



Embedded in the Bark: Kimberley Boab Trees as Sites of Historical Archaeology

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Abstract

This paper discusses the Australian boab tree and its potential for research as living historical archaeology. Boab trees play an important role in the economy, culture, and cosmology of Indigenous people in northwest Australia and continue to hold a powerful presence in the Kimberley region today. Working with Nyikina and Mangala Traditional Owners we have undertaken to document examples of this iconic tree and its cultural and historical associations, particularly in the form of carvings and inscriptions embedded in the bark. Focusing on four individual trees located in the Kimberley region of northwest Australia, we propose that the modification of boab trees, as a practice undertaken by both Indigenous and non-Indigenous people, offers important insights into the everyday lives and historic events that shaped this cultural landscape.

Keywords Australia · Boab · Culturally Modified Tree · Indigenous · Pastoralism · Exploration

*ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE ARE ADVISED THAT THIS PAPER CONTAINS THE NAMES AND IMAGES OF PEOPLE WHO HAVE DIED.

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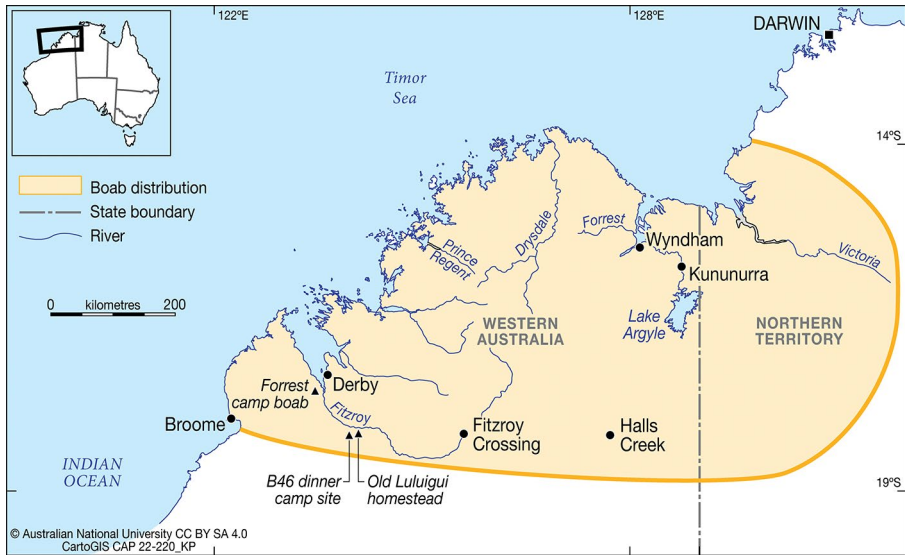


Fig. 1 Map of the Kimberley showing location of sites named in text. Image: ANU Cartography, 2022

Introduction

The Australian Boab tree (*Adansonia gregorii*) is one of Australia's most distinctive trees. It is naturally established only in the far northwest of Australia, a distribution incorporating the Kimberley region of Western Australia and the western edges of the adjacent Northern Territory (Lowe 2019; Orchard 2017) (Fig. 1). Mature *Adansonia gregorii* are characterized by huge bulbous trunks and large sprawling limbs. The thin leathery bark of the boab [or baobab] shields a soft and fibrous wood. Boab trees do not shed their bark, but it scars when cut. In this way, the boab's bark ages and grows with the tree, and marks embedded in it may last for hundreds of years.

In this paper we discuss preliminary results of a new study (*Archives in Bark*) aimed at documenting the culturally modified boab trees of northwest Australia. We propose that the modification of boab trees, as a practice undertaken by both Indigenous and non-Indigenous people, offers important insights into the everyday lives and historic events that shaped the Kimberley. We present four specific boab trees, by way of example, to illustrate the unique challenges and research opportunities of an archaeological project of this kind.

Our project may be seen as part of a burgeoning inquiry into the archaeology of culturally modified trees (CMTs) occurring across Australia and internationally (e.g., Östlund et al. 2002). Harwood and Ruska (2013) chart a number of the CMT studies undertaken worldwide and demonstrate through their own research, of Ojibway tree use in the Great Lakes region of the US, that there are locally specific ways in which tree modification may be defined and categorised. Some CMT activities that apply in one part of the world may, or may not, correspond to other places and cultures. In this paper for example, we consider boab trees marked by both Indigenous and non-Indigenous people over the course of postcontact history, whereas others have



Fig. 2 A mature boab tree provides the field team shade during lunch. Photograph: UK Frederick, 2021

described CMTs as “trees that have been altered by native people as part of their traditional use of the forest” (Pegg 2000:77). In time we aim to advance a conceptual framework for studying CMTs that is locally relevant to the Kimberley region but which may advance CMT research further afield.

To date, studies of CMTs within Australia have been largely on the archaeological evidence of tree modification for utilitarian purposes such as the acquisition of bark and wood for the manufacture of artefacts (e.g., canoes, shields, coolamons), for food gathering (e.g., “sugarbag” native honey) (Morrison and Shepard 2013), the harvest of bush medicine (Carson et al. 2014) or other cultural purpose (Etheridge 1918). Other studies have considered the use of materials extracted from trees (such as resins, wax or gums) for use in the production of tools and rock art (Rots et al. 2020). On rare occasions, tree carvings have also been the focus of exhibitions (Martin 2021; Muller 2011). There has been some attention to carvings on trees (dendroglyphs/ arborglyphs) within Australian archaeology recently, with the majority of documentation about hardwood species (e.g., Buhrich 2017; Buhrich et al. 2015; Buhrich and Murison 2020; Ferrier 2015). Increasingly, Indigenous peoples themselves have been highlighting the complex relationship they have with both modified and unmodified trees, providing an expanding knowledge base and appreciation of the depth of this field (Mangolomara et al. 2018; Salleh 2021; Williams 2021). Of the archaeological studies of CMTs undertaken in Australia thus far, a number are on the modification of trees during the historical period, following European invasion and settlement of Australian First Nations lands (e.g., Cole et al. 2020; Martin 2013; Morrison and Shepard 2013). This time frame may be indicative of the age limitations of CMTs due to the discrete lifespan of this finite archaeological resource, but it is also suggestive

of the significant role that CMTs may play in archaeological studies of exploration and colonialism.

