in use. It is, interestingly, surrounded by a shallow depression indicating that the bore hole



Bore 390 (or 145) was sunk by the RAAF and may have been the main reason for the adoption of Berrimah as a site for agricultural experiments. The bore is still present beside Kent Road but not used.

was not filled in around the casing and subsidence into the hole has occurred. This does not happen with modern bores because the space is filled with blue metal.

Manton Dam was completed in 1942 and a main from its pipeline supplied the military hospital on Berrimah Road. There is record, in the sixties, of an old water pipeline entering the farm from this direction and it seems probable that water for the RAAF complex came from this line as described above. This two inch (50 mm) pipeline enters the farm at about the mid point of Makagon Road but it, too, is no longer in use. It is probable that the supply from this line was inadequate for the expanded complex around the Operations Room, necessitating the sinking of bore 145.

There are no records of earlier bores than No. 390 but anecdotal record tells of a bore on the escarpment south of Curteis Road. It had been equipped but was not functioning in the sixties when the farm was being developed .

This bore is still in existence, its casing projecting from the ground opposite the John England Building. It is probable that it was installed in 1942 or earlier to provide water for the RAAF installation before it became available from Manton Dam. The RAAF had its own boring plant which explains why these bores are not recorded in the archives of Northern Territory water authorities. Pipes led from the equipped bore so it probably functioned but it is possible, in light of the later history of drilling for water on the Farm, that it yielded poorly. After more than fifty years the cuttings that



This disused bore south of Curteis Road predates the development of the farm and was probably sunk by the RAAF.

were drilled up and spread around the bore head are still largely preventing growth of the grass and weeds which cover the rest of the ridge. The cuttings are of shale and a fine clay material called porcelainite which underlies the Farm and is responsible for the poor availability of underground water.

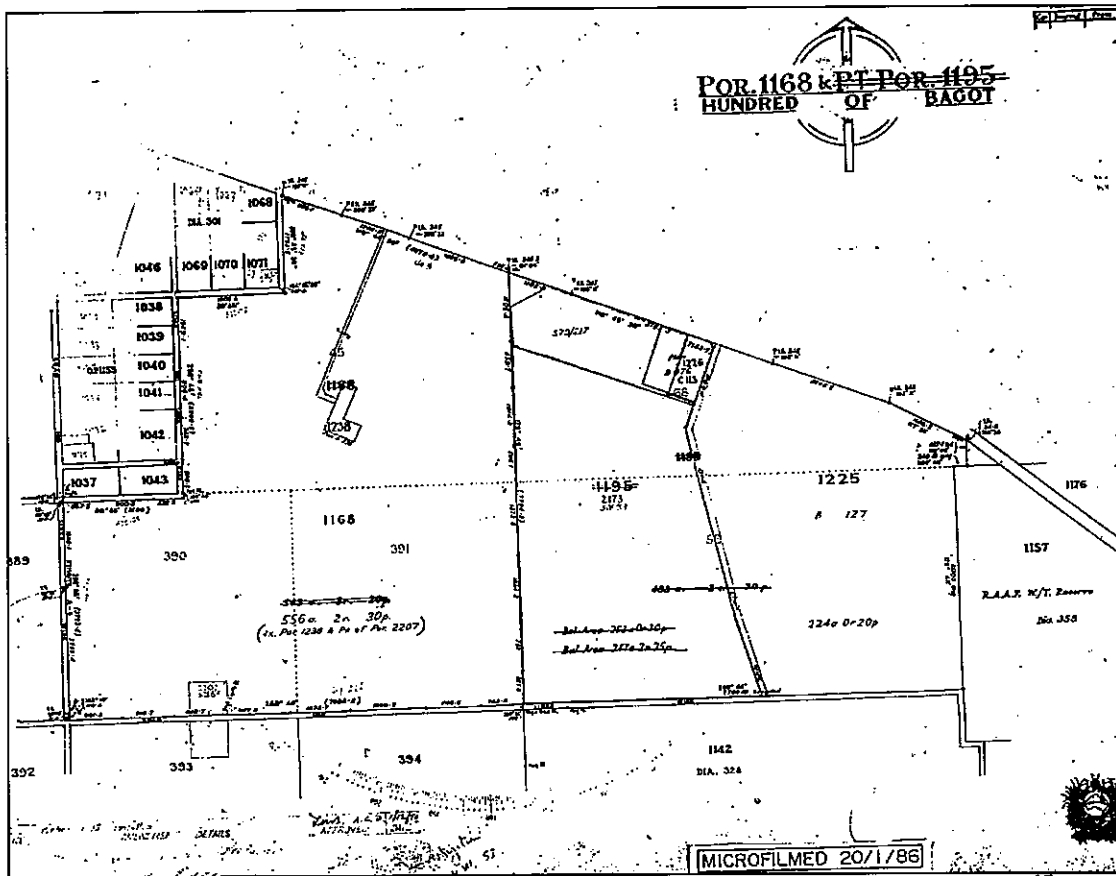
After agricultural activity commenced, the need for water increased and was not met by the mains supply or the single bore 390. Two more bores were sunk in September 1953. One (Registered Number 171) was located south of the present farm office in the area that was to become the forestry nursery but it yielded poorly and rapidly silted up. The other (172) was in the north west corner of the farm near the Stuart Highway. This one initially yielded a flow of 1500 gallons per hour (1.9 litres per second) and was used to irrigate trial plots of improved pasture but the flow declined

markedly as the dry season progressed.¹⁶

The Farm Surveyed and Born

As already noted, the area of the former Aboriginal compound had been given to the Agricultural Section in 1952 and now, on 15 April 1954, Sections 45, 390 and 391 were re-surveyed and united into a new Section, 1168, an area of 556 acres 2 roods 30 perches (556.53 acres or 225 hectares), and the boundaries of the Farm were thus established.¹⁷

The newly surveyed area excluded two small blocks. One was a forestry block, Portion 1238, north and west of where the Goff Letts and CS Robinson Buildings are now located and the other was an intrusion into the southern



This 1954 map shows portions 45, 190 and 191 combined to form 1168, Berrimah Farm ¹⁷

boundary. Both still exist but the forestry block is, in effect, incorporated into the Farm. In the forestry period and in the later Conservation Commission period, buildings belonging to these units were erected outside the block and, conversely, the farm house was built within it. The southern exclusion is actual and contains the communication towers of the Department of Transport and Works, visible from Curteis Road.

Late in 1954 an Agricultural Branch was formed, separate from Lands and Survey Branch and having its own Director of Plant Industry and a staff of sixteen. From this time forward a report on 'Berrimah Experiment (sic) Farm' appears each year in the Annual Report of the Administration but it seems that this was somewhat premature because it was not until the

fourth of September, 1956 that, in a memorandum to the Administrator, the Secretary of the Department of Territories, Canberra, indicated that the Minister had approved in principle the establishment of the 'Berrimah experiment and demonstration farm'¹⁸. The Farm had thus operated de facto for four years before being officially established.

Forestry Activity

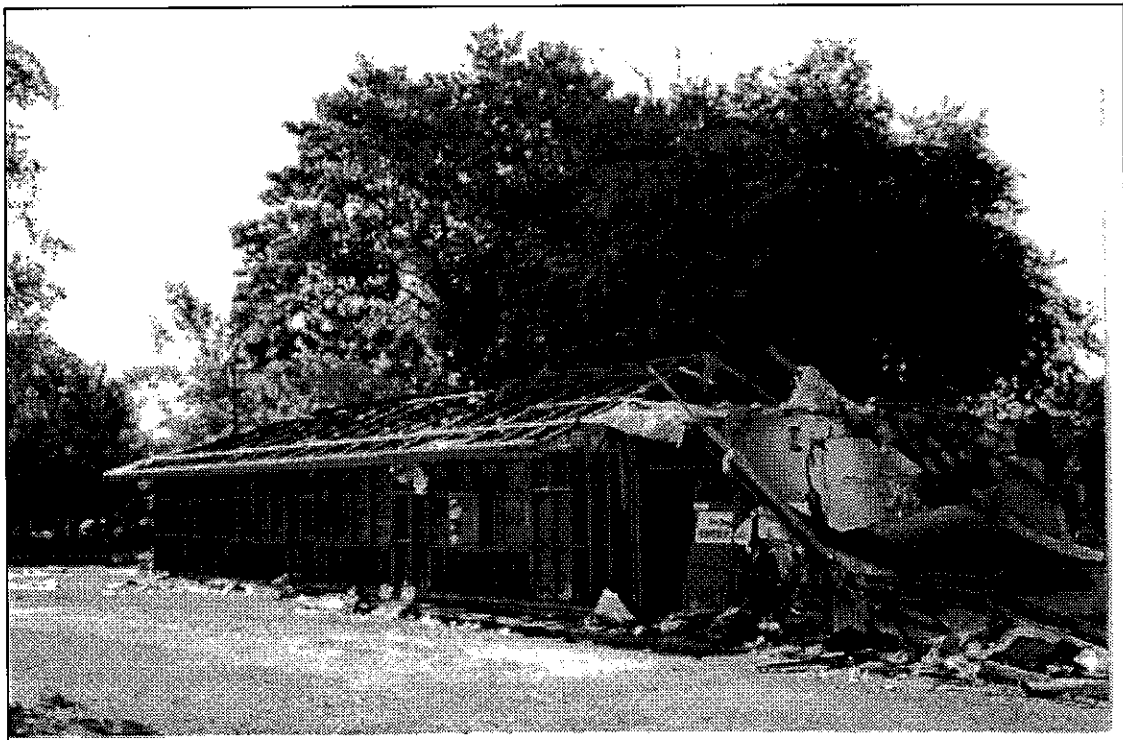
Great promise was seen in forestry in northern Australia in the postwar years, particularly for the northern cypress pine, *Callitris intertropica*. Berrimah Farm was selected by the Commonwealth Forestry and Timber Bureau as a site for a forestry nursery and for experimental plantings and it developed into the headquarters of forestry activity.

