

Forest exploration, assessment and mapping in the Weld Valley, Tasmania 1925

A. Wilson^{1*} and E.M. Christensen²

¹Forestry Tasmania

²Lindisfarne, 7015

Abstract

Following the formation of the Forestry Department in 1921, exploration of Tasmania's forested areas began as a legislated imperative. In April 1925, a reconnaissance was undertaken in the Weld River Valley; a hand-drawn map, a photographic record and a personal diary exist as evidence of the earliest contact of scientific forestry methods with part of what has become the Warra LTER Site.

Introduction

The Warra Long-Term Ecological Research (LTER) Site was established to facilitate understanding of ecological processes and biodiversity functions in Tasmania's southern cool temperate forests. The Site contains both working forests and conservation reserves. The events documented in this paper constitute the earliest formal contact with the area in the context of systematic forestry assessment.

The *Forestry Act 1920*, passed by the Tasmanian Parliament, came into force on the first of January 1921; this event marked a significant recognition of the need to manage the State's forests for the long-term benefit of Tasmanians. It was 'An Act to establish a Forestry Department and to provide for the better management and protection of forests'. This Act repealed

those clauses of the *Crown Lands Act 1911*, under which control of forest operations had previously been exercised. The new Act authorised the formation of a Forestry Department headed by a Conservator of Forests. Section 17 of the Act stipulated that by the first of January 1928 there should be in Tasmania an area of approximately not less than 1 500 000 acres of land dedicated as State forests. Section 13 of the Act provided for the classification of the forest lands of the State in order to determine those suitable for dedication as State forests and those suitable for reservation from sale as timber reserves.

History of early forestry surveys

In the annual report for the Forestry Department for the year ended 30th June 1925, reference is made to explorations which had been undertaken that year; in particular, reference is made to the Weld Valley, Southern District: 'An inspection was made from the junction of the Weld and Huon Rivers for a distance of about seven miles up the Weld Valley, and extending for an average distance of two miles on either side of the Weld River. This river proved a serious obstacle to the exploration of the country on its right bank, being a swiftly moving stream, in places over two chains wide' (Forestry Department 1925).

The preparation of the topographical and timber distribution map was noted as sufficient to indicate the extent of timber in the locality traversed.

* Corresponding author
e-mail: andrew.wilson@forestrytas.com.au

The exploration was part of a concerted effort at that time to assess the resources of Mount Anne and the Weld River Valley which were at the edge of substantial European penetration. The following details are drawn from a paper by A.N. Lewis with the title *Notes on a geological reconnaissance of Mt Anne and the Weld River Valley, South-Western Tasmania* which was read at the April 16 meeting of the Royal Society of Tasmania and subsequently published in the 1923 *Papers and Proceedings* of the Society. At the same meeting, Major L.F. Giblin delivered an illustrated lecture on the Mount Anne District, but no transcript of this lecture exists.

In the summers of 1920, 1921 and 1922, Major L.F. Giblin, D.S.O., and A.V. Giblin organised and led three successive trips into the country surrounding Mount Anne. In December 1921, a party attempted to reach Mount Anne via the Weld Valley from the Huon. The party was forced to turn back after about four and a half days, having taken three and a half days to penetrate 18 miles through horizontal scrub up the Weld River Valley from its junction with the Huon River. The 1920 and 1922 expeditions had reached Mount Anne via the Tyenna–Port Davey track. The main outcome of the endeavours had been the production of the notes and accompanying geological maps of the area traversed. The maps which were reproduced in the Lewis paper were drafted by Colonel D.A. Lane whom Lewis thanked for assistance rendered. It was the same Colonel Denis Lane who led the foray of the Forestry Department team into the Weld River Valley in April 1925.

The photographic documentation of the forestry team, held in the Forestry Tasmania Library in Hobart, allows us to view the landscape as it was, to view the camp which the team set up, and to view some of the men who carried out the survey. Unfortunately, no copy of the report which almost certainly would have been written has been located. However, we have the diary of Colonel Lane, courtesy of his family, and the daily record of the expedition is transcribed here.