Carved boab trees, in particular, have been recorded previously during anthropological research by Crawford (1968); and on archaeology and heritage surveys undertaken by Lewis (2014). There is also a rich, if scattered, visual record of modified boab trees that exists in historical and contemporary artworks, photographs, news and social media. Much might also be learned about modified boab trees through oral testimony, ethnography, “yarning,” and other history and memory work, such as that shared in this paper. Nonetheless, there is little in the way of a coherent, systematic or synthetic investigation of culturally modified Australian boab trees to date.

Given the striking appearance of the boab tree and its position in the public imagination of the Kimberley, it may be surprising that the trees have not garnered more archaeological attention. Head and Atchison (2008:2) suggest that “Plants are easy to take for granted.” And “the fact that plants or their constituent parts can be transformed in so many ways contributes to their mobility, malleability and invisibility.” The boab tree is hardly invisible, but it is possible that the sheer grandeur of the tree and its “non-human charisma” (Lorimer 2007) has to some extent overshadowed its recognition as living *cultural* heritage. Thus, one underlying aim of this project is to reinstate an awareness of the deep historical relationships between the boab tree and people living, working, and/or passing through the Kimberley.

In short, boab trees are both cultural heritage places and living archaeology, which offer insight into “the links between embodied individuals (both human and plant) and the broader landscapes that provision them” both (Head and Atchison 2008:2). Such relationships are borne out by Head and Fullagar (1992:425) in their archaeological study of the Marralam Boab site, in the Northern Territory, which points to the “close intertwining of ecological (in this case seasonal) and social factors in producing an archaeological pattern.”

Like its baobab relatives in Africa and Madagascar, the Australian boab tree is extraordinarily long lived. However, establishing the absolute age of trees can be difficult because the genus does not have dense heartwood. Although researchers have applied tree-ring dating techniques to the study of CMTs elsewhere (e.g. Mobley and Lewis 2009), this approach is not straightforward in the case of *Adansonia*. Determining the age of large boab trees from the circumference can be problematic due to their complex and idiosyncratic structural architectures and their ability to periodically generate new stems. New stems may appear over the lifespan of a tree and grow at different rates. Additionally, the inner part of the trunk is soft and fibrous and often contains hollows and cavities and thus they do not record clear annual growth rings. For this reason traditional techniques such as dendrochronology cannot be used to age boabs. AMS radiocarbon dating of parts of the inner cavity of some of the largest African baobabs has been undertaken, showing that some of the oldest trees are in excess of 1,500 years old (Patrut et al. 2011; Patrut et al. 2015), however, it remains to be seen how this compares with Australian boabs.

The wood structure of the boab also means that these trees disintegrate quickly once they have died and are therefore unsuitable for preservation in the manner of other CMTs. There is, consequently, some urgency to record these ancient trees while

they are living, and to capture the unique archaeological evidence embedded in the bark of their trunks.

Boab Trees, Their Distribution and Background to the Study

Although related to other species of baobabs (*Adansonia*) endemic to Africa and Madagascar (Baum 1995; Wickens and Lowe 2008) *Adansonia gregorii* occupies a natural biogeographic distribution limited to the Kimberley region of Western Australia, and the western areas of the adjacent Northern Territory (Orchard 2017) (see Fig. 1). *A. gregorii* is deciduous, with large creamy-white flowers and leaves appearing at the beginning of the summer wet season (Oct–Apr). During the drier winter months, the tree loses its leaves, and its fruit gradually falls to the ground, although some remain hanging on the tree late into the dry season (Done 2010:20–21). The gourd-like fruit have a woody shell which is known in Australia as the boab nut.

Historically, boab trees were a significant economic species for Indigenous Australians of northwest Australia, with the pith, seeds, and young roots all contributing to the local diet (Done 2010:20–21). Water could be obtained from the trees by cutting holes in the bark (Lowe 2019), and cavities in the trunks of old trees hold rainwater which may be collected when surface water is not otherwise available. Old boab trees can have multiple and massive trunks and branches, which offer significant shade even when their canopy is denuded. In a climate where the daytime temperatures can easily reach 30 °C (86 °F) in the cooler months, this shade can be vitally important to the survival of other living species (human and non-human). The large bulbous trunk and curving branches of the boab tree also make it particularly distinctive, with some trees possessing an almost anthropomorphic presence. These qualities of the boab tree – enormity, longevity, and unique appearance – have enabled individual trees to become distinctive landmarks.

As well as being focal points in the landscape, for Indigenous people boab trees were and remain good places for stopping, sitting down, meeting, picnicking and camping both historically and through to the present time (Fig. 2). Lowe (2019:20) reported that stockmen remembered trees similar to today as they were 30 years ago, providing shade for dinner camps. Utilized as markers in the landscape, boabs also feature in Indigenous cosmologies and ontologies with warnings against sleeping under their canopy at night. As Mary Pandilo informed Pat Lowe (2019:48) “especially rain time, the snake stop on top too, yeah. And they can fall on top of you”; or not to burn boab wood as “it could make you light; all your body will be light like the wood itself,” while breaking a flowering branch can bring a powerful wind with rain and lightning (Lowe 2019:50). The boab also appears as a character in specific Dreaming stories (Lowe 2019:50–51; Nangan and Edwards 1976:46–49; O’Connor et al. 2022) and have been locales for the performance of ceremony (as witnessed by co-author Jeffrey Jamieson). Although these esoteric aspects of the boab tree are not addressed in this paper, it remains important to note that the tree’s significance may be communicated in forms that are not always archaeologically discernible.