In 1957 three acres of land were set aside as a forestry nursery in the area just north of the present recreation and training building and seeds of a variety of exotic and native trees were planted. As already described the Superintendent of the nursery lived beside it in a modified Sydney Williams shed. Four other areas were cleared of native trees and two were planted to cypress, ironwood, rosewood, hoop pine, African mahogany, gmelina and *Terminalia balerica*. A further two and a half acre block on the site of the present mango and avocado orchard (corner of Curteis and Kent Roads), described as a typical coastal hardwood area, was set aside as a forest observation area in order to study, over a long period, the effect of protection from fire. The area was fenced and all the trees in it were measured and identified to determine their rate of growth. The largest tree was a

stringybark of 79 ft 6 inches (24.2 metres) but all the mill size timber was found to be useless because of damage by fire, rot or termites. These areas can be identified in aerial photographs on pages 27 and 31.

A further 15 tree species were planted in the forestry nursery in 1958 and the experimental areas were expanded to eight acres with the planting of a further 10 species.

A number of forestry buildings were erected on the eastern side of Kent Road. These included an office, a laboratory, a garage and petrol bowser, a tool shed, and a tubing shed. They were all completed by 1959 and some are still present but the office, severely damaged by termites, was demolished in 1996. One aluminium clad building blew away during Cyclone Tracy.



The original Forestry Office, badly damaged by termites, was demolished in 1996

Animals, Vegetables and Pasture

In 1955 the first animals came to Berrimah Farm. They were three cows agisted for the Navy and this number later expanded to six cows and a bull. In 1956 a small stock yard was built.

In his first report (1955) W.M. Curteis, the new Director of Plant Industry, was confident of the value of the Farm and was, in particular, delighted with the quality of the pineapples. They were sold to the 'Mitchell Street Mess' a Government hostel housing public service employees. The Director was also impressed with the tobacco trials and sought to have a Tobacco Production Officer appointed who would experiment at Berrimah and also introduce tobacco growing to Aboriginal communities.

Peanuts were grown again on the Farm in 1955-56 as were a range of vegetables; tomato, lettuce, cucumber, squash and rock melon. A five acre fruit and vegetable experimental area was fenced. Irrigated pasture plots were 'restored' in this year and ten acres of unirrigated pasture established.

In 1956-57 the pineapples continued to do well and a consignment of 800 lb (362 kg) found a ready market in Adelaide. In this year, too, there were wet season plantings of vegetables but results were largely disappointing except for sweet potatoes, eggplant, capsicum and snakebeans. Dry season plantings of cabbage, Chinese cabbage, tomato and telephone peas appeared to be thriving.

Two acres were set aside for fruit growing and were planted to pawpaws, mangoes, bananas, limes, passion fruit and cashews. This was in the area

which is still used as the horticultural block.

A wet season planting of cotton yielded fibre of very poor quality and a further planting of tobacco was affected by nematode attack and yielded poorly despite heavy fertilising. Tobacco trials continued until 1959 but no interest had been stimulated in the growing of tobacco on Aboriginal settlements so trials at Berrimah were discontinued.

Pasture trials continued in an area below the present cattle yards and included one grazing trial using a small number of buffalo, horses and cattle. These trials were designed to examine the pasture effects rather than the nutrition of the animals. They were conducted by the Agriculture Branch because, at this time, Animal Industry was a separate Branch of the Administration, with its headquarters in Alice Springs. Stock numbers were limited because the boundary of the farm was not yet fenced.

In 1958 a commercial enterprise, Henderson Trippe Cattle Holdings and Henderson Trippe Shipping (Aust) Pty Ltd sought to take over most of the Farm (360 acres) for use as a holding property for a cattle export project. They were not successful but, at the request of the Administrator, the Farm did sell hay to this enterprise.

A Road In and The First Buildings

Up to this time access to the Farm had been by the unformed, indirect road from the Stuart Highway used during the War, the old foot track to Berrima Road and a rough road from the northern edge of the horticulture block to Makagon Road. The road from Stuart Highway, of which there had

been constant complaint during the years of Aboriginal occupation, was in a very poor state by 1956 and quite unusable in the monsoon. After a futile year of requests for a road to be built by Transport Section of General Services Branch the Farm staff took action themselves and, in 1957, made a road with farm equipment, running directly in from the Stuart Highway to the Farm office (the present Kent Road). They were blocked from reaching the highway, however, by the pipeline and storm drain which ran beside the highway and many further memoranda passed before a crossing over these was constructed by a clearly disconcerted Transport Section. This road, later upgraded and sealed, remained the Farm's main entrance until 1986 when the Makagon Road entrance was established as the main entry because direct access from the increasingly busy highway was considered too dangerous.

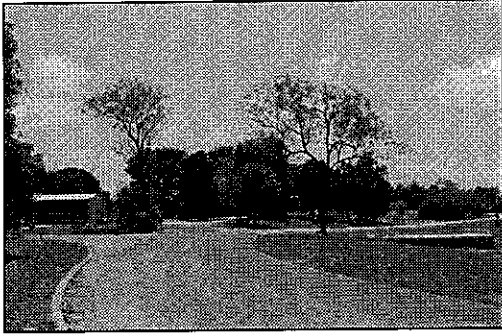
In February 1953 a Sydney Williams shed was erected at what is now the corner of Kent Road and Fritz Road as a depot for the agronomy operations. This shed is no longer present, it was removed to allow Fritz Road a square access to Kent Road.

In 1956 a second Sydney Williams shed was erected beside the first as a fuel and lubricants store and this building is still in use as a store shed (building 39). Another Sydney Williams shed was relocated from 'Nurses Walk', Larrakeyah in late 1956, placed in the line and modified as a machinery workshop (building 40). There was much file debate about the need for reinforcing of the concrete floor, finally settled by reinforcing just at the doorway. It, too, is still in use as a store shed. These two sheds, standing near the corner of Kent and Fitz Roads, are the oldest surviving buildings on the farm.

A Farm Manager was appointed. in 1956 and, in the following year, a farm house was built on the Farm's prime site overlooking the valley which runs along part of the southern boundary (building 45) but the new manager preferred to live in Darwin and the house was occupied by the officer in charge of machinery and equipment and his family. The house was sold and removed in 1993 because its cladding was asbestos sheeting and renovation and continued occupancy was considered to be dangerous. The only surviving trace of the house is two concrete slabs covering the septic tank.



These two Sydney Williams sheds on Kent Road are the Farm's oldest buildings.



These trees mark the site of the Farm House overlooking the Farm's most attractive view.

Also in 1957 an equipment shed was built, beside the Sydney Williams sheds, the boundary fence was completed and a further 60 acres were fenced internally. A Farm office and store was built in 1959. This building was demolished in 1994 to be replaced by the present Farm Office and only its concrete floor remains.



The first Farm Office stood beside what is now Kent Road. The notice reads 'Berrimah Experiment Farm'. Photo taken 1967. (I. Miller)

In the middle fifties the building of a tobacco barn with drying facilities and a glasshouse for plant introduction work was proposed. Both took several years to reach the stage of detailed plans before the tobacco barn, as envisaged, was declared to be technically unsound and a fire hazard. It was not built but a small drying shed was attached to the end of one of the Sydney Williams sheds. Even this was used only once or twice because, as already noted, enthusiasm for tobacco research faded when it was found that

there was no interest in growing it on Aboriginal settlements. When tobacco trials at Berrimah ceased in 1959 the drying shed was dismantled.

More Water and Crocodiles

After the monsoon in 1956 the dam was built that is still present south of Curteis Road below the loading ramp. There were doubts at the time about the size of its catchment but it did fill during the next monsoon. It leaked, however, and did not retain water through the dry season but, after buffaloes were allowed to wallow in it, their puddling sealed the surface and the dam held throughout the following Dry. The Assistant Director of Agriculture became so excited about the result as to suggest 'controlled experiments' in the use of buffaloes in this way and the promotion of their use for dam puddling. The idea was somewhat scornfully rejected by the Director. When the dam filled during the monsoon it attracted wild crocodiles and a four metre specimen was found in a nearby experimental plot of improved pasture.

In the late fifties the dam housed a number of crocodiles being studied by the Wildlife Biology group. In order to allow the farm's buffalo to safely share the water a fence was built through the dam. Anecdotal evidence suggests that the driving in of the posts to support this fence pierced the seal achieved by the buffalo puddling and caused the dam to again empty, as it now does, in the early dry season.

An unsuccessful attempt was made at one time to keep it filled from the old RAAF bore No.390 and a further, unsuccessful attempt at sealing it was made in 1996.



The dam held water only during the monsoon. Some months after this photograph was taken in early 1996 it was dry.



In late 1996 the dam was re-excavated in a further, unsuccessful attempt at sealing it.

A second and a third dam were sunk on the southern side of the farm, one right on the boundary fence. These dams are smaller than the first one but, being in soaks, hold water longer in the dry season even though the wall of the boundary fence dam has been breached.

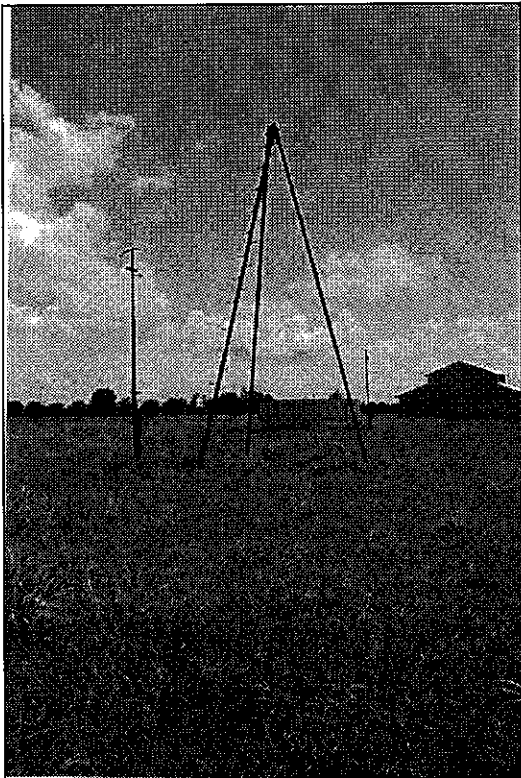
Two more bores were sunk in 1957, 1719 in the horticultural block and 1720 just south of bore 172 which was failing. The flow from 1719 is not stated on its record sheet but it continued in use for a number of years

and, although not any longer operating, it is still present, complete with its pump, beside the workshed in the horticulture block (building 74).