The map and photographs

A hand-drawn map of the area (Figures 1–3) of approximately 14 square miles was one of the outcomes of the survey. It describes in considerable detail the stands of timber and the topography, and provides an insight into fire history of the area. It exists in microfiche form only and the copy is located in the Resources Branch of Forestry Tasmania.

The photographic images reproduced below are from original prints, several of which are quite small in format (typically 3.8 cm x 6 cm). They are digitally scanned copies (some enlarged) of the originals and they reflect some of the minor deterioration which has occurred in the 75-year life of the photos. We have not attempted to digitally ‘improve’ the images as we prefer the more organic result.

Notes from Colonel Lane’s diary

In the following excerpts from Lane’s diary, some punctuation and format changes have been made to assist readability. The aneroid readings refer to the use of a barometer to estimate altitudes.

April 1925

Notes - pocket tape; Drawing instruments, Protractor, Knife, clasp and dining; Snake outfit

6. Monday

Left Hobart 9.20 by car for Russell Bridge, where we were to meet Fletcher with some of the Camp stores and Watson with two pack horses. Just beyond Longley car broke down and were delayed some 2 or 3 hours. Whilst there a car arrived from Hobart with Camp equipment which should have gone down by mail car on Saturday. After getting our car going, proceeded via Huonville to Ranelagh, where we met Fletcher, who was waiting (as per instructions) for camp equipment. Arrived Russell Bridge about 3 p.m. Fletcher arrived about 4.30 p.m. and as Watson had a cart as well as Fletcher, pushed on to Little Denison, arriving at dusk and camped. Rained all night.



Photo 1. Foresters' Camp No. 1.

7. Tuesday

Raining early and cleared up about 7.30 a.m. Left Little Denison River at 10 a.m. with stores and equipment in carts. Arrived King's about 11.30 a.m. and proceeded to pack stores etc on horses. This proved a long job and also immediately on starting, one horse had to be unpacked and load re-adjusted. Eventually got away about 12.50, but the load which contained two boxes of stores gave so much trouble that we eventually dumped same and re-adjusted load. Arrived at old Hydro Elec camp about 4.30 p.m. and stopped for lunch. Commenced to rain, as it was getting late decided to camp on this spot. [Photo 1] Rained most of the night.*

8. Wednesday

Aneroid 8.30 a.m. 275'; 12.30 noon 825'; 5.30 p.m. 225'; 8.45 p.m. 200'.

With Mr Lovett left camp 9 a.m. to fix starting point if possible on one of the points of the Hydro Elec Department's water survey. Went down to junction of Huon and Weld Rivers [Photo 2] and eventually identified a station near camp. During morning Watson took pack horse back to pick up rations left on track and Fletcher returned to King's with horse for more chaff. Both returned about mid-day. Watson returned

home after lunch and Fletcher remained in camp to complete arrangements. 2 p.m. started on cruise of area to north of camp. All burnt out, but showing excellent regeneration (softening stage) of s.b.† and s.g.‡ [Photo 3] Returned camp 5.30 p.m. Day fine.

9. Thursday

Aneroid 9 a.m. 250'.

Left camp 9.15 a.m. Returned 5 p.m. Made a reconnaissance along Weld River nearly as far as the end of Hydro Survey. From a bare hill obtained magnificent view of valley to W and the slopes of Mt Weld. All apparently magnificent forest.

10. Friday (Good Friday)

9 a.m. Aneroid 50'; 6.5 p.m. -100'.

Left camp 9.10 a.m. Returned 6 p.m. Ran assessment line (strip 1) from Blackwood Creek junction with Weld towards Barn Back. The W slopes of Barn Back had carried good timber, but much of same now destroyed by fire. Good sapling regrowth coming through. Returned via ridge to pack track.

** This was Sunset Ranch, 'out the Denison', the home of Charles King, father of Deny King, a well-known Tasmanian identity.*

† s.b. = stringy bark, s.g. = swamp gum



Photo 2. Junction of the Huon and Weld River. The Weld River is in the foreground.



Photo 3. Swamp gum regrowth north of first camp.

11. Saturday

9 a.m. Aneroid -140'; 6.30 p.m. +50'.

Ran 66 chns of assessment Strip 2. Attempted to cross River near Blackwood Ck, but finding

it out of the question pushed on to crossing near Fletcher's Cabin [Photo 4]. It was nearly mid-day by time we commenced work, owing to delay occasioned in attempting crossing.