The entanglement of the boab tree with the people who live and work around it is evident in historical records, oral testimony, and contemporary lived experience, and

is reflected archaeologically in three key ways. First, the tree itself may retain and reveal the traces of human activity (e.g., scars, markings, carvings or inscriptions); second, the tree may have been used for its component parts (e.g., food, firewood, and material belongings); and third, the ground and subsurface soils immediately surrounding the tree may contain other material evidence of human activity. There is undoubtedly some overlap across these indicators, with some individual boab trees revealing all three. In this paper we focus our discussion on the tree itself as the site of modification activities.

Archives in Bark in Nyikina and Mangala Country

In 2021, during the first stage of the project, *Archives in Bark*, our team conducted fieldwork in the west Kimberley region of Western Australia, in the Country of the Nyikina and Mangala people. This area includes the tributaries and lower reaches of the Fitzroy River (*Mardoowarra*) and forms the southern boundary of *Adansonia gregorii*'s natural distribution. During this fieldwork, we worked with Nyikina and Mangala Traditional Owners to relocate known carved boab trees (*larrkarrdiy*), survey specific areas of Country, and undertook recording and 3D photogrammetry of specific trees and associated carvings. We also had conversations about boab trees more generally, their place in life and culture, and discussed the importance of particular boab trees for Nyikina and Mangala people both historically and today.

Our approach to locating culturally modified boab trees was, in the first instance, largely determined through oral history, in the form of collectively shared experiences and individual recollections. For example, Anne Poelina (2016) notes from the Nyikina oral history that there was “a ceremonial initiation ground on which a very old and large boab tree which was located on the right-hand side as you drove in to Balginjirr (Lower Liveringa), this tree died several years ago and was a rich ceremonial law ground involving many of the neighbouring tribes.” One of us [JJ] relates his experiences of being painted up (under a boab tree) in preparation for his own ceremony.

Following the invasion and settlement of the Kimberley by European explorers and Anglo-Australian settlers during the nineteenth century, many Indigenous peoples were removed or displaced from their homelands. A significant proportion of the lands surrounding the Fitzroy River were appropriated from Traditional Owners by the government of the day, and granted to Anglo-Australian settlers and companies under pastoral and agricultural leases. Lands including those of the Nyikina and Mangala people, have been used for grazing sheep and/or cattle since the late-nineteenth century. One way in which Indigenous people were able to remain living on and travelling through Country, was through their participation in the pastoral industry.

In what follows we sketch a loose narrative of this recent history, punctuated and illuminated by the presence of particular modified boab trees that we encountered during our fieldwork. We present the trees in this manner to highlight the way in which modified boabs enfold both the iconic and the everyday, the ordinary and the memorable events and individuals that collectively make the historical archaeology of the Kimberley.

The Forrest Tree

The Northern Expedition of 1879 was an exploration and prospecting expedition into the interior of the Kimberley, the objective of which was to examine the northern portion of the colony that was to become the state of Western Australia; to make observations on hydrology and geology and to collect specimens of the local mineralogy, botany and zoology (Forrest 1879). An auspicious journey that would include naming the Oscar Range, King Leopold Range (renamed the Wunaamin Miliwundi Range in 2020) and the Ord River (Clements et al. 2012:102–103), the expedition was led by government surveyor Alexander Forrest and a party of five non-Indigenous men (F. Hill, J. Campbell, J. Carey, M. Forrest and A. Hicks) and two non-local Indigenous men, Tommy Pierre and Tommy Dower (Forrest 1880). Under instruction from the Acting Commissioner of Crown Lands John Forrest, who was his brother, Alexander Forrest was dispatched with a general route laid out to follow. From Beagle Bay, he was directed to “make a careful examination of the country, and afterwards proceed Easterly toward the Fitzroy [River]...[where]... some time should be spent in following it up and making a reconnaissance” (Forrest 1879:3). Amongst his other duties, Forrest was expected to chart his journey within the land itself:

You will on all possible occasions mark your camps with the following distinctive mark cut into trees, thus $\overset{\text{AF}}{1}$, $\overset{\text{AF}}{2}$, $\overset{\text{AF}}{3}$, &c., &c. The numbers to denote the number of days that have elapsed since leaving the DeGrey River Station. (Forrest 1879:4)

In general terms Forrest complied with these instructions and in the bare-bones narrative of his diaries he indicates having marked several trees throughout his journey (Forrest 1880). According to this document he did so in one of two ways. Most often he used a capital F, for Forrest, and a number to indicate the camp’s place in the sequential duration of the expedition “marked tree F44”. Infrequently, he also added the year: “I marked a tree F 56, 1879 at the Ord Springs” (Forrest 1880; Shellam 2019). Occasionally Forrest marked his initials and the date, “Marked a tree A.F. 1st August, 79”, but rarely if ever did he follow the nomenclature laid out in the directive he was provided. In isolated instances Forrest identifies the type of tree that he inscribed, as on May 5, 1879: “Marked a large boab tree F 69”.

What we might ascertain from this manner of marking is that the success, failure, and historical legacy of the Northern Expedition was intrinsically tied to the individual identity of the expedition’s leader, hence the emphasis on his initials. While his tendency to exaggerate his depictions of a luxuriant country to encourage settlement of the region were later criticized (RiverOfLife et al. 2020:28), both the authorities commissioning the exploration and Alexander Forrest himself knew that history was in the making; and that his writing on the page and in bark were both an historical record and a claim towards colonial expansion and enterprise. However, what is also embedded in the bark of this blaze are the collective efforts of those who participated in the Expedition and those who they encountered along the way. In several entries Forrest notes exchanging goods and information with local Indigenous people, including receiving guidance on the best direction to take to find food and water.



