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Forest Giant Or Bush Fairy? - The ‘Great Ghost’ Kauri Of The Upper Tararu Valley

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Introduction

A very large kauri (*agathis australis*) was reportedly sighted in the Tararu valley, north east of Thames, by an observer in the late 19th century. Although its dimensions were estimated, the existence and gigantic size of this tree appears to have gained credibility and are widely reported, particularly in modern on-line references. For example:

The largest recorded [kauri] specimen was known as *The Great Ghost*¹ and grew in the mountains at the head of the Tararu Creek, which drains into the Hauraki Gulf just north of the mouth of the Waihou River (Thames). Thames Historian Alastair Isdale says the tree was 8.54 metres in diameter, and 26.83 metres in girth. It was consumed by fire c.1890 [3]² (https://en.wikipedia.org/wiki/Agathis_australis).

The text quoted here is widely plagiarised on the Internet; e.g. http://communities.co.nz/kauricoast_new/History_The_Kauri.cfm?par_ListID=1016033. The name ‘Great Ghost’ will be used throughout this article to distinguish this tree from another large kauri, growing in the same area, which was also observed and reported, as described below. The Great Ghost also features in a recent (circa 2009) display at the Department of Conservation (DOC) Kauaeranga Visitors Centre near Thames. On the veranda, there is a series of concentric grooves in the decking, which reflect the actual diameters of ‘known’ large kauri. The largest, the Tararu Great Ghost, is qualified as ‘never officially measured.’ However, the listed diameter of 8.53m is nearly double that of Tane Mahuta (4.38m).

Barker and Wilton (2010) describe another large kauri in the Tararu area with lesser (but actually measured) dimensions. This tree was a well-known tourist

¹ Some articles use the term *Grey Ghost*. The (estimated) dimensions are consistent; indicating they are talking about the same tree. The only Isdale references to this tree that could be found quote the estimated dimensions listed in Hutchins (1919) and Reed (1953).

² The Reference, endnote [3], is another Internet source: “*Giant Kauri Trees.*” *Tararu Valley Sanctuary*. Archived from the original on 2007-12-23. Retrieved 2007-11-02.)

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attraction in the late 19th century, and was the subject of numerous newspaper articles, photographs, an oil painting, a sketch by a well-known botanical illustrator, and a poem. For the purposes of this article, that tree will be known as the ‘Tourist Tree,’ although it probably deserves a better name. The tree was destroyed by fire in 1898. The Barker and Wilton article mentions the Great Ghost, in terms of a quotation from Reed (1953), but doesn’t explore the possibility of the Great Ghost and the Tourist Tree being the same, or separate trees. The article did, however, outline the discovery of a burned-out stump with a diameter of 4.5m, which, coupled with its location, indicates it was probably that of the Tourist Tree.

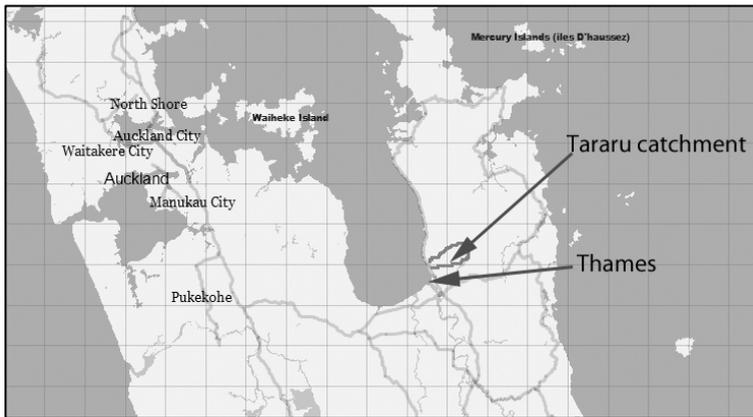


Figure 1. Location of the Tararua Valley

It appears that the Great Ghost is becoming a legend in its own right (possibly approaching the status of a national icon) and its existence, and size, increasingly regarded as factual. The purpose of this article is to examine the historical and archaeological evidence relating to the Great Ghost and Tourist Tree, and to consider whether the Great Ghost was indeed a true forest giant, or merely a myth, based on a wildly-inaccurate estimated measurement.

