

The eastern entrance of the Sandy Hollow rock shelter, showing the alignment of the excavation in a continuous trench along an east-west datum line. The banks of the Goulburn River can be seen (far left) about 200 yards distant. [Photo: G. Moore.]

THE PREHISTORY OF THE HUNTER RIVER VALLEY

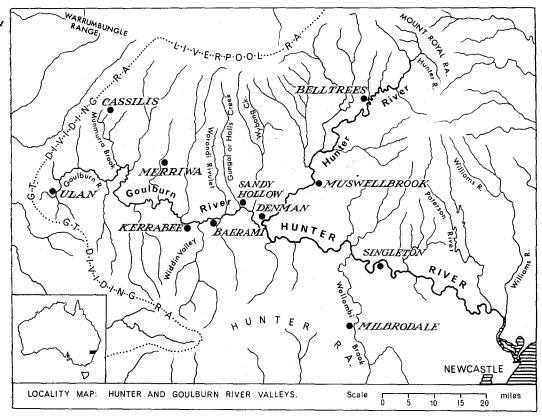
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THE Hunter River system, 100 miles north of Sydney, New South Wales, contains many fertile and well-watered valleys which, before European occupation, must have been excellent hunting grounds for the Aborigines inhabiting the region. Sir Thomas Mitchell described the valley in 1831 as being park-like, with light forest and grassy glades. With plenty of fish and shellfish in the rivers and creeks, marsupials and birds of many kinds in the open sclerophyll forests, and many species of edible nuts, wild grains, and berries, life should have been pleasant for the tribes as they moved about their territories.

As far as is known, at the time of first contact the tribal divisions were as follows: the upper Hunter, from its source in the Mount Royal Range down to about Muswellbrook, was part of the territory of the Geawegal; the middle Hunter down to Maitland was inhabited by the Wonarua, who were stated to number about 600 to 700; the Hunter estuary and Port Stephens came in the territory of a numerous tribe called the Gaddhang. The upper Goulburn appears to have been roughly the dividing line between two extensive inland tribes—the Gamilaroi to the north and the Wiradhuri to the south—while south of the Hunter Valley itself were the Awabagal around Lake Macquarie and the Darginung on the northern side of the Hawkesbury.

Unfortunately for us, little interest was taken in the way of life of the Hunter tribes by the early European settlers. Relations with the Aboriginal people seem to have followed the usual pattern—a friendly and inquisitive interest on the part of the Aborigines at the start, rapidly followed by

1969



Map: Elvie Brown.

misunderstandings and clashes as they became aware that their lands were being appropriated, then mounting hostility on both sides, leading inevitably to the collapse and disintegration of the tribal organization. Settlement on the middle Hunter began around Singleton after 1819, and by 1826 the settlers were petitioning Governor Darling for military protection against the attacks and depredations of the Aborigines. Nevertheless, some Aboriginal people appear to have been employed on properties from quite early in the history of settlement.

Since the ethnographic record for the Hunter is so scanty, it is only through archaeological work that we can obtain any idea of the prehistory of the valley or even of the details of the way of life of the Aboriginal inhabitants immediately prior to contact. Although farmers in the valley still occasionally plough up ground-edged axe-heads (known locally as "mogos", after a Wonarua term) and a number of amateur collectors have searched and raked through the deposits in rock shelters for stone implements, no scientific excavation had been undertaken along the Hunter prior to 1965. In September of that year a systematic archaeological survey of the Hunter and Goulburn Valleys was undertaken by the Australian Museum, with financial support from the Australian Institute of Aboriginal Studies.

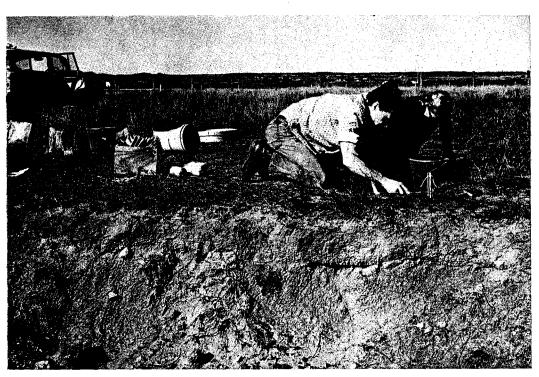
It seemed clear from the start, on both geographical and ethnographic grounds, that the area of the Hunter-Goulburn junction, in the vicinity of the town of Denman, was likely to be of archaeological importance since a number of writers, notably A. W. Howitt in his *Native Tribes of South-East Australia* (1904), mention contact, mainly hostile, between the Wonarua and the inland Gamilaroi. The latter reached the valley via the upper waters of the Goulburn and through what is now called the "Cassilis gap"—an easy way through the otherwise rugged ranges, along the axis Cassilis-Merriwa-Sandy Hollow. It was near the last-named place, in fact, that, after field surveys of the upper Hunter and Goulburn Valleys, the first main excavation was conducted.