Fig. 3 The boab tree Andrew Forrest blazed with F 69, and additional marks made on the western side of the trunk. Photographs: UK Frederick, 2021

In some ways then the location and marking of Forrest’s camps was influenced by local people, a fact which was often ignored in romanticized representations of the intrepid white explorer. As Forrest made note:

I instructed Mr Hill to lead the party towards the South-east, following the natives’ guidance... Columns of smoke from native fires rose up in every direction, and gave me the idea of a thickly populated country... we found the party camped at the edge of a large sheet of brackish water, which stretched for three miles in a South-easterly direction, while to the N.N.E it flowed out into the sea. The country travelled over to-day was very clear and well grassed. Before sundown nine more natives came into the Camp, making altogether twenty who are now with us, and most of whom have never seen a white man before. Marked a large boab tree F 69...

What Forrest’s diary reveals is that he was not alone when he made this inscription, despite the image evoked in the singularity of the F and by the isolation of the tree itself (Fig. 3). This tree was in fact a site of cross-cultural interaction, a place where Indigenous people and Forrest’s party camped together. It suggests there are a more nuanced set of relations to be uncovered in the history of “trail blazing.”

As our 2021 recording of the same boab tree suggests, there may well have been additional markings which were not mentioned in official correspondence or reportage at the time. In addition to relocating the F 69 noted in Forrest’s 1880 account, we

also recorded what might be interpreted as the initials FH, which would correspond to the Expedition's second in command, Mr Fenton Hill. Moreover, although the marks in the bark signify the Forrest Expedition more broadly, those laboring to cut the bark may well have been other members of the party.

To point to the presence and participation of Indigenous people in acts of colonial exploration does not, however, diminish the territorializing power of Forrest's actions. His act of inscription "named a spatial moment and a cultural expectation" (Carter 1988:62), which was ultimately concerned with possessing the country. Trees like those inscribed during Forrest's Expedition acted as physical waypoints, which were used by the explorers to orient themselves and as a way of mapping out a spatial history for other non-Indigenous explorers and settlers to follow. This embedded anticipatory function of the tree blaze is alluded to in the Expedition's Instructions, which identifies the area around the Fitzroy River as "a place likely soon to be settled" and articulates a primary objective of the journey—to ascertain the suitability of the land and waters for grazing, White settlement and other agriculture (e.g., sugarcane and coffee) (Forrest 1879:3–4).

The publication of the Expedition's official journal, it was later noted, "directed the eyes of the public towards this district and various companies were- [sic] formed to exploit its resources" (Anonymous 1912:15). GJ (Julius) Brockman was one of those non-Indigenous West Australians who wasted no time in seeking to capitalize on the "opening" of the Kimberley as a pastoral district. Unlike Forrest, however, Brockman's explorations were privately financed and for the purpose of his own enterprise. The surviving diaries of Julius Brockman are held by the Brockman family (with microfilm in some libraries) but they were edited and published as *He Rode Alone* by Joan Brockman (1987). As historian Mary Anne Jebb (1989) suggests, this edited account, and the diaries on which they are based, are hardly impartial but they do provide information and insights into the northern frontier of Western Australia.

Brockman's Blazing

In 1879 Julius Brockman formed a company with three friends, Farquhar McRae, Sam Viveash, and Fred Pearse and applied for 400,000 ac (162 ha) of land under the then North-West regulations that allowed individuals 100,000 ac (40 ha) if they did the location duties and stocked the land (Brockman 1987:67–68). Julius Brockman arrived at Beagle Bay in mid-November with Hector McRae, O'Meehan (a medical officer), Charlie Cusack, a husband and wife Indigenous couple George and Mary who were to be shepherds, J. Brown (as a general hand), 300 sheep, nine horses, two pigs, and two dogs (Brockman 1987:67–68). Here they set up a depot where the stock and some of the crew stayed and in early December 1879, Brockman, McRae, and O'Meehan and a "native guide" set off to locate the land the company had hoped to acquire.

Traveling to King Sound, they were able to follow Forrest's tracks noting that Forrest had traveled during the wet season and made deep impressions (Brockman 1987:72–73). They saw some of Forrest's camps and marked trees like "No 66 marked upon a white gum tree" (Brockman 1880). However, for Brockman, water was scarce. At one point, near Mount Clarkson, they could find no water except in the

hollow of a boab tree. “I climbed up and filled the water bag, but oh! the after effect was indescribable. Jalap [*a laxative herb*—was easy, compared to it. So we tried no more boab water!” (Brockman 1987:73). As the group got closer to the Fitzroy River, they often encountered Aboriginal people who helped them find water and guided them. In return, Brockman gave them food (ducks shot with a gun), flour, and other small gifts. Nearing the Fitzroy River on the 9th of December he records the country as “beautiful” (Brockman 1880). Crossing at the northern end of the land for which Brockman had applied, they encountered a group of Aboriginal men. After their own guide decided to stay with his friends, the group were joined by an Aboriginal boy who volunteered to guide them to the river (Brockman 1987:74). On arriving at the Fitzroy River, the boy went back and, after crossing to the south side of the river, the team stopped for lunch at a “fine lagoon on the edge of the Pindan” where Brockman cut his name and date on a tree. This action was not done in the company of Aboriginal people and its purpose was to mark the border of his land claim, at what later became the Lulungi [Luluigui] home station (Brockman 1987:74). The Brockman party then returned to Beagle Bay, crossing the river where Forrest had marked “74” in a “white gum tree” (Brockman 1880a).