Historical and Archaeological Background

The historical impetus for the Great Ghost story appears to be the writings of Sir David Hutchins, a British forestry expert with a wide background in colonial forestry, who, in 1915, was commissioned by the NZ government to

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report on the nation's forests (Roche 2005). Hutchins, in a report entitled *New Zealand Forestry Part 1* (1919),³ stated: '...it was common knowledge in the sixties and seventies of last century that there was a huge kauri growing on the mountains at the head of the Tararu Creek...This tree was stated by those who had seen it to be twenty-eight feet [8.9m] in diameter.' This assertion, already at least second-hand, was then reiterated by Reed (1953) and the story 'had traction,' to use a modern cliché.

The story (and tree size) continues to flourish and grow, especially in the cyber-environment, where academic rigor has low priority and plagiarism is rife. For example, the archived Internet article referenced above states:

The Southern Kauri (*Agathis australis*) is found only in New Zealand's northern rainforests, where they grow to immense sizes. Early settlers who saw their massive columns of smooth, white trunks, and elegant tracery of high canopy likened them to Gothic cathedrals.

Kauri trees can live more than 4000 years and grow cylindrically, rather than conically like Sequoia (Giant Redwood). So, even though they may not grow as tall or broad as other trees, the Kauri overall contains more timber by volume.

Tararu Valley is today home to ancient trees including this 1500 year old kauri tree [photo omitted]. It is 8 metres (25 feet) in girth but it is small compared to Tararu's 'Te Atuararahi' (The Great Ghost) Kauri, the largest kauri known and thought to be the World's largest measured tree. Te Atuararahi was a gigantic Kauri recorded at 82 feet / 27 metres in girth [diameter 8.6m].... Tragically, this colossal tree was destroyed by fire around 1890.⁴

No measurement data, photographic, nor archaeological, evidence of the Great Ghost has been located to date. The history of the Tourist Tree is well described by Barker and Wilton (2010):

The story of this great tree lives on in the writings of several reputable local historians and the newspapers of the day. In April 1884, a Letter to the Editor stated 'There is no need to describe the big kauri tree at the head of the Waiotahi Creek. Its name is as well known at the Thames as that of the Big Pump.' The statement was made that a

³ Hutchins passed away in Wellington in 1920, while completing Part 2 of his report.

⁴ This text is duplicated at http://www.littlegreenpixel.com/rainforest/img_kauri.php.

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photograph of it could be found in every English-speaking country and that something must be done to buy the tree and save it or else 'if the tree be cut down we shall lose the grandest natural wonder in the neighbourhood of Thames' (*Thames Star* 29 April 1884).



Figure 2. An 1892 image of the of Tourist Tree in the Tararu Valley, originally captioned 'Kauri tree at Punga Flat, recently destroyed by fire' (*Auckland Weekly News*, 30 July 1898, *Auckland Library Heritage Images*).

Calculations based on the likely height of the human figure in front of the tree in Figure 2 indicate a diameter of about 4.3 metres (14 ft), which equates to a girth of 13.5m (44 ft). It would have had approximately the same

diameter as Tane Mahuta, which is a good indication of why it was so popular as a tourist attraction.

Noted artist Gottfried Lindauer also journeyed to the Tararu Valley to take a photo of the tree:

We have been shown a photograph executed by Mr Lindauer of a gigantic kauri tree, which stands at the head of the Ohio Creek, Upper Tararu, near the Look-out Rock. This monarch of the forest measures 50 feet in circumference [diameter 4.85m], and its trunk is devoid of branches to a height of nearly 100 feet. The figure of a stalwart woodsman, standing in front of the tree appears a mere pigmy in comparison with its stupendous bulk (*Thames Advertiser* 2 September 1882).

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From the time the Thames goldfields opened in 1867, pilgrimages appear to have been made to the Tourist Tree; outings were made to see the tree and picnic nearby. Grainger (1951), remarked that, on weekends, citizens used to take "...walks to Punga Flat to see the giant kauri tree".