Upper Hunter Excavations, 1965–1967

The rock shelter excavated near Sandy Hollow took the form of a cavity in a huge conglomerate boulder, fallen from the scarp and now lying in a sloping paddock, about 200 yards north of the Goulburn River. Within the east entrance artefacts, including Bondi points, microliths, and a large quantity of waste flakes, were found to a depth of about 36 inches. These were mostly made from the excellent yellow chert and red jasper which are still found in the bed of the Goulburn. Outside the overhang were fireplaces formed from natural rocks and river boulders and containing a wide selection of bones and shells, all of which were found to represent species still existing in the area.

It appeared that the interior of the shelter, which contained a flat rock shelf, was probably used for sleeping, the overhang of the east entrance for making implements during rainy periods, and the area in front for cooking. This was probably so that when the prevailing nor'-easter was blowing the smoke did not pour into the shelter. Charcoal from a depth of 24 inches, the horizon most prolific in implements, was carbon dated to approximately A.D. 600 to 700, and a sample from 4 to 6 inches below the top of the deposit returned a date of about A.D. 1,400. Judging by the average rate of build-up of the deposits during the time-span so dated, first occupation of the site might have begun at about the beginning of the Christian era.

After this, the survey was continued downstream in the Singleton area. Here an interesting situation had been reported on in 1943 by F. A. Davidson and F. D. McCarthy, then Curator of Anthropology at the Australian Museum. At a number of points



The beginning of one of the series of trial trenches on the 200-foot terrace at Singleton. In the foreground artefacts can be seen sticking in the underlying clay. The dark longitudinal crack represents the base of the overlying topsoil from which the artefacts erode. [Photo: Author.]

along the 200-foot contour on the low hills bordering the Hunter upstream from Singleton considerable quantities of artefacts were eroding out of the soil during times of heavy rain. Many of these artefacts had been collected and analysed. On examination, they seemed to resemble closely the assemblage we had just excavated at Sandy Hollow, but also included a range of somewhat larger implements made from a pinkish quartzite.

On examining the terraces above Singleton in 1966, it was found that the same situation continued, whereas no trace of Aboriginal occupation could be found on the lower terraces, nor along the banks of the Hunter itself. Several series of trial trenches were dug at points on the 200-foot contour and a number of artefacts were found in a thin topsoil which lay on the heavy clay composing the body of the terrace. Unfortunately, no datable material was associated and it appeared that the artefacts might well have been mixed up and accumulated by wind and water erosion of the light soil prior to the establishment of grass cover by farmers.

It was puzzling that the Aborigines had apparently sat about 100 feet above the river on a windy waterless ridge to make implements, but this same situation was found to exist at a great many points along the river up to 10 miles above Singleton. One possible explanation seemed to be that, at the time, a lake had existed in the area and the toolmakers were in fact sitting around its verge, but on examination of the geological literature a more likely explanation emerged. It appears that this particular terrace contains the relics of a decomposed layer of basalt, through which the river has downcut. Good cherts tend to occur at the base of basalt horizons, and in fact at one point large outcrops of fine-grained yellow chert were found that appeared to have been split to produce blocks from which implements. might have been made. Possibly, then, flaking was carried out at points on the terrace where the raw material was readily available. Although we were unable to find any traces of occupation along the river itself, this is understandable, because any sites which may have existed would certainly have been either swept away or covered with silt by the extensive flooding the valley has suffered during the past 150 years. It is



The painted cave at Milbrodale. This remarkably well-preserved art site is adjacent to the shelter excavated. The hand and weapon "stencils" show much interesting detail. The human figure is most impressive, being about life-size but having arms that extend some 18 feet along a slight ridge. [Photo: Author.]

likely that European clearing of tree cover has greatly accelerated the run-off of water from the valley fringes and increased the frequency and extent of flooding.

The next excavation was of a large sandstone rock shelter above Bulga Creek, near Milbrodale, on the southern fringe of the main valley. This site is not far from a very fine painted shelter. It proved to contain an assemblage very similar to that already obtained at Sandy Hollow. The deposits were comparatively shallow and a maximum depth of only 24 inches was excavated before the underlying rock shelf was reached. Charcoal from this site was subsequently processed and returned dates of approximately A.D. 500 from a depth of 12 inches and about A.D. 1,300 from 6 inches. These dates tallied closely with those from Sandy Hollow.

A comparative excavation on the upper Goulburn

At this point a major problem presented itself. The only scientific excavations previously carried out in the immediate vicinity of the Hunter Valley were a series of rock shelter excavations conducted in 1961-62 by F. D. McCarthy and N. B. Tindale in the Capertee Valley, about 50 miles southwest as the crow flies. McCarthy found an assemblage containing Bondi points and a range of geometric microliths similar to those of the upper Hunter. However, below this was a completely different industry, which was characterized by large flake implements, dentated "saws", and uniface pebble implements; this industry, which was named the Capertian, was dated from approximately 5,500 B.C. to 1,500 B.C. by McCarthy and to 9,000 B.C. by Tindale. The puzzle, then, was why there should be no Capertian material in the Hunter Valley sites and why the occupation appeared to have started so late. An additional problem was that McCarthy, as a result of an earlier excavation at Lapstone Creek, near Penrith, had postulated that the Bondaian had ceased about A.D. 1,000, to be replaced by an industry he named Eloueran, characterized by the ground-edged axe and the substitution of bone points for Bondi points. Yet it appeared from the Hunter deposits that Bondi points had been in use up till the abandonment of the occupation sites, which was presumably after the establishment of European settlement in the valley.