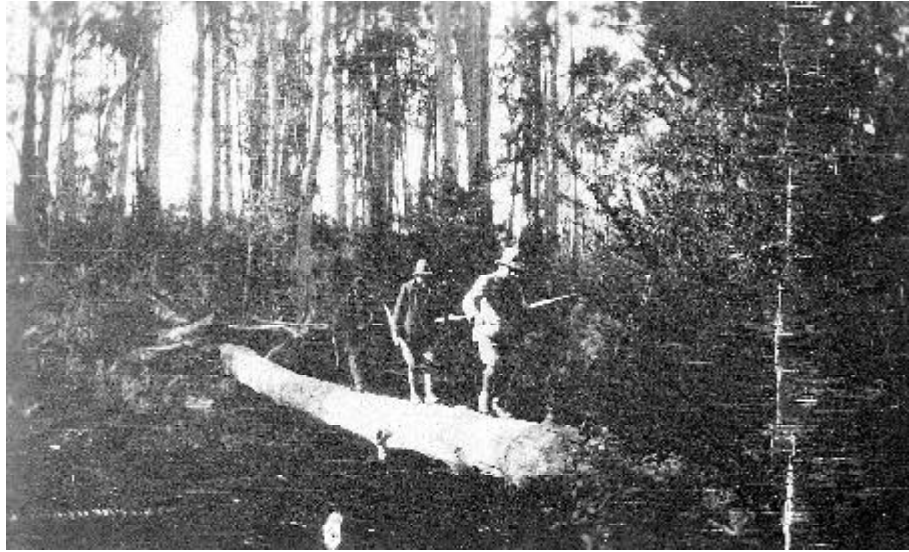


Photo 4. Log crossing over Weld River near Fletcher's cabin.



Photo 5. Weld River above the Zig-Zag.



Photo 6. Weld River above the Zig-Zag, looking downstream.

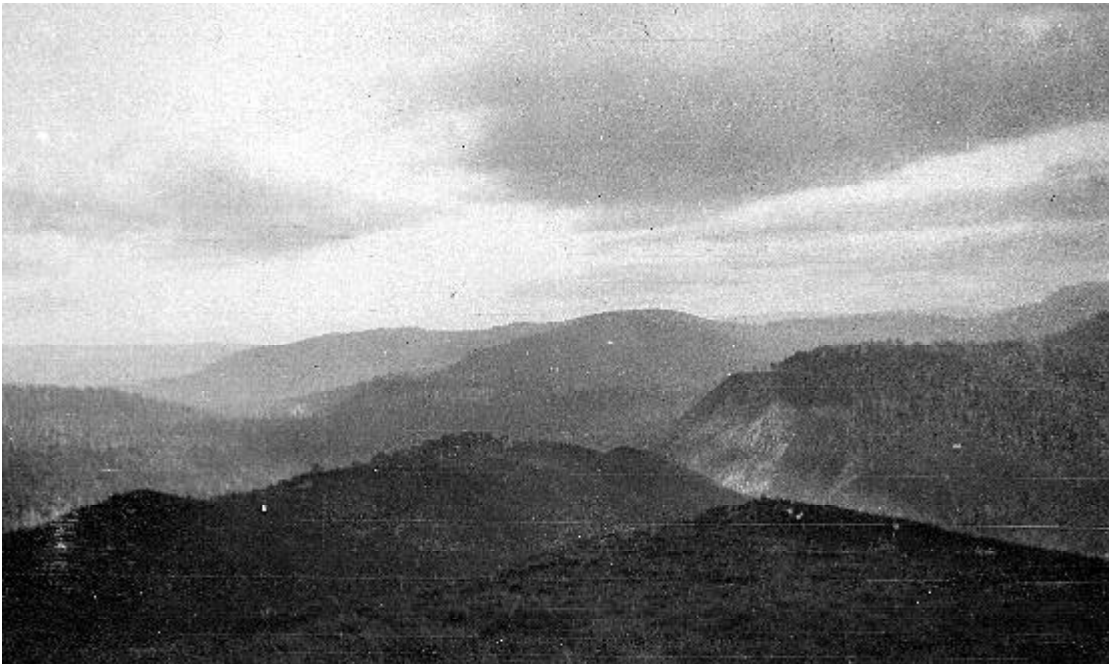


Photo 7. Looking down the valley from Ken Hill.