Bore 1720 had a strong flow (also not recorded on its record sheet but quoted in other records as 2000 gallons per hour [2.5 litres per second]) declining to 1000 gallons an hour in the late dry season. This bore, the best one sunk on the farm, is still operational and can be seen, surmounted by a tripod, beside the tank in the northwest corner of the farm.



The Southern Cross pump of bore 1719 is still present beside the Horticulture workshed.



Bore 1720, in the north west corner of the Farm, is still in operation.

A bore sunk just south east of the forestry block in 1959 (No. 1904) yielded no water at all and another try very close by (No. 1915) yielded a poor flow of 0.6 litres per second despite being sunk to over 200 feet (62 metres)

In a further search for water for the forestry nursery in 1965 another bore was sunk in this area (No. 4722), but it too was dry and a last bore (No. 5414) sunk in the southern part of the Farm in No.18 paddock was all but dry. Hydrological survey had, by this time, indicated that it was unlikely that strong, sustainable flows would be found on the farm because of the underlying porcelainite as described earlier.¹⁹

In 1961 a four inch water main was brought to the western boundary of the farm and more water became available. The wartime water pipe line described earlier as entering from the Berrimah

Road main was still present. It was 'black pipe' (not galvanised) and was in poor condition but was still patent in the early sixties and, since it was not metered, it was used liberally (and illegally) by the agricultural staff for several years.

Horticultural Changes

In the 1957-58 wet season weeds became a major problem on all intensive blocks. Later in 1958, as the dry season progressed, and despite the new bores all the experimental blocks,

including the forestry ones, suffered from inadequate irrigation. Dry season vegetables were poor and not marketable with the exception of Chinese cabbage. The pineapple plot which had been declining in production yielded almost nothing and a new one acre plot was planted out.

The two acre orchard block was reorganised in 1958 and twenty four tropical and temperate fruits were planted. A further two acre block was planted to banana, paw paw and mango.

THE SIXTIES - MIXED FORTUNES



This 1960 photograph shows the nature of the country before the farm was cleared. (From Report of the Forster Committee, 1960).

Final Clearing

Much of the final clearing of the Farm took place in the sixties with only a few residual areas left, including the forest observation block, preserved at the corner of Fritz Road.

Pigs, Goats, and a Vice Regal Visit

In the late 1950s a Berkshire boar was donated to the Director of Plant Industry by a southern stud breeder to be used to improve the quality of pigs in the Territory. It was housed, with a number of females, where the ornamentals shade house now stands. They

were in a very inadequate pen system, described as 'ringlock and mud' which quickly became ruinous and squalid. The Farm had no feed source for pigs and no one with expertise to properly care for them and a memo from the Farm Manager to the Director in 1961 asks what should be done about them. After an unsuccessful attempt at selling them, when the winning tenderer failed to appear to collect his purchase, the pigs were finally given to the Aboriginal Welfare Branch in Alice Springs.²⁰

No sooner were the pigs gone than a British Alpine buck goat was donated by the Master of the interstate trader

SS Kangaroo to be used for upgrading the Territory's goats. It, too, was housed at the Farm and there is no record of its ultimate fate but the Farm had a further experience with goats when, in 1972, those from a neighbouring farm ate out the vegetable trials of lettuce, silver beet, Chinese cabbage and spinach.

In 1961 a fire burned across the Farm, destroying much of the pasture including the experimental areas of Townsville stylo but no buildings.

In 1962 the Farm agisted horses for the police and also accepted, for five shillings a week, a thoroughbred stallion which had made a habit of breaking out of its stall at the racetrack.

In the belief that sorghum offered good prospect as a Top End crop efforts were made to promote a poultry industry around Darwin as an outlet for the grain. To this end a poultry experimental unit was established on the Farm. A flock of 400 birds was kept in sheds just east of the plant quarantine facility and fed a variety of rations to determine whether layers would produce satisfactorily on a ration compiled of locally produced grains. The trials also sought to determine a tolerable level of *crotalaria* contamination of feed grain for poultry since it was proving difficult to produce grain free of *crotalaria* seeds which are toxic for poultry. This work was urgently necessary because the sorghum grain produced on the very large Willeroo venture was contaminated with *crotalaria* seeds and 9000 tonnes was denied an export clearance. The trial was terminated after two years because the Willeroo venture had failed and, furthermore, difficulty was experienced in disposing of the eggs because of protest from private

producers about unfair government competition.

In 1964 the Farm was honoured by a visit by the Governor General, Viscount deLisle. The visit started badly when the vice regal car overshot the group of Farm staff assembled to welcome him. After a long moment of confusion, as the procession of vehicles endeavoured to reverse, his Lordship was obliged to alight and walk back to meet his hosts. Later, while inspecting the horticultural block, the Governor General, and his naval aide-de-camp, immaculately dressed in white shorts and long socks, fell sadly foul of a patch of Noogoora burr and had to be plucked clean.

A Move Away From Horticulture

In 1962 a new agronomist, John Sturtz, took charge of the research work of the farm and shortly after this a further reorganisation of the horticultural area saw the vegetable plots moved to better soil north east of the Farm office. In 1963 a consignment of french beans was sent, without approval, to Adelaide market, met a period of acute shortage and returned such a large amount of money that its payment into consolidated revenue sparked a later enquiry.

In the early sixties it became apparent that there was not sufficient water to maintain all of the research projects and the research emphasis moved away from horticulture, apart from vegetable and cashew trials, towards pasture development and grazing experiments. Much of the horticultural area was cleared out including even the pine-apples, which had been so much praised in the early years of the Farm but were now being grown without irrigation and were of poor quality.

Also in 1962 the Administrator sought to have paspalum grown at the Farm for distribution to government staff for their lawns. This scheme appears to have been allowed to die quietly but the next one, a demand by the Darwin Town Clerk for 3000 cubic yards of topsoil from the Farm for the dressing of Nightcliff oval, was stoutly resisted by the farm manager and rejected by the Director and the Administrator.²¹

By the early sixties the farm had some 70 to 90 head of cattle in pasture trials and 40 to 50 head of buffalo in breeding trials being run by the Field Services group. In the middle sixties the live cattle export trade to Hong Kong and the Philippines, active since 1958, collapsed and a great quantity of steel from the race, erected at the railhead in Darwin and on the wharf, became available. Much of it was used in a major rebuilding of yards, paddocks and laneways on Berrimah Farm. The present cattle yards were built at this time. By 1964 the Farm

was fenced and subdivided into 21 paddocks and plots for a range of horticultural, grazing and pasture experiments.

In 1965 the Animal Industry and Agriculture Branches were combined and animal activities began to feature more strongly at Berrimah. The Farm became a bull holding centre, selling bulls to the industry and, in 1968, a project was launched to develop a tropically adapted beef animal, after the model of the American 'Beefmaster', using a number of *Bos taurus* and *Bos indicus* breeds. The Farm had insufficient pasture to maintain the 260 animals needed for selection and several paddocks became overgrazed and degenerated, with much of the improved pasture taken over by sida. The project was terminated after four years but it took a further several years for the pastures to recover, an object lesson in the effects of overgrazing improved pasture in the tropics.



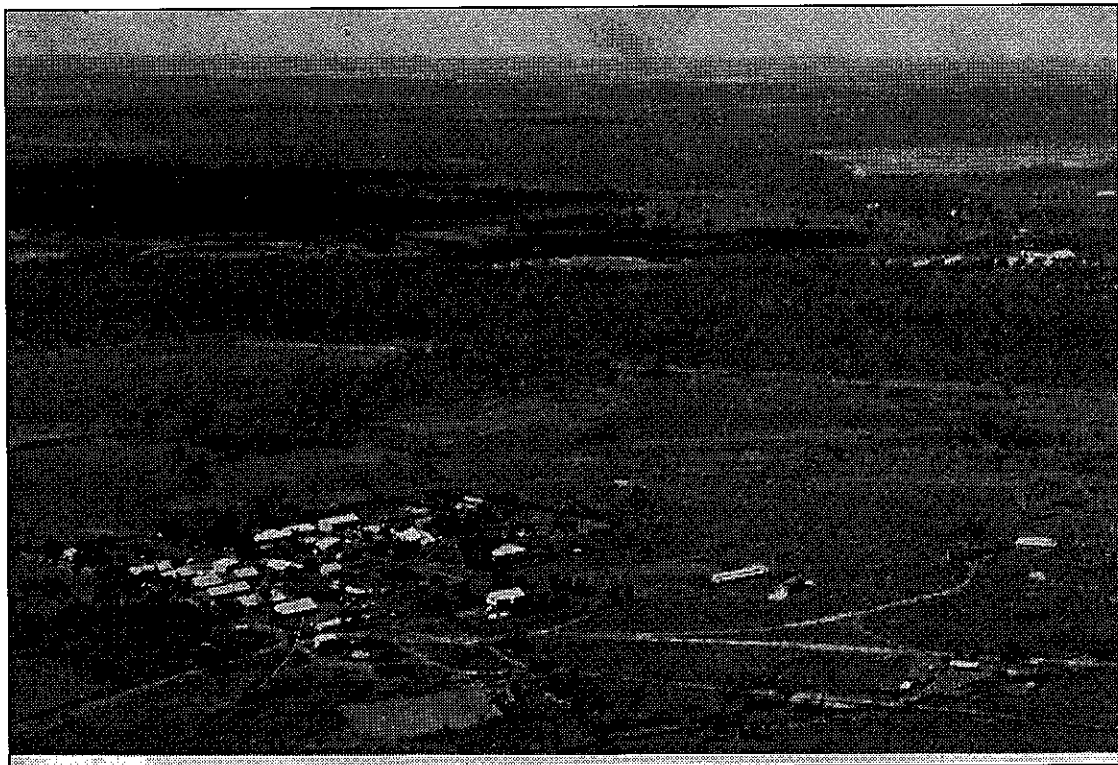
The Farm's main yards were built with piping recovered from the cattle loading race on Fort Hill Wharf

Despite this the emphasis in the late sixties and seventies continued to move away from horticulture and into pasture species introduction and assessment, grazing trials and trials with sorghum. Most of the Farm was under pasture through the seventies and the area of fertile soil immediately north and east of the present BAL was largely devoted to pasture plots. The introduction of new grass and legume species as well as varieties of rice and sorghum became the main function of the Plant Quarantine Station.