Before continuing the survey downstream to the estuarine parts of the Hunter system, it was, therefore, decided to find and excavate an occupation site at the western outlet of the Cassilis gap. This area would have been in Gamilaroi territory, but close to the point at which contact with the Wonarua was periodically made. After extensive surveying in the area of Gulgong, Ulan, and Cassilis, a small rock shelter with apparently undisturbed occupation deposit was found on private property close to where the Goulburn River rises on the Divide.

This shelter turned out to be remarkably interesting and productive. The occupation deposits went down to a maximum depth of 48 inches and contained Bondi points and very fine microliths, many made from quartz and rock crystal. A number of bone implements had also survived. Plenty of charcoal remained as a result of innumerable camp-fires and, when processed, produced dates of about A.D. 1,200 from a depth of 6 inches and 5,800 B.C. from 30 inches. This latter is an exceptionally early date for the backed blade and microlith industry repre-



A general view of the main shelter at Milbrodale, with excavation in progress. This shelter stands about 50 feet above the valley floor, up a steep slope. Immediately above it is a second shelter. [Photo: Author.] , sented, so a further sample of charcoal has been submitted for carbon dating, to corroborate it. No material resembling the Capertian was found.

Discussion

It is obviously too early in the Australian Museum's survey to reach any definite conclusions, but a number of tentative points may be made. The consistency of the dates from the Sandy Hollow and Milbrodale sites suggests that possibly the Hunter Valley was occupied much later than the inland slopes of the Great Dividing Range. The pattern of carbon dates beginning to emerge from excavations in various parts of the continent seems to indicate that the original group or groups of Aboriginal people to reach Australia may have arrived somewhere in the northwest or north of the continent at least 20,000 years ago, and probably considerably earlier than that. Subsequently, with natural increase, Aboriginal groups spread slowly, over many millenia, across the continent, progressively occupying the tribal territories to which ultimately they became so closely attached. Obviously, Australia was a totally different continent in the late Pleistocene and early Holocene, and areas that are now prolific in food may in other periods have been unattractive, and vice-versa.

Dates of the order of 9,000 to 14,000 B.C. have been obtained on the western side of the Dividing Range, whereas the earliest sites known on the eastern coastal strip are dated to about 5,000 to 6,000 B.C.* It is conceivable that the Hunter Valley was not, in fact, occupied from the inland through the Dividing Range, which is fairly rugged in the Hunter-Goulburn region, except for the Cassilis gap. If, in imagination, one reforests the area, the routes into the upper Hunter would not be at all obvious. It may be, then, that occupation came from the coast, only after other obviously attractive areas, such as Botany Bay, Port Jackson, Broken Bay, Lake Macquarie, and Port Stephens, had been fully populated. This is something that the results of the extension of the survey to the lower Hunter and Port Stephens may support, if suitable sites can be found that have not been disturbed by amateur collectors and other causes.

On the other hand, it may be that the sites so far excavated in the upper Hunter are not by any means the earliest occupation deposits in the region. Unfortunately, one cannot tell the age of a site until after it has been "dug", nor are occupation sites always obvious, even to the trained eye.

Another problem concerns the time of abandonment of the upper Hunter shelters. All sites found, and this includes both Sandy Hollow and Milbrodale, were scattered with Bondaian material on the surface and there was no indication of any succeeding Eloueran period. Admittedly ground-edged axes were found at 6 inches at Milbrodale and on the upper Goulburn, but so also were Bondi points and microliths. It is impossible to date the actual surface material of deposits, because it almost certainly contains recent charcoal from bushfires, European campfires, and so on. However, the dates from 6 inches at Sandy Hollow and Milbrodale are consistent with the probability that both of these sites were occupied up to or even after European settlement in the Hunter Valley. Otherwise one has to postulate a prehistoric abandonment for no apparent reason. It would seem, therefore, that in the Hunter Valley, at least, Bondi points may have been in use until the disruption of tribal life and the acquisition of European tools.

However, impatient though one may be to find answers to these fascinating puzzles of prehistory, archaeological work is essentially slow and painstaking, so that the solutions to the Hunter Valley problems may not be known until several more years of survey and excavation and analysis have been completed.

FURTHER READING

- Howitt, A. W.: The Native Tribes of South East Australia. London, Macmillan, 1904. xix, 819 pp.
- McCarthy, F. D.: Australian Aboriginal Stone Implements. Sydney, Australian Museum, 1967. 99 pp.
- Mulvaney, J. D.: The Prehistory of Australia. London, Thames and Hudson, in press, 1969.

^{*} Since this was written, a date of approximately 18,000 B.C. has been obtained from an occupation site on the South Coast of New South Wales.