Photo 8. Looking up valley from Ken Hill. Mount Weld is in the distance.



Photo 9. Looking down valley from Mount Bernard. Glovers Bluff is in the right, mid distance.



12. Sunday (Easter Sunday)

During morning Lovett and self ran a Base Line along Weld Plain and fixed position of range to North and range across the Huon. Took remainder of day easy. [Photos 5, 6]

notes: axe, 2 billies; fry pan; kerosene tin; plotting board; buns, cheese, sugar, vegetables; dining tent; all instruments; candles, salt; cutlery

13. Monday

Aneroid 7.45 a.m. 245'; 6.20 p.m. 325'.

Left camp about 8 a.m. and reconnoitred up river as far as Ken Hill [Photos 7, 8]. Climbed this hill and went along ridge for some few chains. Good view obtained. Returned to camp about 6.20 p.m. Decided to shift camp tomorrow to Fletcher's Plain.

14. Tuesday

Wet day. Packed as much camp equipment etc as possible to and pitched fresh camp on Fletcher's Plains. During afternoon I made

a second trip and brought up more provisions etc from first camp. Two tents and some gear left standing, to be brought up by pack horse on Thursday.

15. Wednesday

Aneroid 10.5 a.m. -50'; 5.20 p.m. 0.

Left Camp about 10 a.m. and commenced traverse of Base Line for commencement of Strip 5. Completed about 20 chns of traverse. Returned camp about 5.30 p.m.

16. Thursday

8.45 a.m. Aneroid +/- 0.

Norm and Fletcher returned to old camp to strike same and help Watson load and pack in. Lovett and self traversed Ken Hill-Mt Bernard range. From Mt Bernard most excellent view of Weld Valley slopes on right bank of River [Photo 9].

17. Friday

Norm returned with Watson to strike old camp, and pack in remainder of equipment etc to this camp. Lovett, Fletcher and self left camp 9 a.m. and traversed strip no. 4.

18. Saturday

Left camp 9.20 a.m. and completed Strip 2. Very thick going, meeting with horizontal scrub. Ran just over 1/2 mile. Returned camp 5.15 p.m. Timber on this strip disappointing being mostly old and faulty stringybark. At end of strip ran into good swamp gum but horizontal scrub prevented further progress on this line.

19. Sunday

Wet day. Unable to do any washing or airing.

20. Monday

Rained all last night. As two hounds had attached themselves to camp and fresh meat being required, put the day in hunting. Rained practically all day.



Photo 10. Grovers Bluff.

21. Tuesday

Rained heavily all last night and during day. Too wet for bush work. Messed about in camp. Completed plotting on chart and any inking in of Field Book.

22. Wednesday

Aneroid 9.30 a.m. 0; 6 p.m. -100'.

Left camp about 8.30 a.m. crossed Weld by log near camp and climbed Glover's Bluff [Photo 10]. Took observations from Bluff. Then pushed on and fixed starting point for Strip 6. After lunch pushed ahead with a view to getting into Weld Basin. Met with interminable cutting grass and thick scrub. At 3.30 p.m. turned back without having reached destination. Arrived back at Camp just before dark, all very weary.

23. Thursday

9.30 a.m. Aneroid 0; 6 p.m. 175'.

Lovett stayed in camp suffering from effects of yesterday's march. Fletcher left camp about



Photo 11. Forestry party after three weeks. From left, Denis Lane, A.J. (Jack) Lovett and Norman Lane.



Photo 12. Forests on the right bank of the Weld River, opposite the landslip.

8.30 a.m. and sought a suitable place for felling a tree up river with view to effecting a crossing on to slope of Weld, where heavy stand of timber is to be seen.

24. Friday

Aneroid 10.5 a.m. 375'.

Left camp 10 a.m. Crossed River near camp and assessed strip 6. Very rough going and poor timber, being mostly overmature and faulty trees. Returned camp 6 p.m. During search for water at lunch time, fell into mass of cutting grass and extricated myself with great difficulty. Strained myself in doing so. Day overcast, with showers.