More Buildings

In 1961 a house was built for the Forestry Supervisor near the forestry nursery. This house, of similar construction to the Farm house and also clad in aging, unsafe asbestos is now, somewhat incongruously, the

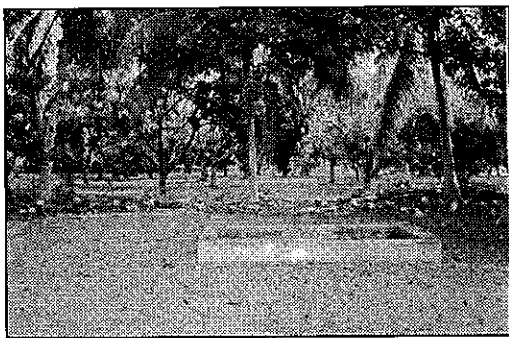
office of the National Safety Council (building 80). There was no other accomodation for the agricultural staff and none for forestry staff and all lived in Darwin. The forestry workers travelled to work in a van but the ten or twelve men employed by the Agricultural Branch were obliged to travel to and from Darwin each day in an open Holden utility, a subject of several complaints on the file. There was also a complaint of inadequate water pressure for the farm house obliging the residents to wash outside under the hose. A memorandum from the Farm Manager placed the blame for the poor water pressure on the illegal tapping of the Farm's two inch water main by a neighbour through whose property the pipe was laid. The man had a piggery and commercial garden and on some days drew off all the water from the main.



This 1967 photograph shows six Sydney Williams huts side by side along Kent Road and the observation forestry block opposite them. The Farm House is in centre foreground and the buildings to the right of it are the first quarantine shadehouse and poultry house.

By 1961 three further Sydney Williams sheds had been erected on what is now Kent Road and all six are visible in the 1967 aerial photograph on page 27. These sheds came from Winnellie and Parap and were given to the Agriculture Branch on the condition that they either be moved at once or their roofs be taken off to prevent squatters taking possession of them. These three most recent sheds, at the eastern end of the row, were badly damaged by cyclone Tracy in 1974 and were demolished.

In the 1960s four of the sheds housed an agronomy laboratory with a forage dehydrator, a workshop, a store, as previously described, and the laboratories of 'Field Services' and 'Wildlife Biology' which was investigating buffalo, pied geese and other wild birds. The geese, and other birds, were penned across the road in a large cage where orchard trees now stand and their concrete pond is still to be seen under the avocado trees on the corner of Curteis and Kent Roads. A number of emus and broilgas were allowed to roam about the Farm.

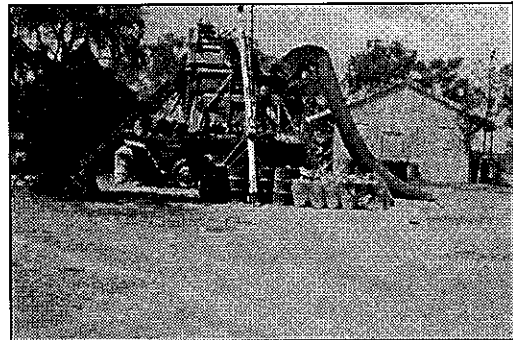


This concrete pond near the corner of Curteis and Kent Roads is a relic of the pen for pied geese and other birds run by Don Tulloch.

The buffalo and bird research was being undertaken by Don Tulloch who later became Australia's leading authority on buffalo. He had a herd of about thirty animals which had been

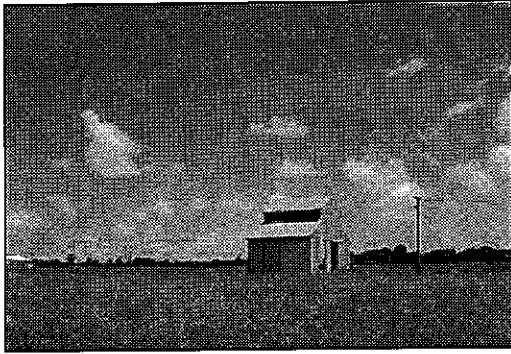
driven in on the hoof from Beatrice Hill. A wooden buffalo yard was built just west of the present yards. One buffalo bull, 'Whiskers', which had come to the Farm as a small calf had a scornful disregard of fences and proved impossible to contain. Peter Pangquee, who worked on the Farm at that time, described frequent searches through the mangoes along the harbour south of the farm to find Whiskers and return him to his paddock. He was finally restrained from his wanderings by the introduction of electric fencing.

The supply of seed was an early function of the Farm and, in the middle sixties a mobile seed cleaner was installed beside the Sydney Williams sheds. It was in use until 1968 when a hay shed and a seed cleaning shed were built in the north western paddock.



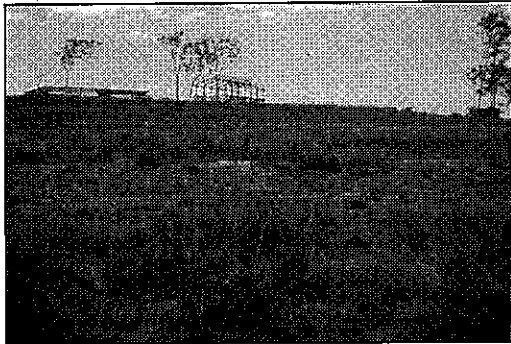
The seedcleaner was located beside the Sydney Williams sheds. Photo 1967. (I. Miller)

The seed cleaning shed was built in two stages. The first stage, a tall narrow structure, was built by a contractor at great cost so another exercise in self help by Farm staff was needed to complete the wings. This was, it is claimed, undertaken by one man, Ted Kilpatrick, and largely from petty cash. The shape of the finished building prompted its name, 'The Opera House'. Both buildings are still in use, the hay shed as such and the seed cleaning shed as a store.

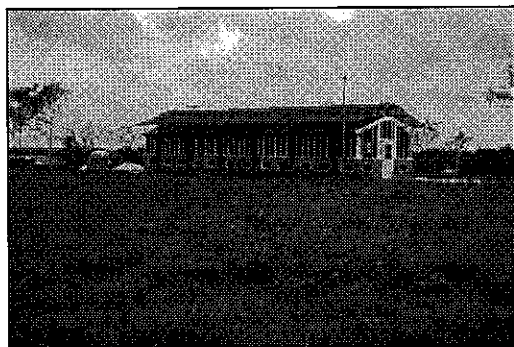


The former seed cleaning shed, the 'Opera House' is now used as a fertiliser store.

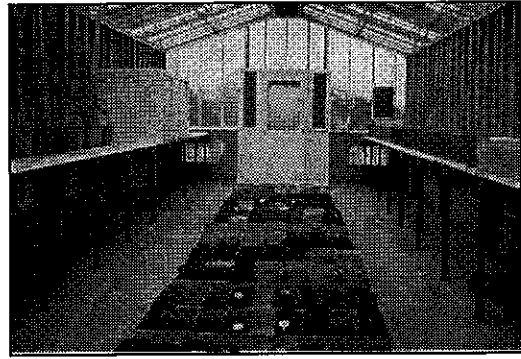
As described earlier the Farm had been designated as a quarantine area for the importation of plants in the very first year of its life (1952) and a screenhouse was planned a few years later. It was not until 1967, however, that the first screenhouse was built on the hill beside the poultry house.



This photo, taken in August 1967 shows the first screen house being erected. The poultry house is behind it on the left. (I.Miller)

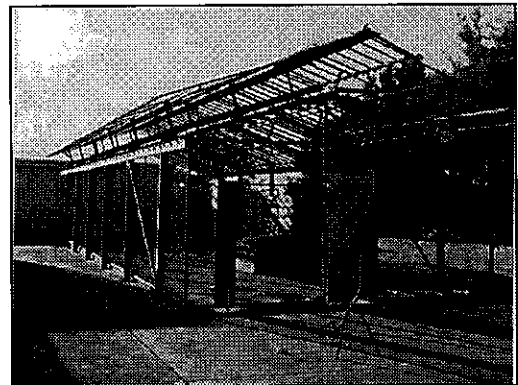


By January 1968 the screenhouse was completed and ready to function. (I.Miller)



In January 1968 the screen house accepted its first plants. (I.Miller)

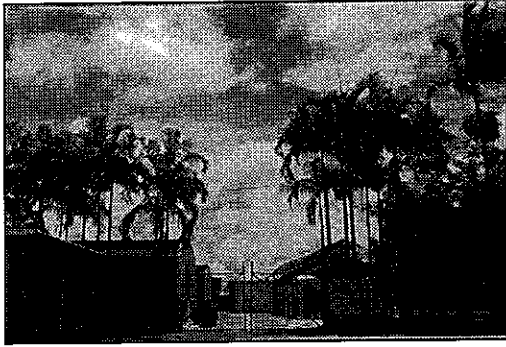
Described in the files as a glasshouse it had a glass roof but the sides were of mosquito mesh because an all glass clad building was unsuitable for the tropics. The building was damaged in the cyclone but was repaired and used until the mid eighties, most latterly for the importation of orchids and cashews. The frame of the shed, with no glass or screens, still stands in the quarantine compound and serves as an outdoor quarantine facility.



The frame of the first plant quarantine shade house still stands in the quarantine compound

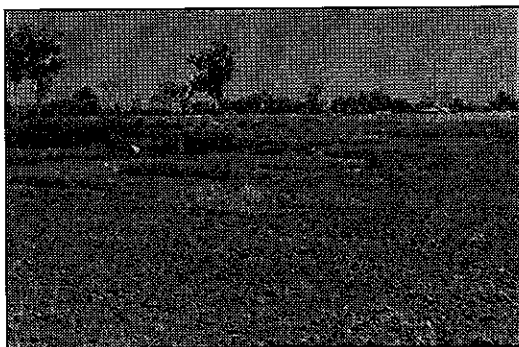
A second glasshouse cum screenhouse was completed by 1971 and a third before Cyclone Tracy in 1974. In 1980 quarantine activity for the whole of Australia was taken over by Australian Quarantine Inspection Service (AQIS) and, as part of a national building program, a Sydney firm supplied two further prefabricated screen-houses for

the compound. In 1981 an office and toilet facility was built. The quarantine unit which thus developed is now operated by DPIF Horticulture Division and is the oldest unit on the Farm still carrying out its original function (compound 50).