Brockman’s attempts to acquire certain areas of what White settlers called “new country” may have been pre-emptory. He had applied for the land “before Forrest’s expedition started” and in his words “I of course felt certain that my applications would be approved in due course of time” (Brockman 1880b:3). However, in late 1880, Brockman heard that the regulations for the land that became known as the Kimberley region had changed (Brockman 1987:83). Despite having selected 400,000 ac (162 ha), paid the fees, and moved his stock onto land at Lulungi [Luluigui], the land was put up for auction and taken up by the Murray Squatting Company. Brockman was furious. In a letter to the editor of the *West Australian* (December 21, 1880) complaining about his treatment, and perhaps to dissuade other applicants, he pointed out the problems of settling the Kimberley, writing that the “soil is no good, it lacks variety of feed, wells are needed to counter the lack of water and the country is too difficult to travel stock and must be landed by sea.”

Undeterred by the setback, Brockman considered settling in the area north of the Fitzroy River where leaseholds had so far not been allocated. His expedition from early May 1881 to explore the country north of the Fitzroy began in dry conditions. Returning with Withnell and Paterson to the area near “Forrest’s F70 on freshwater river” (Brockman 1881) that they had visited the previous year, they only found brackish water. On a second expedition a few weeks later heading for the Meda River, water was reportedly still scarce but accessible from pools in the river beds. Soon after Brockman was informed by a Captain Walcott, who was searching for a suitable port, that there was no difficulty landing stock up the Meda River.

In September 1882, a motion to the Legislative Council (WA) proposed that an address to the governor be made indicating the “desire of this house that free leases of 100,000 acres, in the Kimberley district, for 12 years be granted” to Brockman and Paterson in recognition of their services to test the value of the area for pastoral purposes (Anonymous 1882). This motion was passed and Brockman subsequently took up land on the Meda River.

Brockman (1881:7) also made note of the boab tree and its importance as a food source to Indigenous people and his own party:

Baobabs are plentiful on this side of King's Sound. We obtained a good many of the nuts, or fruit, which are very good eating, either raw or cooked. The natives seem almost to live on them; they also cut into the young trees and eat the inner soft wood, which tastes much like sugar cane. In many places where there is no water they live for days on the baobab juice.

Brockman's observations may give some indication of why the boab tree featured strongly in travel accounts and in the consciousness of early expeditions through the Kimberley. Not only were the trees visually distinctive within the landscape, but they offered vital nourishment. As the above newspaper quote reveals, Brockman was quite active in sharing his travel accounts and opinions about the Kimberley with the general public. His personal interest was in having the region sufficiently developed, stocked, and settled to enable a viable pastoral enterprise (Brockman 1882).

Both Forrest and Brockman were conscious of the necessities for settlement of the area: reliable water and good feed for grazing. The disjuncture between Forrest's account and Brockman's reveals just how unacquainted the Anglo-Australians were with seasonal changes and annual variations. Despite differences in their perceptions of the country, one overall effect of Brockman's text is to reassert Forrest's original "discovery" of the area; thereby placing Brockman himself in the footsteps of Forrest, and rendering him logically as the well-known explorer's successor.

The Boab Trees Today

Although Brockman noted "I cut my name and date on a tree here" while in Nyikina and Mangala Country, we have yet to find any references made by Julius Brockman to having marked boab trees, specifically, during his surveys. There are contemporary oral history accounts of trees marked with a "B" and efforts are underway to relocate known examples. One of these trees may be represented by the large crater left by an enormous boab which died in the last decade, or so (see Fig. 1). A co-author [JJ] recalls that this tree was used as a dinner camp by local Indigenous stockman traveling from Sandfly Yard on Geegully Station to Luluigui Station as they were mustering cattle during the 1920s-1970s. In more recent times it was used by the school from the nearby Aboriginal Community of Jarlmadangah Burru when travelling on Country (J. Milgin Jr. and L. Sebastian, pers. comm., 2021). Those present recalled this tree being marked "B46" and that it was linked to George Julius Brockman. It is possible that Brockman used the tree in a similar manner, as a dinner camp during his travels. Aside from a large depression in the soil, and fine organic matter, no tree or large remnants are visible today (Fig. 4). It was last seen about 10–15 years ago but has left a lasting impression in the minds of the Traditional Owners who visited the location with us. It was one of the first boab trees that Nyikina and Mangala people asked to relocate as part of this project.



Fig. 4 Members of the fieldwork team standing at the location of a boab tree marked by explorer pastoralist G. J. Brockman. Note the large depression in the ground where the boab stood. Photograph: UK Frederick, 2021

A second tree was also identified in a broad area to the southwest of the reported B46 tree, but it was also difficult to relocate. Recollections suggested it was marked “B49” but when arriving at the suggested area, there were no signs of carvings on any of the trees here. While this may indicate that the tree lay elsewhere, Lowe (2019:74) reported a similar situation at the ill-fated Camden Harbour settlement. Following the death of “Mary Pascoe” in 1865, she was laid to rest at the foot of a boab and had her name carved into the trunk of it. Crawford (1968) later observed the carving as “perfectly legible,” however by the late 1990s when Lowe visited “most of the markings, including Mary’s name, had grown over and were hard or impossible to make out in full” (Lowe 2019:74). It may also be that the second tree believed to be marked by Brockman was in the suggested location but at that time we visited, the light made the carving difficult to see.

Pastoralism and Boab Trees at Luluigui Station

Luluigui (also known previously as Lulugai, Lulungi, and Luluigai) Station is located near the Fitzroy River approximately 130 km southeast, as the cockatoo flies, from the town of Derby. Since the mid twentieth century, the station has been owned as part of a conglomerate of neighboring pastoral leases which often included the neighboring Kalyeeda and Myroodah Stations; as well as Nerrima and Jubilee Stations under the ownership of the McLarty family, pioneers from southwest Western Australia (Richards 2003), who held the pastoral lease of Luluigui for the bulk of the twentieth



Fig. 5 Station hands at Luluigui Station, Hubert H. Brockman stands in the center, ca. 1922. State Library of Western Australia 067202PD. Hubert H. Brockman collection of photographs of the Kimberley, Pilbara and South West regions of Western Australia BA1465/30

century. In 1999, the Indigenous Land Corporation (ILC – now the Indigenous Land and Sea Corporation) purchased the pastoral leases for Myroodah and Luluigui on behalf of Nyikina and Mangala people with the intent to improve the property before handing it over to Traditional Owners, a vision realized in 2020.