25. Saturday

9.5 a.m. Aneroid 250'; 6 p.m. 250'.

Fine day. Lovett, Fletcher and self left camp 9 a.m. and continued Strip 5 for 30 chns, coming out on bare hills, W end of Mt Bernard. Decided to seek a crossing over Weld about a mile further up river. Did this during afternoon and found a place where a crossing might be effected. Returned to camp 6 p.m. Watson had arrived at camp about 5.30 p.m. bearing urgent correspondence from Head Office.

26. Sunday

Day in camp [Photo 11]. Shaved beards. During afternoon took hounds and gun after game. Watson returned home after lunch. Carried letters for post. Still feeling effects of Friday's fall. Rained overnight. Day fine but very windy.

27. Monday

Left Main Camp about 10 a.m. with provisions, tent and blankets to establish a flying camp about 4 miles up river. Arrived at camping place about 1.30 p.m. Lovett and Norm prepared camp whilst Fletcher and self inspected river for a possible crossing. Pushed up stream for about 1 mile, but not one suitable tree on our side to fell across. Returned to camp as darkness fell.

28. Tuesday

During morning attempted to bridge Weld River. Fletcher fell the only likely spar, but it failed to span River. Ran out rope and endeavoured to cover about 20 ft of River not spanned. Current too strong to attempt wading and position too difficult to permit passing along spars to complete crossing. [Photos 12, 13] As time was now too short to permit of any valuable reconnaissance being made on right side of River, even if crossing was effected, pushed up another mile and a half or so along track. Returned to Camp about 5 p.m.

29. Wednesday

Struck camp and packed gear back to main Camp at 9 a.m. arriving Main Camp about mid-day.



Photo 13. The attempt at crossing the Weld River near the landslip.

During afternoon completed marking up chart and books and packed as much gear as possible ready for our early start to-morrow. Watson and King arrived during evening with pack horses.

30. Thursday

Broke camp and left for Russell Bridge at 8.45 a.m. Arrived King's about 11 a.m. Transferred gear and horses to carts. Arrived Russell Bridge 1.20 p.m. Mr Stubbs was waiting with car. Returned Hobart 4.35 p.m.

Conclusions

The social and historical detail of the diaries gives insight into the difficult conditions under which the assessment teams laboured; there is useful descriptive information about the fire history of the site in the extent of the dead stags in the forest cover of the area surveyed and mapped; in combination with the photographic documentation we are able to form a reasonable reconstruction of this part of the Warra Site as it was 76 years ago. Interpretation of landscape based on comparisons of earlier photographs with

subsequent photographs is currently used in the United States to derive significant information about long-term change (Skovlin *et al.* 2001). Sustainable forest management requires sophisticated monitoring and there is a demonstrated continuity of those first efforts by D.A. Lane and his team in the Southern Forests with the current research being carried out on the Warra LTER Site.

Acknowledgements

Thanks to Rob Taylor for the conversation which started the trail of discovery; for the enthusiasm and perseverance of Gerald Coombe, Bill Tewson and Roger Norris of Resource Mapping at Forestry Tasmania; for the happenstance of meeting Margaret Lane, one of D.A.'s granddaughters, in the Tasmaniana Library, State Reference Library, which resulted in another of D.A.'s granddaughters, Liz Christensen, co-authoring the present paper; and for the assistance of the Bureau of Meteorology, Hobart, in explaining the detail of aneroid barometer readings as an aid to calculating elevation.

References

- Department of Forestry (1925). *Report of the Forestry Department for the Year ended 30th June, 1925.* Government Printer, Hobart.
- Lewis, A.N. (1923). Notes on a geological reconnaissance of Mt. Anne and the Weld River Valley, South-Western Tasmania. *Papers and Proceedings of the Royal Society of Tasmania 1923:* 9–42.
- Skovlin, J.M., Strickler, G.S., Peterson, J.L. and Sampson, A.W. (2001). *Interpreting Landscape Change in High Mountains of Northeastern Oregon from Long-Term Repeat Photography.* General Technical Report PNW-GTR-505. Portland, Oregon. US Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Appendix 1. The appendix comprises Figures 1–3, depicting the hand-drawn map produced from Lane's survey. Figure 1 shows the map scaled to fit the page, and Figures 2 and 3 show overlapping enlargements. The illustrated segments in Figures 2 and 3 have been selected to maximise coverage of the present-day Warra LTER Site (area bounded by the Huon and Weld Rivers).