The plant quarantine facility still occupies its original site. Photo 1997.

Supporting the work of the plant quarantine unit a plant introduction area was established beside the horticultural block for examining and multiplying a variety of pasture plants of potential use in the Territory. A number of the improved pastures now in production in the Top End have their origins in these Berrimah Farm pasture plots.



Several pasture species were introduced to the Territory through these early pasture plots. Photo 1969. (B.Fritz)

In March a herd of twelve Banteng cows and heifers was brought from the Coburg Peninsular by sea. These were

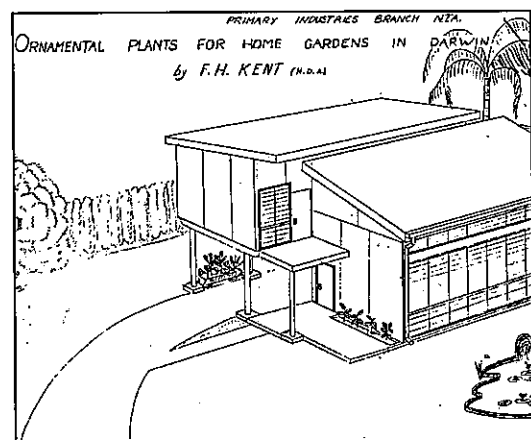
kept for a number of years for comparative studies of reproduction and weight gain but they proved less efficient than other breeds in this regard and were finally sold.

By 1968 the Farm was fully fenced into paddocks and names and numbers were allotted to each. During a wet week in January 1968 signs were prepared showing the name and number of each paddock.

In the late 1960s the first section of a forestry headquarters building was erected (building 88) and a second section (89) was added in the early seventies. This is now known as the Goff Letts Building and is the oldest major building on the Farm. The CS Robinson Building was also erected in the early seventies (building 90).

A First Publication

On 24 November 1966 a roneoed pamphlet titled 'Ornamental Plants for Home Gardens in Darwin' was prepared by the Farm Manager, Frank Kent. This is the earliest known publication and the forerunner of the twelve hundred Agnotes, Tech-notes, Technical Bulletins and other publications in the catalogue of the present Department.



The cover illustration on the first publication.



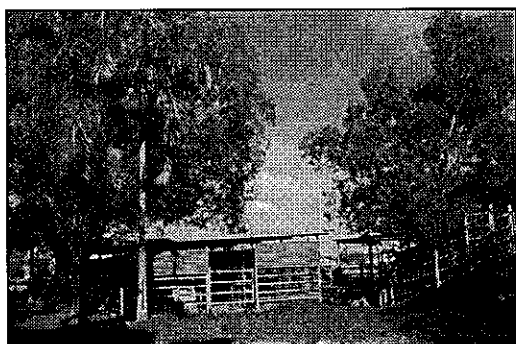
In this 1963 aerial photograph much of the farm is cleared , the six Sydney Williams sheds and the old Farm Office are present. The horticulture and observation forestry blocks beside Kent Road are visible as are the three forestry blocks on the south side of the Farm

THE SEVENTIES - A CYCLONE

A Westward Move

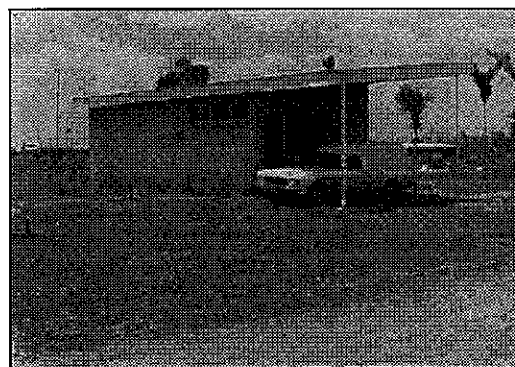
The seventies started with most of the Farm fully cleared, subdivided by fences and under improved pasture, experimental crops or horticultural trials. The forestry complex was well established but Agriculture Branch had not progressed beyond the Farm Office on Kent Road, the Farm house and the working buildings, most of them Sydney Williams sheds. The trees lining the front road were well established and the remnant forest in the demonstration block was still standing.

Breeding trials and other work with buffaloes and Banteng cattle were being undertaken at this time and in the early seventies a work shed and stock yards (buildings 7 and 9), still present on the western side of Ross Place, were built together with a small office for the animal production staff. All survived the cyclone and a hay shed (8) was built beside the workshed in the late seventies. The office was replaced in the middle eighties by building 5, the present office of Weeds Branch.



These yards, beside Ross Place, were erected in the early seventies for buffalo research work. They survived the cyclone and, together with the adjoining workshed, are the earliest structures built on the western side of the Farm.

Also in 1973 a repository for genetic resource was built near BAL. This store held at one time over 12000 accessions of seeds collected locally and from overseas. National repositories were later established and the Berrimah collection went largely to Brisbane. The building, located behind Charlie's Jungle, is now occupied by the biological control section of Weeds Branch. (Building 24)



Building 24 started life as a genetic resource store. The bare foreground is now within Charlie's Jungle and the Argentine bahia grass around the building is the first planting in the Territory of this now very popular lawn grass. Photo 1975. (A.Cameron)

By 1974 buildings 22 and 48 had been erected as agronomy laboratories and 23 as a poisons store.

Building 14 beside Ross Avenue was built as an animal production laboratory (now a post harvest laboratory). Pruen Road and Makagon Road had been formed but not Strath Road. Industrial buildings were appearing on Makagon Road.

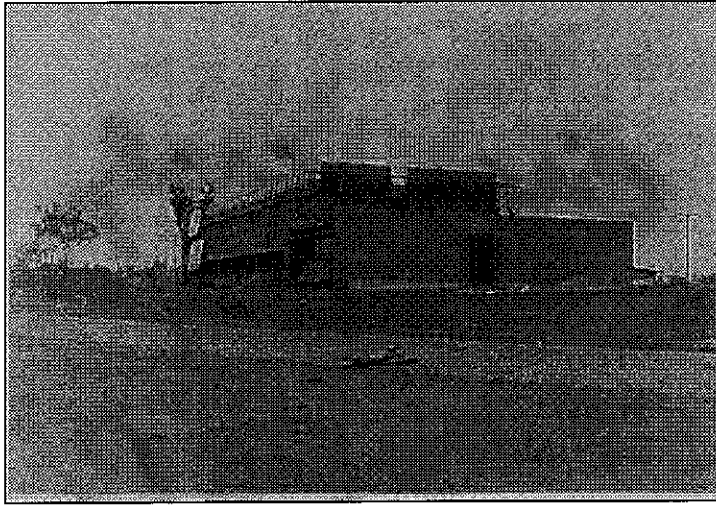


This 1971 aerial photograph shows the trees lining the road into the Farm (now Kent Road) and the forestry observation plot still intact. The westward move of buildings had started.

The BAL and Cyclone Tracy

The position of Berrimah Farm as a rural industries research centre was firmly established when the Berrimah Agricultural Laboratory (BAL) was opened on 22 November 1974. The building housed laboratories for plant

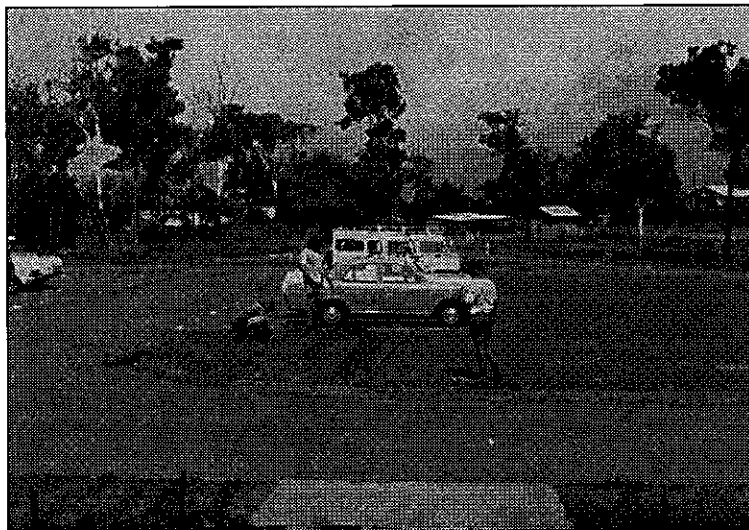
pathology, entomology, chemistry, the Northern Territory Herbarium and animal health although the main animal health laboratory for the Territory remained at the Arid Zone Research Institute, Alice Springs. All of these functions, with the exception of the Herbarium, are still housed in BAL.



Berrimah Agricultural Laboratory (BAL) under construction in 1974



A volunteer working bee planting lawn around the new laboratory in 1974.



Planting lawn beside the BAL carpark in 1974. In the left background is the remnant of the preserved forest block. On the right is the old poisons shed and the two stringybarks and the *E. bleeseri* which are still present.

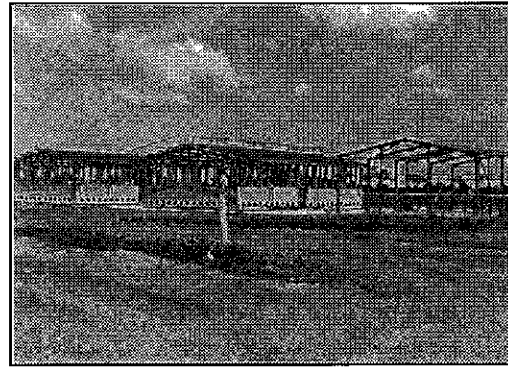
Within a little more than a month of the opening of BAL Darwin was ravaged by Cyclone Tracy.

Berrimah Farm met the full ferocity of the winds but suffered little damage compared with other parts of Darwin. The new laboratory building survived almost unscathed and, because the water supply to the farm was not interrupted and because BAL had a standby generator, the building was functioning again within a week. Many of the staff, however, had lost their houses in Darwin and those who were married had seen their families evacuated south so they moved into the BAL building and lived in their offices or in the recreation room. For some, the BAL was home for more than six months.

The other substantial building, housing the Forestry offices, was also little damaged. Three of the Sydney Williams sheds on what is now Kent Road were bent and buckled on their steel frames and were later demolished but the three older ones survived, a tribute to the sturdy construction of these famous sheds.