Local historian Toss Hammond recalled that, in 1884, he was with a party who were walking in the area. He noted the big kauri tree and estimated the girth of the base as 43ft [diameter 4.2m] and 45ft to the first branch. With him was H.D. Driver, a painter of Thames who had recently painted the great tree. Mr Hammond stated that, 'many years afterwards the Thames Borough Council paid £50 for this painting which now hangs in Thames Public Library' [then the Carnegie Free Library building in Queen St] (*Thames Star* 29 April 1884: 2).

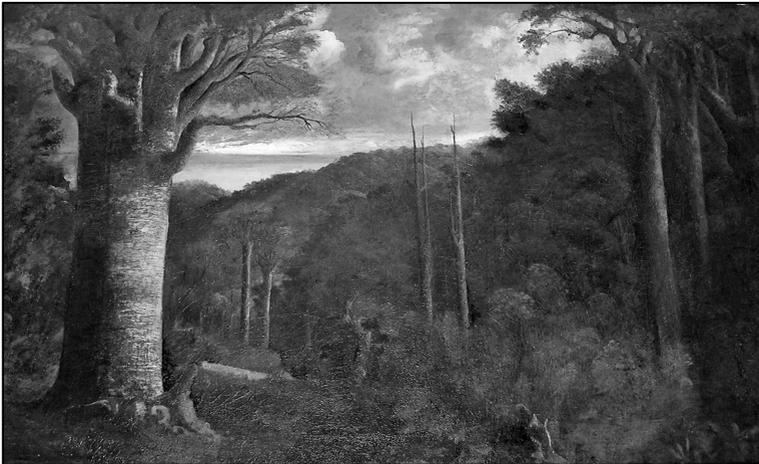


Figure 3. Driver painting of the Tararu kauri tree, still on display in Thames Library (Thames Public Library).

Isdale summarises the Driver painting and the correlation with the giant kauri that was destroyed:

The big kauri tree in question is variously described as being 'at Punga Flat', 'behind Punga Flat', and at the head of the Ohio tributary of the Tararu Stream. All these descriptions are correct. The painting shows a view looking down the Tararu Valley to the sea. (*The Big Kauri Tree Painted by H.D. Driver; notes by A.M. Isdale accompanying the painting in Thames Library, dated 30 March 1988*).

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The tree was also the subject of a sketch by noted botanical artist Hugh Boscawen, whose art work was used to illustrate the works of notable botanical authors such as Thomas Kirk. A copy of this sketch is also held in the Thames library.

In 1898 the Tourist Tree was destroyed by fire:

It is with regret that we learn the big kauri tree at Punga Flat has been burned. A report to that effect reached town yesterday morning, and Sergeant Gillies dispatched Constable McPhee to the spot. When the latter arrived he found that the swamp (which has dried up) was in a blaze, and that the big tree itself was a sheet of flame. The heat was intense, and as there was no water available it was impossible to save the tree, which was one of our most prized attractions (*Thames Star*, 4 January 1898).

The loss of the tree was memorialised in verse: a poem by an author with the pen-name 'Roslyn,' was published in the *Thames Star* of 8th January 1898:

In Memory. THE GREAT BIG KAURI TREE, THAMES, Destroyed by fire January 4, 1898.

Unharm'd by tempests through a thousand years,
Spared the hot bolts of Heaven – a Forest King.
Yet lo! The Greenwood now with grief doth ring.
The Hamadryads are dissolved in tears,
Their court despoiled beyond imagin'd fears;
Loss Irreparable its Pall doth fling-
Justly the verdict with one voice they bring
'Gainst the destroyer, Regicide appears.

No more at morn the merry tourist band,
Towards that upland habitat shall strain;
Its beads a faithful memory may tell
With an inevitable prick of pain,
Missing this crowning glory from the land
Which had bid much with less regret farewell.

There is some archaeology associated with the Tourist Tree. Mr David Pryor of Waiotahi Rd, Thames, informed the author that he had seen a large stump near a prominent slip overlooking the Tararu valley, on the Waiotahi - Crosbies Settlement track. A visit to this site by the author revealed the charred remains of a large kauri stump, alongside the track, approx 50m

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south west of the slip. Measurement with a builders tape revealed a diameter of approx 4.5m, although it was hard to measure, as only parts of the stump remain, and the original outline of it had to be re-created. Also, the area was quite overgrown.