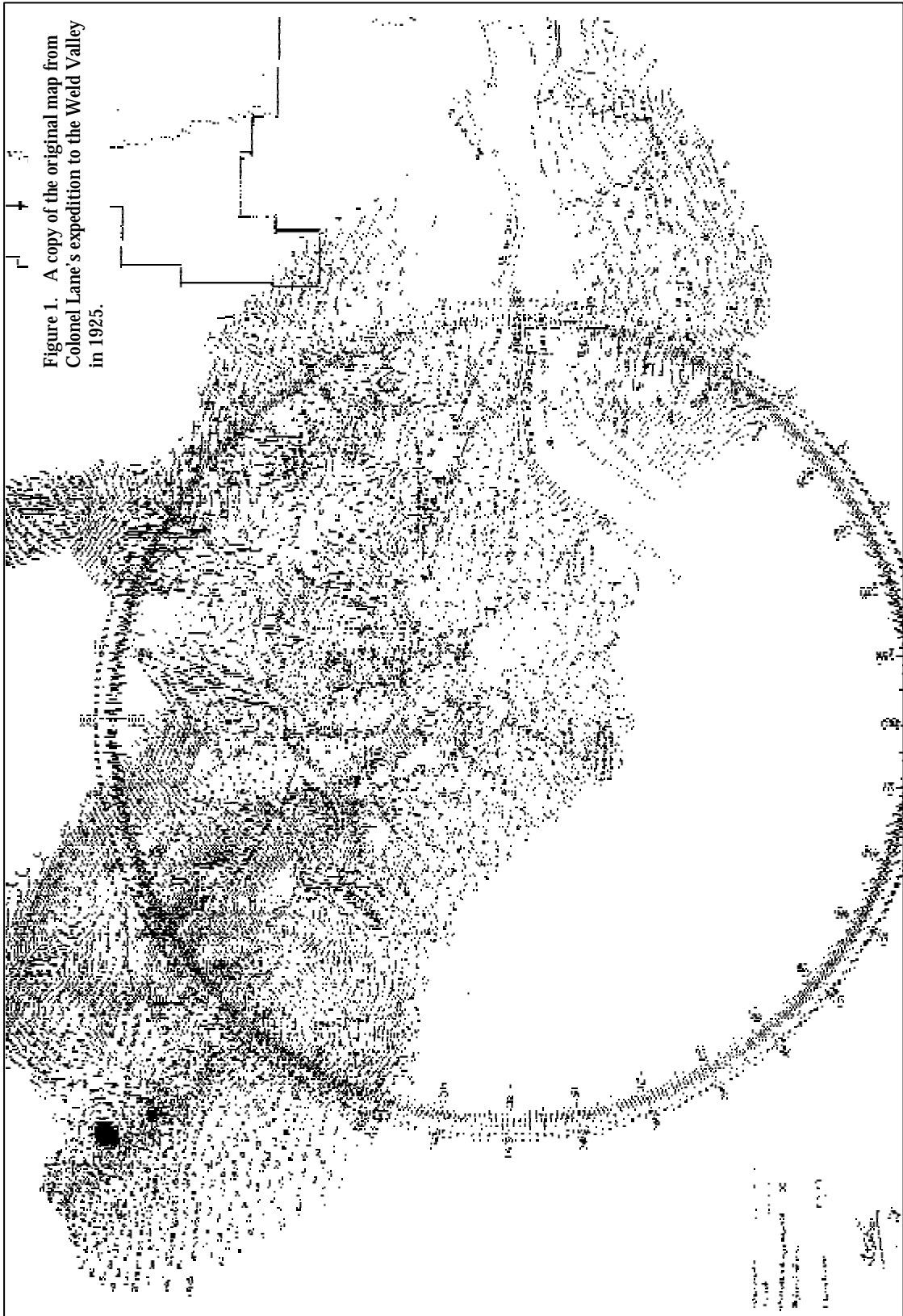


Figure 1. A copy of the original map from Colonel Lane's expedition to the Weld Valley in 1925.