The remaining orchard trees on the Farm were stripped of leaves or blown over and the trees on the uncleared hill on the southern boundary were entirely stripped of leaves and appeared as though dead. Fencing on the farm was damaged but there were no livestock losses and no animals strayed. However, the poultry farm of Mr Syremi on the eastern side of Makagon Road was not so fortunate, the fencing was destroyed and hundreds of birds invaded Berrimah Farm. The enthusiastic efforts of Farm staff to round up the trespassing birds and deal with them led to a later complaint against the Administration.

Three shadehouses for plant pathology and entomology studies were being built adjacent to BAL but were not yet completed at the time of the cyclone and suffered little damage. They were completed a year later and are still present (buildings 15,16,17,18).



These three shade houses behind BAL were not completed when Cyclone Tracy struck in 1974. They were not greatly damaged and were completed the following year. Photo taken in November 1974.

Charlie's Jungle, behind the BAL carpark was planted in 1975 by Charlie Bosshart a farm worker. The farm kept bees for a short period in the middle seventies and the hives were located near Charlie's Jungle.



Charlie's Jungle was planted in 1975 by gardener, Charlie Bosshart. Photo 1996

Forestry Activity Terminated

The great expectations for forestry in the Northern Territory were not fulfilled. After initial encouraging growth the trees in plantations in the Top End grew slowly and termite

depredation was severe. Production was only a small fraction of projections and charges were made that officers were concealing the true state of development in order to protect their jobs. In 1978 a House of Representatives enquiry was held into forest research and development in the Northern Territory and its report was very critical of the conduct of the work and of the money spent on largely unsuccessful forest development. It recommended that the forestry section of the Department of the Northern Territory be disbanded and this was done. The work at Berrimah Farm was not mentioned in the report but it effectively came to an end with the disbanding of the forestry section.²²

Senior forestry officers left and other staff were absorbed into a new branch, the Conservation Commission of the Northern Territory, together with the Reserves Board and the Wildlife Section of the Animal Industry and Agriculture Branch. The newly formed Conservation Commission inherited the forestry buildings on Berrimah Farm and remained in them until 1986. The early forestry buildings were used for a variety of purposes over succeeding years (see later). The first of them, the original office, ultimately fell victim to termites and was demolished in 1996 as previously described. The major forestry buildings (88, and 89) lay vacant for several years after the Conservation Commission moved out until the CS Robinson building (89) was taken over by Horticulture in October 1988.

The small patch of original forest left as an observation plot to study the effect of fire protection on native forest had degenerated during the sixties and all the large trees had died. The reasons for its collapse as an ecosystem were not known, possibly it was too small an

area, surrounded as it was by cleared paddocks or by pasture and horticultural trials where chemicals and fertilisers were being used. The observation area was badly damaged by the cyclone and was cleared and used as a buffalo paddock and geese experimental area before being planted to the orchard which stands now at the corner of Fritz and Curteis Roads.

Little trace remains of the forestry plantations on the Farm. The only trees surviving from the forestry nursery are nine Caribbean pines (*Pinus caribea*) in a group beside the present workshop compound.



This small stand of Caribbean pines beside the workshop is the only surviving remnant of the forestry nursery.

These came from Queensland and were planted in 1963 or 1964 in a mycorrhiza trial to determine whether pines needed nodal fungus to thrive in the Top End. Apart from these pines the elevated concrete floor of a shadehouse and another shade structure are all that remain of the forestry nursery. A few trees, from one of the paddock blocks, are still present near the south eastern boundary and another small group stands just outside the south eastern fence.

In 1996 a planting of trees was made beside Fritz Road as part of a new initiative, agroforestry, designed to promote a combination of forestry with agriculture on rural holdings.

An Important Virology Laboratory

In 1977 some strains of bluetongue virus were found in insects in the Northern Territory. The presence of this very serious sheep disease spurred the establishment of a veterinary virology unit on the farm and the A.L. Rose Virology Laboratory was opened on 15 September 1979. A large number of viruses were isolated and identified in this laboratory over succeeding years. The work of the Virology Laboratory has been closely integrated with that of the Australian Animal Health Laboratory, Geelong, Victoria.

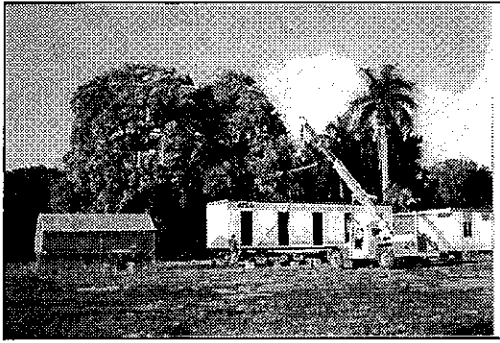
A group of five demountable buildings were placed beside the Virology Laboratory at the northern end of Ross Avenue and were occupied at various

times by Veterinary Services, Horticulture and Pastures. During their period with Veterinary Services one of the demountables briefly housed the headquarters of the Brucellosis and Tuberculosis Eradication Campaign (BTEC) and its leaking roof required that desks and cabinets be covered with plastic sheeting in heavy rain.

The demountables also accommodated the Darwin base of Veterinary Services Arnhem Land. This was a section of two officers who were regularly put down in Arnhem Land to camp for a week or more while they shot buffalo and examined them for tuberculosis. These buildings were eventually removed in 1996 to make way for a modern veterinary laboratory to service the needs of the Territory and to monitor the possible entry of exotic animal diseases from the north. Construction of this building commenced at the beginning of January 1997.



The Virology Laboratory has played a major role in monitoring the presence of animal viruses in northern Australia.



The demountable buildings at the northern end of Ross Place served a variety of purposes and were finally removed in 1996.

A number of women occupied professional and technical posts in the animal and plant laboratories at this time but none were employed in outside work until a girl was appointed in the middle seventies to assist Clem Benson, Agricultural Officer, in horticultural and gardening duties. Clem recalls that Ermgard, a German girl, was of robust physique and the hug she gave him when she departed after several years was nearly fatal.

Self Government and After

In 1978 the Northern Territory was granted limited self government and the management of Territory affairs was transferred from Commonwealth departments or branches of the Northern Territory Administration to new Northern Territory Government departments. One of these, the Department of Industrial Development (DID), was formed to take over the task of supervising and promoting rural and fishing industries and it absorbed the staff of the now defunct Animal Industry and Agriculture Branch of the Department of Lands. Berrimah Farm was part of the new department's responsibility. In July 1979 DID was renamed the Department of Primary Production (DPP), without significant change in function or structure. In

response to a developing expansion of the horticulture industry in the Territory, DPP appointed a horticulture research officer in 1979 and horticultural activity on Berrimah Farm was reinvigorated. The industry expanded rapidly in the eighties and work at Berrimah complemented this expansion. Initially much of the work was with vegetables and ground fruit: cabbage, cauliflower, broccoli, tomato, lettuce, cucumber and rockmelon but a variety of tree fruits were also planted in the original horticulture block: mango, avocado, sour sop, custard apple, star gooseberry, sappodilla and Barbados cherry. These tree fruit plantings were performed by CSIRO, which had no land of its own on which to undertake trials. However, as the decade progressed the horticulture staff of DPP expanded and all of the work was taken over from CSIRO.



Cowpea trials 1979. BAL and other buildings of the western group are behind. (A.Cameron)

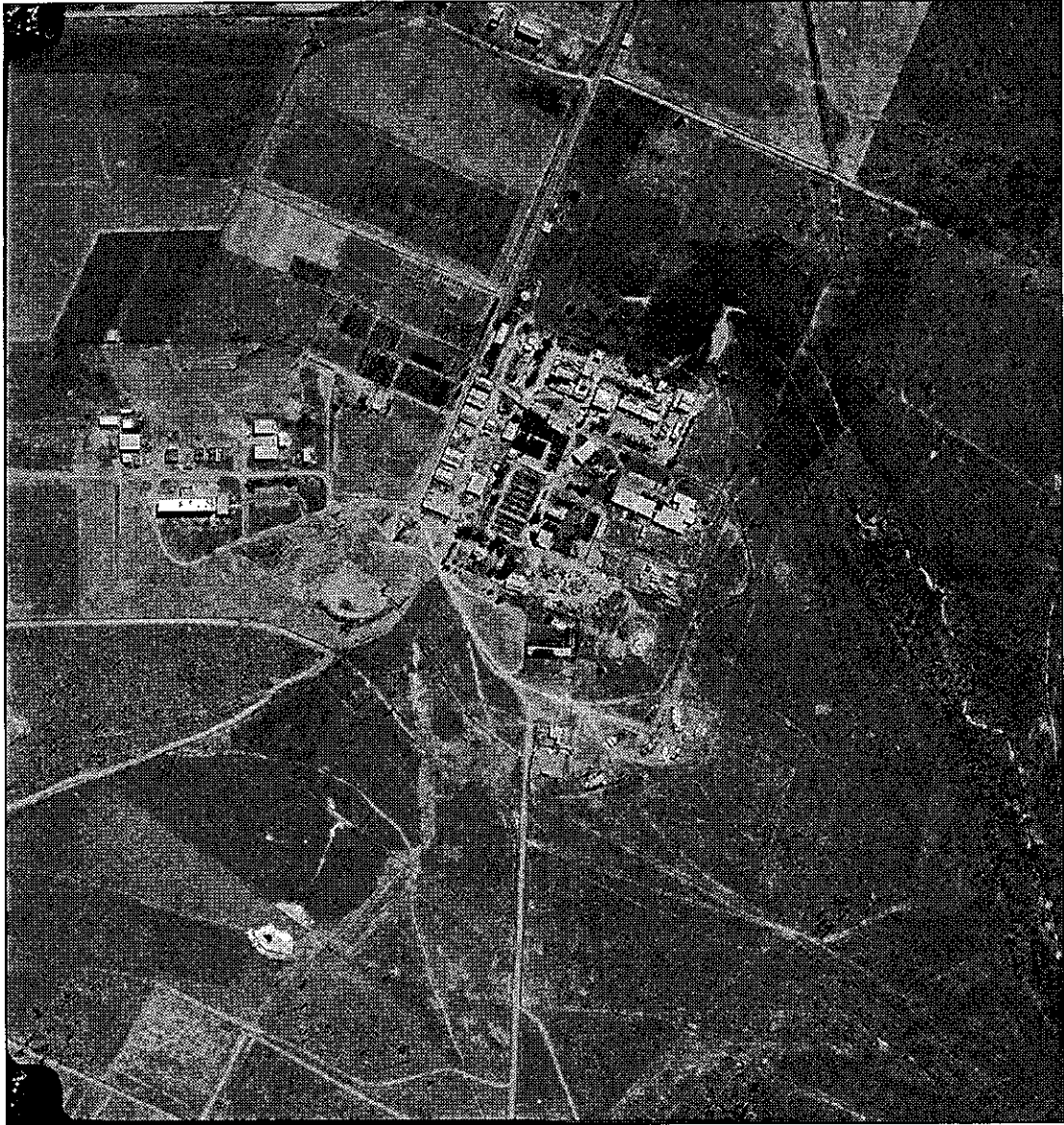
The commitment to pasture and animal nutrition research and development remained strong and some crop trials continued. Seven new paddocks were fenced in 1979 and there were plantings of pangola grass, signal grass, millet, mungbean and cowpea.