When it was first established Luluigui was run as a sheep station, but it gradually moved over to grazing cattle. By the early 1920s, a homestead, outbuildings, and stockyard had been built and was managed by Hubert Brockman with a team of Indigenous and non-Indigenous stockmen. The nephew of the aforementioned Julius Brockman, Hubert was the son of Julius' younger brother Henry, who himself was a grazier and a member of the Western Australian State Legislature, 1887–93 (Anonymous 1916:7). While Hubert's uncle and father held reputations as early pioneers and politicians, Hubert shied away from political life, with limited public accounts of his time on Luluigui from ca. 1915 into the late 1920s.

Nyikina Mangala man and co-author Jeffrey Jamieson talks about the 1920s when his grandmother came to Luluigui, and subsequently his mother grew up there:

my old granny who's from the Mangala people in the Great Sandy Desert... over the years, with her two sisters who were all married to the same man, they ended up, you know, wandering around... before they made their way and walked into Luluigui in 1928. That was told to me by my mum... because my granny related that story to her... my mum was born in 1933 and she grew up

then on Luluigui. I'd say she was 14 when in 1947 she was given in marriage culturally to old Tommy Kunjagar of Luluigui...

Jeffrey Jamieson was born near the Aboriginal station worker's camp at Luluigui Station and recalls leaving the station to attend school and returning during the holidays before becoming a ringer in his own right:

When I was about five or six years old, maybe in 1961, Old Ted McLarty... he became like a guardian to me. He put me in school and to stay in the UAM [United Aborigines Mission] hostel - the mission in Derby with a big mob of other kids from around, all over the Kimberleys... I'd come back every school holidays...but I'd get caught over this side of the river because of flood... before 1968 when the [Willare] bridge was opened up... you'd have to wait for months, weeks to cross that [River] you know.... Sometimes I used to go out in my school holidays working in the stock camp with Ted. He would've taken me out there. In February 1970 Ted sold out and he left Luluigui. By August that's when I started my station work, giving a hand to fix windmills and fences. Paid wages just started, wages in 1970. ...Luluigui, that's where I started my full year as a ringer, as a young fellow in 1971.

As with many other pastoral leases across Australia, prior to the 1960s, Indigenous stockmen were not paid equal (if any) wages. An unanticipated effect of the 1968/69 introduction of equal wages by the Commonwealth, was that many Aboriginal people were forced off Country and pushed into the fringes of town, dispossessing them further and disconnecting many from their traditional lands as shared by late Nyikina elder L. Marshall (pers. comm., 2010). Looma Community was established around this time, to the west of the Old Liveringa Homestead, and is one of the places to where many Nyikina and Mangala people living at Luluigui relocated.

In '71 I went through my ceremony and all that I said before. '72 I come back at that that Johnny Collins tree where you marked there and all that. And worked all the way to right up till about August, went to Fitzroy races and I didn't come back! Anyway I worked all around all the other side in the East Kimberley finally coming back late '75, that's when I find mum and dad at Looma ... Looma was established earlier in '74 and when I come back I wanted them mob to all come back here [to Luluigui]. But we but we couldn't, you know, see the old fella was getting old himself, old Tommy ... mum's cultural husband, my stepfather, my Aboriginal dad. Luluigui had become a sad place since I left. And it still is sad now. Mum and my family was the last lot, last one to leave Luluigui out of the Aboriginal people.

The Horse Yard Tree at Luluigui Station

During our 2021 visit to Luluigui Station we went to the site of the old homestead and station camp. Some of the buildings remain but they are no longer used and are in a

general state of disrepair. Evidence of station life and stock activities were seen on the ground surface, and in a few remaining timber posts of the yard. What caught our attention, however, was the centrality of a large culturally modified boab tree (Fig. 6). The tree shows various kinds of modification, which involved both extractive (carving) and additive processes (Fig. 6). The latter include nails, buckles, leather straps, wire, and chains hammered into the tree bark and, according to a co-author [JJ], had a utilitarian function as part of the workings of a pastoral lease. The carvings suggest initials, and Joseph Jr. Milgin, a Nyikina Traditional Owner, has indicated that one large set of initials “JM” may relate to his uncle (recently deceased). Co-author [JJ] also recalls that JM carved some of the river flat stones at *Balanjarr* (the nearby crossing point on the Fitzroy River to travel from Luluigui to Mt Anderson/Liveringa) and other boabs nearby:

I came back to Luluigui in 1980, I spent a wet season there. Yeah, we repaired this yard, we repaired it into a full horse yard in 1980. Some of the names were already on that tree from previous years like JM who passed away recently [2021]. That wet season of 1980 Georgie Green, Leslie Skinner and myself, we put our names, on that boab tree in the horse yard at the Old Luluigui homestead. We stayed until about the Boab Festival in July of that year - cause there was a new manager at Myroodah, new company took over then. A Lebanese company took ownership of Luluigui, Kalyeeda and Myroodah... They got a new crew but soon after did not have anyone out here... This place was just swinging doors, you know, swinging with the breeze.

Adjacent to this boab tree was the round yard used for breaking horses, and is depicted in a photograph from the early years of the station (Fig. 7). It is likely that the nails and hooks that remain embedded in the boab trunk, were used for hanging bridles and other gear. Indeed, as Fig. 7 suggests, the boab tree was integrated into the fencing of the yard, with posts running into the lower portion of the trunk.