Figure 4. Part of the charred remains of stump - recorded as T12/1353.

The location of the stump matches the descriptions given in earlier literature, and the view down the Tararu Valley, from the slip, is consistent with that in the Driver painting. The measured diameter of 4.5m is consistent with the estimates of Toss Hammond, and that from the photo at Figure 2. It is therefore concluded that the stump is probably that of the Tourist Tree. Dendrochronological analysis of the remains of the stump (to confirm whether or not the tree was destroyed in 1898) may be possible, and will be investigated.

After discussions between the Central File-keeper, Regional File-keeper and the author, it was finally agreed that a tree stump (particularly one of such social prominence) can be regarded as an archaeological feature, and the site was recorded as T12/1353.

Discussion and Analysis

Having presented the available historical and archaeological evidence relating to the Great Ghost and Tourist Tree, it remains to conduct some sort of analysis to try to determine if the Great Ghost did actually exist, and if so, where, and how big it was. Fortunately, the discovery of archaeological remains of a stump consistent with the size and described location of the Tourist Tree gives a degree of certainty relating to that tree. The author estimates that the consistency of the size and location of the stump with numerous historical accounts, probably gives at least 90% probability that it is that of the Tourist Tree.

As for the Great Ghost, it is very difficult to prove that something didn't exist (or that some event never occurred). An approach to overcome this problem often used in Statistics is that of the *null hypothesis*:

The simplistic definition of the null hypothesis (normally written H_0) is as the opposite of the alternative hypothesis, H_1 , although the principle is a little more complex than that. The null hypothesis (H_0) is a hypothesis which the researcher tries to disprove, reject or nullify. The 'null' often refers to the common view of something, while the alternative hypothesis is what the researcher really thinks is the cause of a phenomenon (<https://explorable.com/null-hypothesis>).

In the Great Ghost situation, the null hypothesis, that there was no tree in the Tararu Valley with those dimensions, is very difficult to prove, so an alternative hypothesis, that the tree did exist, will be explored, along with the probability of its existence.

The two main variables to be considered are: size and location. In terms of size, the only apparent data relating to the Great Ghost is the hearsay evidence of Hutchins that '... This tree was stated by those who had seen it to be twenty-eight feet [8.9m] in diameter.' It is possible that the story became confused, to the extent that the estimated diameter of 8.9m was actually the girth; as, for a living tree, it is almost impossible to measure the diameter directly. It is much more common to measure the girth and divide by pi (π) to calculate the diameter. However, a girth of 8.9m would equate to a diameter of 2.8m; just over half that of the Tourist Tree, and hardly likely to compete as an alternative tourist attraction.

Another issue relating to size is the claim on some web sites (example referenced above) that: 'The Great Ghost kauri [is] the largest kauri known and thought to be the World's largest measured tree' (In fact, there is no

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evidence the Great Ghost was ever measured.) A convenient Wikipedia page (https://en.wikipedia.org/wiki/List_of_superlative_trees#Stoutest) lists tree *species* in order of their largest diameter specimen ever observed. The Great Ghost would only be rated seventh on this list. Te Matua Ngahere, of the Waipoua Forest, actually rates 12th on the list, at 5.33m diameter.

In summary, there is no reliable (measured) data, nor photographic, nor archaeological evidence that a kauri of 8.9m diameter ever existed in the Tararu catchment, nor any other part of NZ, for that matter. The largest kauri actually measured in NZ was thought to be *Kairaru*, which had a girth of 20.1 metres [diameter 6.4m] and a columnar trunk free of branches for 30.5 metres as measured by a Crown Lands ranger, Henry Wilson, in 1860. It was on a spur of Mt Tutamoe, about 30 km south of Waipoua Forest, and was destroyed by fire in the 1880s or 1890s (Reed 1953 89-92).