A number of Banteng cattle were captured on the Coburg Peninsular and brought to the Farm for crossbreeding trials. These trials proved, over the

next five years, the unsuitability of this breed as a beef animal.

In that year, too, the present workshop and store were built and the farm

attracted its second visit from a Governor General, Sir Zelman Cowan, without the minor dramas associated with the visit of Lord de Lisle.



By 1977 the buildings are repaired and some of the roads are sealed. The forestry nursery is still functioning but the observation block has gone and the trees of the western complex are not yet grown.

THE EIGHTIES - EXCISIONS AND EPHEMERAL ENTERPRISES

In the nineteen eighties, with the Farm fully cleared, established and serviced acquisitive eyes were turned upon it.

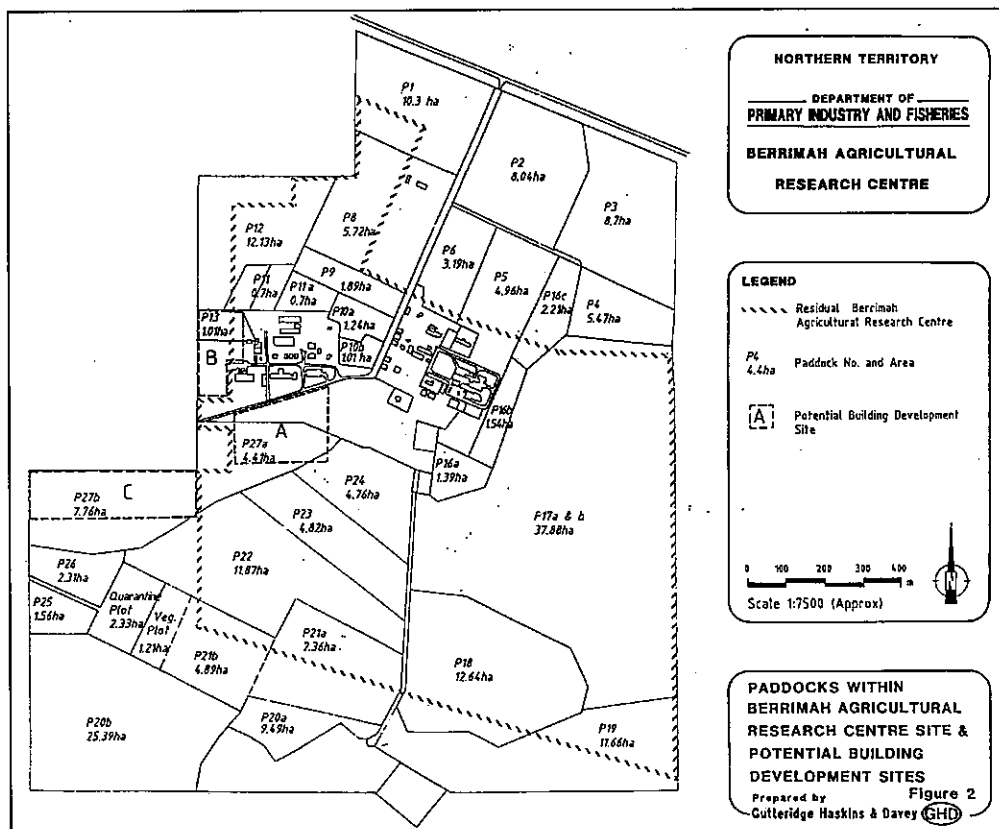
Excisions

In 1982 a strip of 10.43 hectares was excised along Marlow Road, Makagon Road and Pruett Road to meet an anticipated demand for industrial land but this demand did not materialise at that time, the strip was not fenced out and is still in use by the Farm.

A further 55 hectares was excised on the southern side of the farm to accommodate an extension to Tiger

Brennan Drive and a spur line for the Darwin to Alice Springs railway. This land, too, has not been fenced out and is still in use by the Farm. In 1988 44 hectares were excised beside the Stuart Highway for a grammar school, following an application to the NT Government from International Education Holdings Pty Ltd. Earthworks were commenced but by 1990 the project had failed, the lease charges remained unpaid and the land reverted to Farm use although not re-incorporated into the Farm subdivision.

The Farm was left with 127 hectares which, it was claimed, was sufficient for its activities.



This plan, prepared in December 1988, shows the extent of excisions from the Farm.



This 1981 aerial photograph shows many of the western cluster of buildings in place but not yet the John England Building. The Farm roads are still not all sealed but a few industries are present on Pruett and Makagaon Roads. Trees are still few and quite small.

Ephemeral Enterprises

As the Farm developed into a well organised and serviced research facility a number of government, semi government and private enterprises sought to establish themselves within the complex. The Department had, in 1986, been incorporated into a larger grouping as the Department of Industries and Development (DID).

After the departure of the Conservation Commission some of the former forestry buildings on the eastern side of Fritz Road were occupied until 1996 by a crocodile research and development enterprise, Graham Webb and Associates.

In 1987 Biogenesis Australia Pty Ltd planned to produce cloned plants and orchid cut flowers on the Farm. It intended to employ 90 people and have an annual turnover of \$8 million. The

group wanted to occupy building 89 and received encouragement from the then Chief Minister. However, the company went into liquidation before taking up residence and although a new company was formed and a three year lease offered the project did not proceed.

In 1988 a mushroom project was started in two sheds, 71 and 72, on the eastern side of Fritz Road. The viability of the process was established and the project moved after nine months to other accommodation. The sheds were subsequently used, briefly, for a worm culture venture.

There were further demands for land and facilities on the Farm. The newly formed Northern Territory University sought to establish a research facility and CSIRO also sought accommodation. In 1989, a 'BARC Joint Authority' was established to oversight development at Berrimah. It comprised Secretaries of DPIF (Department of Primary Industry and Fisheries which separated from the Department of Industrial Development in July 1988), Lands and Housing and Administrative Services.



This 1987 aerial photograph shows the industrial area north and west of the farm filling up. The John England Building is present, most roads are sealed and the gardens, trees and orchard are well established

In June, 1989 the National Safety Council of Australia obtained a ten year lease of an area south west of the present DPIF executive buildings (88 and 89). The area includes buildings 84 and 82 as well as the forestry house which was refurbished as the National Safety Council office. The National Safety Council sought all the buildings in the area together with other land in order to establish a major training facility. The submission called for a helicopter landing area, a Hazardous Chemicals Training Area (the only one in Australia) and a Hot Fire Training Area in the vicinity of the cattle yards. NSCA were permitted to establish an office and some facilities in buildings south of buildings 88 and 89, then occupied by Conservation Commission. The development of a hazardous chemicals area, a hot fire area and a helipad were resisted by the Department on environmental and health grounds and permission was refused by Cabinet.

In 1990 a project commenced growing tropical mushrooms of *Volvariella* sp., *Pleurotus* sp. and *Agaricus* sp. in the old forestry office. The project was given laboratory assistance and produced considerable quantities of mushrooms on racks in the darkened room but was abandoned after little over a year when the operator of the venture developed a serious allergy to mushrooms.

In a 1990 a pilot distillery was installed by Darwin Distilling Company Ltd in one of the demountable buildings at the northern end of Ross Place. The company aimed to develop an accelerated maturation process for the distilling of whisky, brandy, rum, vodka, liqueurs and gin. By June the company reported 'excellent progress' in their research program and by the

year's end had produced over two hundred litres of spirit. The company failed to attract backing for its process, however, and abandoned the project. The two hundred litres of spirit were poured into a Farm drain under the supervision of customs inspectors.

The Department Comes Home

In the early 1980s the animal health work of the Department expanded significantly with the acceleration of the program to eradicate bovine brucellosis and tuberculosis BTEC. On April 21, 1983 the John England Building was opened to accommodate veterinary officers and stock inspectors on the ground floor and a seeds laboratory together with Crops, Weeds and Pastures Sections upstairs.

At this time, too, a trial was conducted on the Farm which had the most profound implications for the one billion dollar BTEC program. It was necessary to determine whether cattle and buffalo could acquire tuberculosis from pigs because, if so, the feral pig herd would act as a reservoir for the disease in the field and one which might prove impossible to remove. For over a year, a group of pigs, deliberately infected with TB, were kept in very close association with a group of uninfected buffaloes in a paddock off Ross Place. Although the pigs and buffaloes spent the year together and even wallowed together in an artificial 'billabong' in the paddock there was no transmission of TB to the buffalo and the eradication campaign was able to proceed.

By the nineteen eighties the Farm had become the northern regional office of the Department but the head office was still located in Darwin city. In 1986 Conservation Commission, which had

inherited the former forestry buildings moved its offices to Palmerston and its two main buildings on the Farm, 88 and 89 stood empty and degenerating

In 1988 the Horticulture Division of DPIF moved into Building 89 and, in 1991, a decision was taken to locate the head office of the Department at Berrimah Farm, in Building 88. This move was completed on 27 February

1992 and Building 88 became the centre of DPIF administration.

During the eighties the principal Farm roads were sealed and the gardens, particularly the trees, had flourished.