While on site, co-author Jamieson referred to how this particular boab tree featured in stock work and life at the Luluigui-Myroodah Station:

We near that old *larrkarrdiy*. In that old horse yard area. Pretty much right in the middle there to provide shade for the yard for the horses and... During the mustering season a lot of work would be done there. Horse breaking earlier in the season as well as just generally feeding the horses and things like that... it's a handy boab tree that one and we used to climb up them, up on them branches and trunks to watch all the men down below when I was a kid... during the wet season it was a lot greener with leaves but we would climb right up just for something to do, you know. It'd be during the rain time, and it would be bloody slippery but it was good sort of doing something. I'd say about 15 to 25 people [used to stay at Luluigui] I think at the most during the work season. They'd go on holidays during the end of the year when the season finished up, mustering season, and they'd go to holidays, ceremonies and whatever.



Fig. 6 Different kinds of tree modification associated with the horse yard history of the boab site at Luluigui Station. Photographs: UK Frederick, 2021



Fig. 7 Hubert H. Brockman breaking in a colt, Luluigui Station, 1920s. State Library of Western Australia 067286PD. Hubert H. Brockman collection of photographs of the Kimberley, Pilbara and South West regions of Western Australia BA1465/30

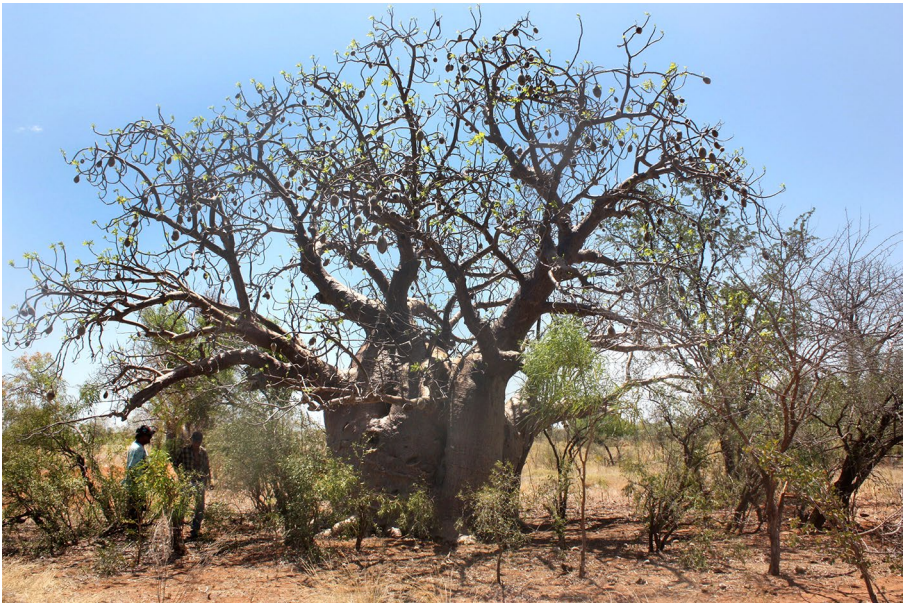


Fig. 8 A large boab tree at Luluigui Station, where Jeffrey Jamieson and Johnny Collin waited for the cow (“the killer”) that was to be dispatched and butchered. Photograph: Melissa Marshall, 2021

Like other forms of name-inscription activity, carving one’s name in a boab tree



Fig. 9 Co-author Jeffrey Jamieson standing next to the “killer” tree, 50 years after it was carved during station work at Luluigui. Photograph: Melissa Marshall, 2021

might be considered an expression of identity. But it is also a sign of literacy and at the time that Luluigui Station was operating, not all of the people living there could read and write. Thus, the presence of some names may illuminate the absence of others, and the educational inequities faced by Indigenous people at that time.

The “Killer” Tree at Luluigui Station

There are other trees that reflect histories of the pastoral industry in the area, but they are not always obvious to decipher. One example is a boab tree visible from the present-day Myroodah-Luluigui Station track that is boldly carved with the name JOHNNY COLLIN. Co-author Jeffrey Jamieson provides the background to this inscription, “I was with him when he did it.” He recalls being picked up by the station manager, old George Lannigan, who told them they had to go get a “killer.” Jeffrey and Johnny and about three other men were there under the boab tree waiting with the truck for the “killer,” a cow brought down from the herd to be killed and butchered for meat. They would climb up the tree and shoot the cow from above. Jeffrey recalls waiting a good hour or two for a second group to drive the killer out from the bush, and in that time, Johnny carved his name into the trunk of the boab. The carving was done with an axe, because they had one with them as they were planning to cut up the rib bones of the cow that was coming their way.

Yeah, we was there, we were waiting for that killer at that tree, they was bringing him on horseback. Couple of old fellas and a couple of young fellas on horseback were bringing bullock cattle from there in the paddock. Cattle was in

that paddock there. And we'd made arrangements where we'd waited under that boab tree for the killer... While we were waiting for that mob, we went there early, we were sharpening up knives on oilstone and things like that... While we were waiting these blokes, this young fella Johnny, he grabbed that axe and started chopping his name on that tree and Roy too, Roy Juboy. Yeah he was with us that day... but him and I we had just come off the ceremony thing at Jigarda (on Liveringa) earlier on.

We're waiting there and that's when Johnny was carving his name there on that tree and Roy too, waiting for this killer to arrive. Yeah that was in, I'd say that was about late March. Mid to late - well late March, it was another week to go in March, before April you know... Still wet, the country was, you know, wet season still, it was 1972. Somebody climbed up to the top of the tree, shot the killer from the tree with a rifle. We went out to get leaves and that sort of thing. And that was it. Someone bought the horses back to the homestead and a lot of us stayed back there helping skin the killer.