In terms of location, the documented location of the Great Ghost of being ‘in the Tararu Valley’ is, in fact, a fairly limited area - about 15 square kilometres (measured from TUMONZ digital mapping software). The extent of the catchment can be seen in Figure 6 above. The main tracks through the catchment - the Tararu and Waiotahi tracks - were both mining access roads used from the early days of the Thames Goldfield (i.e. from about 1868). By 1880 (at the latest) both would have been extended to allow access to the farm settlement of Crosbies Settlement, about 10 km north east, on the main Coromandel Range. No point in the Tararu catchment is more than about 1.5 km from either of these two tracks (and about 80% of the catchment is about 1 km or less from them). It therefore appears logical that, if there was another tree roughly twice the size of the Tourist Tree, in the same area, with about the same distance to walk and altitude to climb, that tree would have been a much more likely tourist attraction, and subject of artworks, poems etc.

It could be speculated that the Great Ghost was less accessible than the Tourist Tree, or that the initial discoverers of the Great Ghost were unable to find it again. The first of these possibilities is not logical, bearing in mind the limited size of the Tararu catchment and existence of two well-formed tracks, as discussed in the preceding paragraph. No place in the catchment would be significantly less accessible than the stump at the foot of the ‘Second Lookout’ rock. The second possibility is also considered unlikely, due to the fact that it was apparently known that the Great Ghost was destroyed by fire ‘... around 1890.’ If the location of the tree was not known (or not remembered), how could its demise be noted and reported?

Summary and Conclusion

According to historical literature (an increasing amount of which is now on the Internet), there were two large kauri observed in the Tararu Valley in the late 19th century. One, named the 'Great Ghost' was estimated to have a diameter range of 8.6-8.9m, which would make it far and away NZ's largest known kauri (by diameter/girth). On the extreme eastern edge of the Tararu catchment was another large kauri, which has been named 'Tourist Tree' for the purposes of this article. The diameter of this was variously measured and estimated as between 4.2 and 4.85m. This tree was well known to locals and visitors, well documented in newspapers and photographs, and was the subject of an oil painting and a poem. A stump, with diameter measured at 4.5m, and in a location consistent with those described in the historical literature, has been located and is now recorded as T12/1353. It is highly probable that this was the stump of the Tourist Tree.

The stated purpose of the paper was to '... examine the historical and archaeological evidence relating to the Great Ghost and Tourist Tree, and to consider whether the Great Ghost was indeed a true forest giant, or merely a myth, based on a wildly-inaccurate estimated measurement.' As it is difficult to prove that a particular object never existed, the approach taken was to examine the evidence that the Great Ghost did exist and consider the logical inferences arising from this. The fact that the Tourist Tree was well recorded (in text and image form) and was a popular tourist attraction tends to infer that the Great Ghost, as a separate tree, with a diameter nearly twice that of the Tourist Tree, did not exist. If it did exist, in a relatively small geographic area (15 sq km) served by two well-formed tracks, why did tourists and recorders not flock to the larger tree (especially if it was the largest kauri recorded in NZ, and, claimed by some, to be the largest tree in the world)?

The lack of recorded evidence or measurement data of any other large kauri in the Tararu Valley other than the Tourist Tree suggests that the Great Ghost, on the balance of probabilities, was indeed a myth. The most likely explanation (discounting the possibility of an attempted fraud) was that the original observation was made of the Tourist Tree, and that the estimated measurement was greatly exaggerated. The possibility that the Great Ghost did exist, but was not able to be located again after the initial visit, is not logical, as it was apparently known that it had been destroyed by fire in the 1890s. If that was the case, it implies that its location *was* known, and therefore it would probably have been subject to tourist pilgrimages, rather than its half-sized relative in the same small geographic area.

References

- Barker, A. and Wilton, D. (2010) *The Giant Kauri Tree*
<http://www.thetreasury.org.nz/Kauri/Kauri.htm> Accessed January 2017.
- Grainger, J. (1951). *The Amazing Thames: the Story of the Town and the Famous Goldfield From Which it Grew*, AH & AW Reed, Wellington.
- Hutchins, D. (1919). *New Zealand Forestry. Part I, Kauri forests and forests of the north, and forest management*, Department of Forestry, Wellington.
- Reed, A. H. (1953). *The Story of the Kauri*, A.H. and A.W. Reed, Wellington.
- Roche, M. M. (2005) *Sir David Hutchins and Kauri in New Zealand*
<http://environmentalhistory-au-nz.org/links/publications/anzfh/anzfh2roche.pdf> Accessed January 2017.