On the eastern boundary of the Farm, both Pruett and Makagon Roads had largely filled with light industrial buildings.



This photo, taken in 1990, shows that there has not been great change at Berrimah Farm through the nineties. However, the Farm House, the old Farm Office and the demountables at the northern end of Ross Place, all present in this photo, have now gone and the beds of the old forestry nursery, also still visible in the photo, are no longer evident.

FARM NAMES

The earliest name of the farm was, as already noted, Berrimah Experiment Farm but when the Farm was formally announced in 1954 it was as Berrimah Experimental Farm. This name remained its official title, used by Lands Department, but the name Berrimah Research Farm (BRF) appeared in the seventies and gathered common usage in Department of Primary Production files and in later files.

As the buildings accommodating research units increased in number it appeared necessary to distinguish between this complex and the farm itself. In a memorandum of 6/1/89 Minister Mike Reed referred to it as the Berrimah Research Facility but the name 'Berrimah Agricultural Research Centre (BARC)' appears in a December 1988 report on the Farm by consultants Gutteridge, Haskins and Davey and on 9 January 1989 this name was used in a memorandum by the then Secretary, Department of Primary Production, Don Darben. There is no evidence that the name was ever formally adopted or gazetted but it appears in documentation from then on.

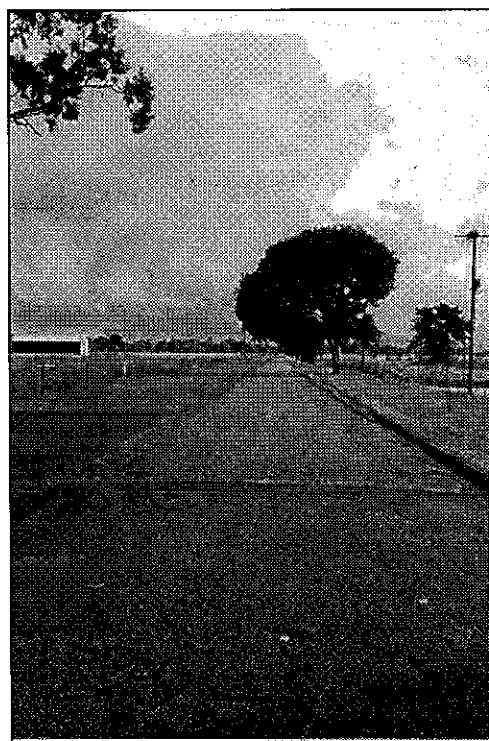
In 1992 a Farm Names Committee was convened to recommend a name for the farm itself and for the buildings and roads within it not already named. The Committee reported on April 13, 1992 and recommended that the Farm be called simply 'Berrimah Farm', that the name Berrimah Agricultural Research Centre (BARC) and other internal road and building names be retained, and that the principal headquarters building (building 88/89) be

named Goff Letts Building. There is again no evidence that these recommendations were ever formally endorsed by management or the Minister but they have remained in official usage.

The roads and some of the buildings of the Farm have been named after past officers of the Department and others who have had association with the Farm.

Curteis Road is named for William Curteis the first Director of Plant Industry during whose term the early development of the Farm took place.

Kent Road is named for Frank Kent the Farm's first manager who was on the Farm from 1956 to 5 July 1978. He had been a Field Sergeant, Army Farms during the War.



Kent Road is no longer a tree lined avenue, thanks to Cyclone Tracy.

Fritz Road is named for Bob Fritz, Technical Officer during the sixties and, for a short time, later Farm Manager.

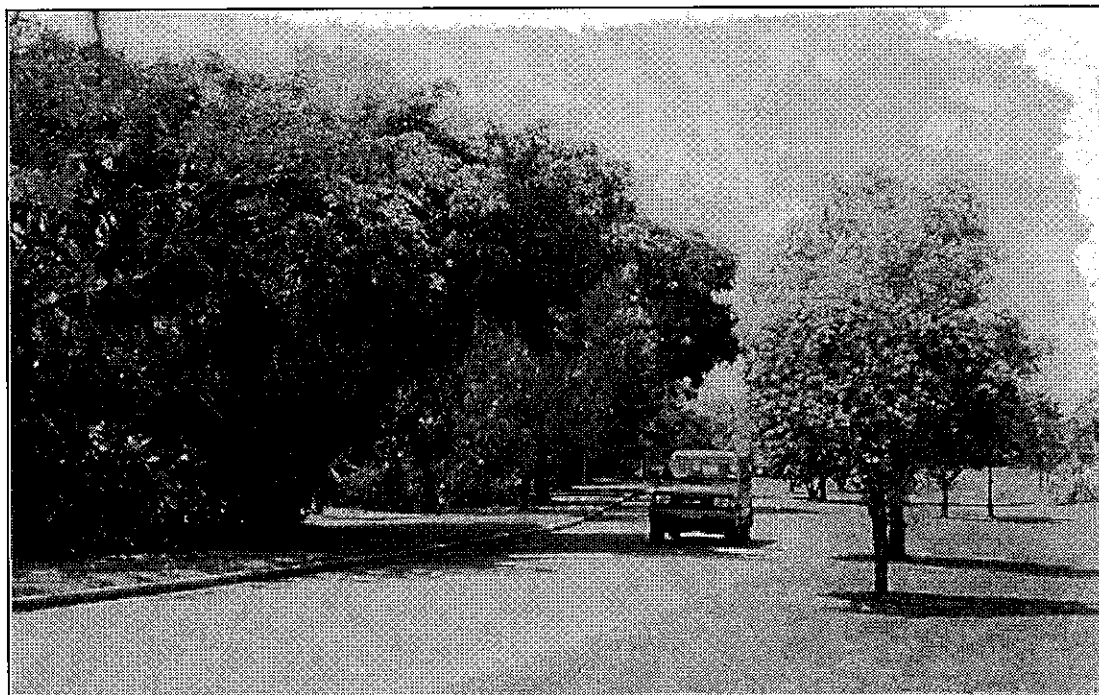
Ross Place is named for Stock Inspector Noel Ross, killed in a helicopter crash in Arnhem Land in 1989 whilst shooting buffalo for the Brucellosis and Tuberculosis Eradication Campaign (BTEC).

The Goff Letts Building is named for the head of Animal Industry Branch at the time of the amalgamation of this

Branch with Agriculture and the initiator of the first animal activity on the Farm.

The C.S. Robinson Building is named for botanist and soil scientist 'Bob' Robinson who worked for the Commonwealth Forestry and Timber Bureau during the sixties and later for the Agricultural Branch.

The John England Building is named for the Administrator of the Northern Territory, June 1976 to December 1980.



Curteis Road, the front entrance to the Farm, follows approximately the same path as the wartime track from Berrimah Hospital to the Operations Room.

SIX SPECIAL TREES

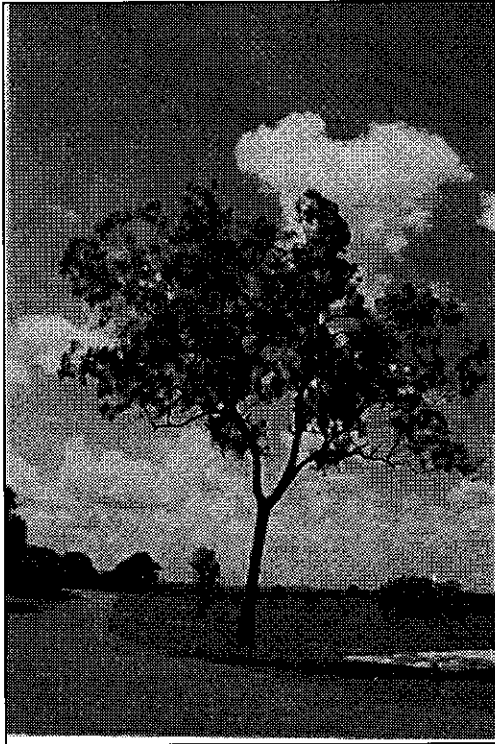
It is appropriate to end the story of Berrimah Farm with a mention of six trees which provide a link to the earlier picture of the land on which the Farm lies, before it was cleared and tamed and turned into its present state of paddocks, lawns and buildings.

Two large stringybarks (*Eucalyptus tetrodonta*) stand, one each side of the road near the workshop corner of Curteis Road and a hundred metres west of them stands a *Eucalyptus bleeseri*. Behind the wall of the dam there stands an iron bark (*Erythrophleum chlorostachys*) and there is another down in the valley south of Curteis Road.

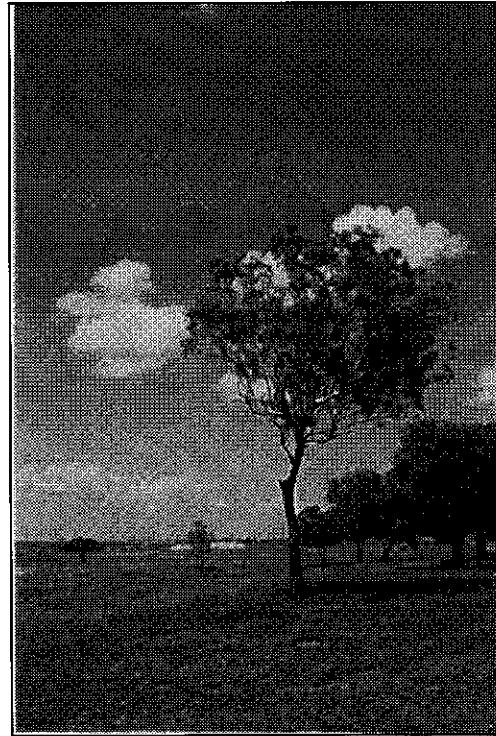
All of these trees are more than sixty years old, the stringybarks more than one hundred.²⁴

They thus predate the earliest activity in the area and are the oldest features on the Farm. They have witnessed the coming and going of the RAAF, the coming and going of the Aboriginal compound, the arrival of the 'Mobile Group' and the steady development of the Farm into a modern research and administrative facility.

The *Eucalyptus bleeseri* has a further place in the Farm's story in that it carries the name of one of the early lessees of the land.



This stringy bark is one of the oldest trees on the farm, probably over 100 years old.



This attractive *Eucalyptus bleeseri* would have been present when Florenz Bleeser was lessee of part of the farm.

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