Johnny Collin was a Nyikina man and like Jamieson, belonged to that Country, on which the Luluigui Station was built. As such, there was nothing wrong in Johnny making his mark in the boab tree, on living Country. What makes this even more remarkable however, was that this is not the only carving that remains visible. During a subsequent visit to record the oral histories of this event, one of the Traditional Owners noticed additional carvings, including a faint 3-toe emu track on the west-facing side of the tree, and possible kangaroo tracks on the north-facing side. The presence of these marks, and the manner in which they have "faded" as the trunk has grown and widened, indicate a time depth and continuity for boab inscription in this landscape. The presence of *karnanganja* (emu) and *bardkarroo* (kangaroo) *kardijina* (footprints) are not widely represented in the sheltered rock paintings on Nyikina and Mangala Country near the *Mardoowarra* (Fitzroy River). Rather they are found further to the north and south in rock engravings of neighboring language groups across the Kimberley (Donaldson 2011) and further south in the Pilbara region (Mulvaney 2015). While apparently absent within other artistic mediums, we have documented similar carvings on other *larrkarrdiy* trees within this broader cultural landscape. Representative of *jarriny* (spirit animal/totem), tracks also can be used to illustrate songlines and narratives traversing Country from *Moorool Moorool* (King Sound) to Geegully in the desert to the south and beyond (Milgin 2018). Examination of the potential relationships between rock art and boab tree carving is ongoing and the subject of future work.

Discussion and Conclusion

Pastoralism was a key driver and technology of colonial expansion into regional and remote areas of Australia which resulted in (often devastating) impacts on local Indigenous communities and the natural resources they relied upon for survival. Introduced stock compacted soils and fouled vital water sources and the new animals became a point of tension in relations between Indigenous people and early Anglo

settlers. Consequently, Indigenous people of the Kimberley “moved onto” and lived in station camps under difficult circumstances and due to a complex suite of reasons. Like many other Indigenous groups occupying lands subject to pastoral enterprise throughout Australia, stockwork and station life was one way for people to remain on and physically connected to their own Country (McGrath 1987; Smith 2000). While there is no doubt that some local station owners and non-Indigenous stock workers were complicit in the killing of Kimberley peoples, life on a station might also offer a degree of safe harbor, at a time when Indigenous people living in the bush were being hunted and massacred (Owen 2003; Redmond and Skyring 2010; Skyring 2018; Smith 2000).

In spite of the significant changes brought by pastoralism, Indigenous people found ways to maintain cultural activities and assert their ties to the land. As previous archaeological research has indicated, this sometimes involved the integration and adaptation of new materials as well as the incorporation of new modes of communication (Frederick 1997; Harrison 2002, 2004; O’Connor and Balme 2013).

The archaeology of the Kimberley region provides evidence of Aboriginal people working within and living alongside the pastoral industry, while also having ties to Indigenous lifeways experienced prior to invasion. Harrison (2002, 2004), for example, has shown the ways in which Aboriginal people living in stations camps utilized, transformed, or repurposed European objects made of materials such as metal and glass artifacts, and in the process gave them new forms and new meanings. The marked boabs may be seen as part of this rich heritage.

The trees we have discussed in this paper offer unique insights into the early non-Indigenous /Anglo-Australian invasion and settlement of the Kimberley and an emergent pastoral economy that ultimately transformed the landscape and lives of people in northwestern Australia. The names, initials, and material culture embedded in the bark of the boabs present different perspectives on this history and open up new narratives.

For explorers and early settlers to the Kimberley, tree-blazing was a way of demarcating territory. For the men working at Luluigui Station the boab tree, with all of its modifications, was part of the fabric of the horse yard. For Johnny Collin and other Nyikina men living and working on Country, inscribing the boab tree was not unlike making a hand stencil and an act of cultural continuity. What may have been “just something to do” as they were waiting under the tree, Johnny’s name in the bark remains today as a bold reminder of the lived experience of being on and belonging to Country. The “killer tree” at Luluigui Station is testament to the fact that there are places where old and new markings meet. As one of the few examples known to date that incorporates traditional motifs and historical carvings, a tree such as this is a tangible reminder of the depth of lived connection with Country.

What these examples demonstrate is that the living bark of the boab tree was a medium of communication used by both Indigenous cultures and Anglo-Australians. These various carving events reveal not only different forms and techniques of modification but also different intentions. The Forrest and Brockman carving activities indicate efforts to blaze a course through unfamiliar territory, and the on-the-ground survey and mapping strategies of the day. On the one hand, the boab trees anchor these exploratory accounts in the particular – in an actual landscape of journeying

that was seen and felt by the individual expedition members. On the other, the tree carvings signpost a larger narrative of colonial endeavor and the incidents of encounter and exchange that were enfolded in the longer-term process of invasion. That they also speak of shared events and exchanges is where archaeology and oral history may have an exciting part to play.

Ethnographic accounts collated as part of this research with Traditional Owners including co-author Jeffrey Jamieson, evidence the tangible and intangible value of the trees from *Bookarrikarra* (Dreamtime) to today. Towering over the riverine landscape as markers of place, *larrkarrdiy* connect the landscape where rock formations and ranges are few and far between. Grounding culture and ceremony simultaneous to social and economic activities, including the harvest of food and string (material culture), traversing Country one passes a multitude of *larrkarrdiy* guiding the way and holding stories of the ancient and contemporary past alike. Some are carved and inscribed, while others hold stories that are not immediately discernible on their surface but safeguarded and shared by today's knowledge holders.

In conclusion, boab trees feature in the background of key historic events as well as everyday histories of the Kimberley. From time to time they also appear in the foreground of human activity and endure today as archaeological sites, living heritage, and aide-de-memoire. *Larrkarrdiy* to Nyikina and Mangala people, boab trees to all, they remain significant markers of identity and place – where people met and rested, where others were born or played; as enduring locales for cultural events, camping and cross-cultural communication. As this project indicates, the essence of the boab traverses time and is as vital today as ever.

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