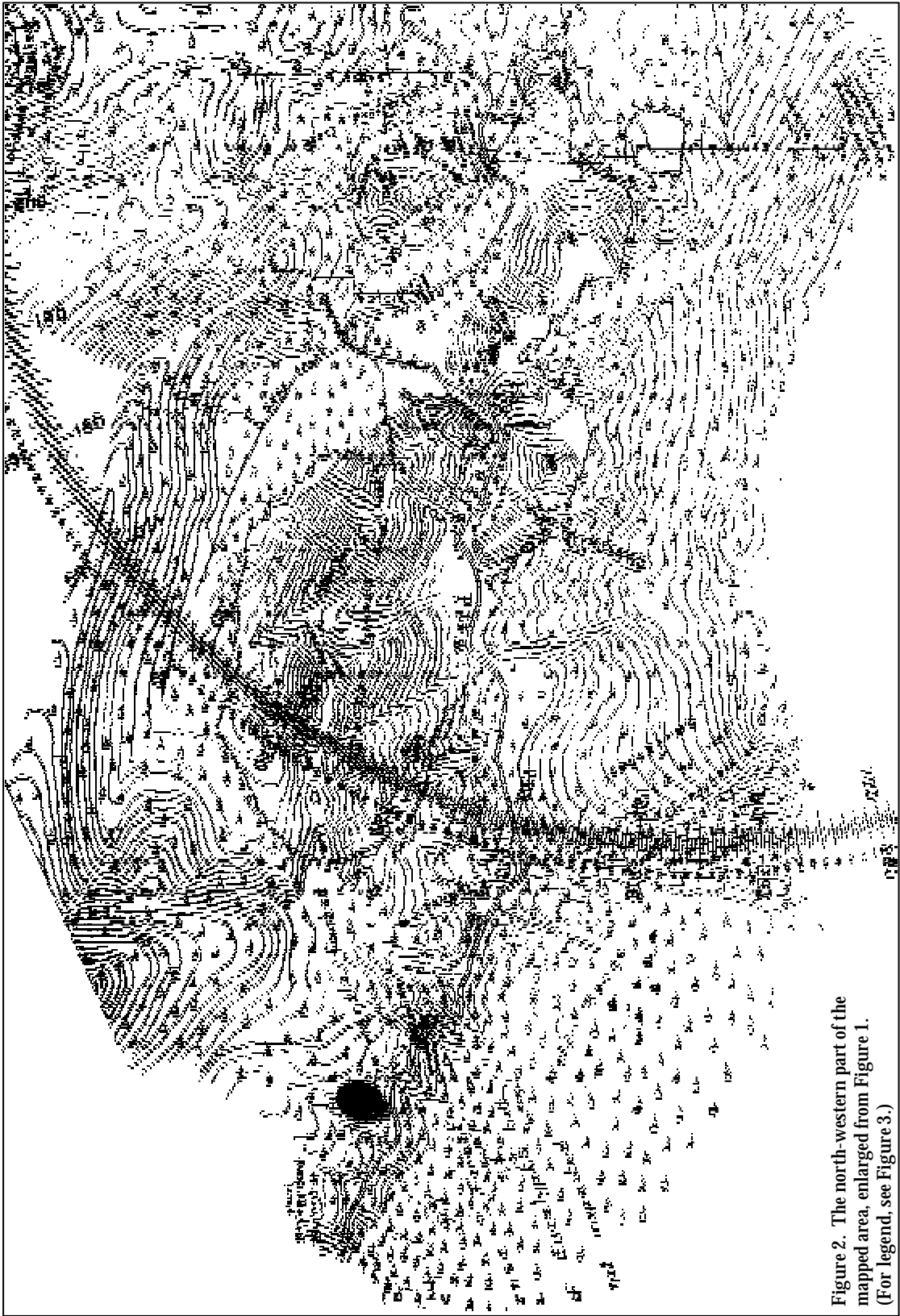


Figure 2. The north-western part of the mapped area, enlarged from Figure 1. (For legend, see Figure 3.)

