Figure 34.
Ruin of stone building,
Carrick Range.
Peter Petchey 2003.



- Original fence for Kawarau Station adjacent to the Nevis Road
- · Possible boundary riders' hut near Duffers Saddle
- · Kawarau Station homestead and outbuildings
- · Kawarau Station woolshed
- · Carrick station woolshed
- Remains of old bridge across the Kawarau River

5.2.6 Stories in the landscape

The story of Kofiua, Kolo and Maia and their encounter with the Bouakai (Box 1) is based in the Bannockburn Valley. This extraordinarily evocative story links the landscape to a distant past and to people who are still alive today.

Some people who have family links to the area over several generations are the holders of family stories. Some have also made a point of collecting stories of the area, and tracing genealogies and the personal histories of those who lived in the area. There is a wealth of information of this type in the community.

Some interviewees related stories about the area which they had heard from others. We cannot vouch for their accuracy. Stories included:

- The Carrick Station woolshed was built from stones that had been used as 'brakes' tied behind wagons going down the Nevis road.
- When the Carrick race was being put in the designer got the angle wrong and it has never worked properly for this reason.
- Two Chinese miners lived together in a hut and had amassed some gold. One went to Clyde to buy groceries and while he was gone someone came and murdered the other and stole the gold. The murderer was apprehended at the natural bridge but the gold was never found.
- A Chinese miner grew vegetables and sold them around the village up to the 1920s.
- There was a collection of Chinese dwellings along Shepherds Creek. Chinese men lived there until the 1920s, many being quite elderly by then.

- The women in the area had a hard life but were the prime movers for social amenities. The women's sewing circle raised the money which got the Presbyterian Church built.
- 'Jockey Jones' was a colourful woman who had lived at Carricktown with two daughters. When she was pregnant for the third time she moved down and built a house about 400 metres beyond Quartzville (the house still exists). She was notorious for getting into trouble and came before the courts on several occasions. She was most often seen riding a horse (see Box 13: Jockey Jones).

Other stories associated with the Bannockburn emphasise the romance attached to the lone miner: miners driven mad by drink; the loneliness and isolation of small claims; the hazards of the environment such as sluicing faces in the dark. One story tells of an apparently successful miner who passed his gains straight to the hotelkeeper 'with the result that he began seeing the Blue Devils. He constructed a sod wall around his hut to ward them off and from behind this wall he hurled stones at them. As the story goes, he chased the last of them into the Kawarau River' (McGill 1997: 44).

5.2.7 Sense of community

Many interviewees spoke about the strong sense of community in Bannockburn. Longer-term residents recalled the stable period of the 1950s-70s, and the strong community spirit that prevailed. During that period the Post Office and store were still open, and formed a community meeting cluster along with the pub.

The influx of new people into the area, particularly since the late 1980s, has meant that residents no longer know everybody as they did in the past, and the community is no longer as homogeneous. The close-knit rural-focused community has changed, and new people have a broader range of backgrounds. Nevertheless, most interviewees commented positively on the community spirit, and the fact that (unlike some other places) there is no obvious division between newcomers and those who are longer-established. Some interviewees suggested that the community spirit was stronger than in other places they knew. Community events such as a Christmas party at the hall are well attended. The new influx of people has meant more support for community activities such as working bees, and bowling club and community events. The community has also united over local issues such as the possible sale of the Presbyterian church.

Irrigation is another uniting factor. Landowners necessarily come together to ensure the upkeep of water races which serve their land, many of which are heritage features in their own right, such as the Carrick Race.

5.3 COMMUNITY CONCERNS

Interviewees expressed a number of concerns about current or potential change to valued aspects of the landscape.

Urbanisation of the landscape

Almost all interviewees were concerned at the increasing urbanisation of the landscape—the proliferation of 'lifestyle' blocks and their attendant houses, driveways, fencing, plantings, lights, noise, etc. Several people mentioned that in recent years, lights had changed the previous extraordinary experience of the sparkling night sky. The growth of Cromwell meant its street lights were now visible; the many new houses in Bannockburn meant the night was now punctuated by many lights, changing the absolute darkness that used to prevail.

The greatest concern was about subdivision extending up the hillsides into the tussock country. One particular proposal for 17 lots running up a very visible spur was often commented on (granted consent by the Council, this is currently under appeal). People generally felt that any subdivision should be kept to the Valley floor where there is less visual impact, and should not be allowed on hills or ridges. The point was often made that people come here because of the quality of the landscape, and that subdivision like this would destroy the very qualities that people come here for.

There was also concern about subdivision and urbanisation in the Valley. It was suggested that the increase in property values pushes up rates and forces people to subdivide, which itself has a domino effect, increasing property prices yet more. The market forces may well turn Bannockburn into a satellite suburb of Cromwell.

Some people interviewed were concerned not only about the rapid rate of subdivision but also the form of new development and whether it was appropriate to the area. It was suggested that new houses should take more regard to the scale and style of historic buildings, and that maybe there should be guidelines for new development especially in the vicinity of Bannockburn. More attempt should be made to keep the distinctive character of Bannockburn.

Vineyards and urban development are not necessarily easy neighbours. While people like to live near vineyards, they can have adverse effects (e.g. noise, sprays). Viticulturists were concerned that housing developments near vineyards could be a long-term threat to the industry, as people may want restrictions on how the vineyards operate, making them uneconomic.

Loss of historic buildings and features

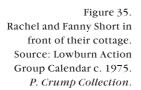
Those with a longer association with the area tended to have a greater knowledge of its history, and many of these referred to the loss of heritage features. They knew of many features which had disappeared, or had deteriorated significantly. There was a concern about the cumulative loss over time, and that people today had no idea of how rich the area previously was in historic features.

Most people interviewed spoke of the loss of particular historic buildings or features. In some cases this was from general deterioration over time; in other cases it was from deliberate action; and in others it was from benign neglect—

owners not taking a 'stitch in time' to prevent deterioration. Particular losses to sluicings that were mentioned included people bulldozing them, planting them up, building houses in them, and planting grapes. Bottle-hunters and other collectors had removed artifacts. Recent mining exploration has damaged older quartz mining sites. The reduction in rabbit numbers from RHD virus means that shrubby vegetation is growing in sluicings to a much greater extent than previously. 4WD vehicles and trail bikes on the hills can damage historic features and create new tracks. Several people mentioned the loss of the corrugated iron villa opposite the store, and its replacement by a two-storeyed modern house, as this building and the store and post office had previously been seen as the centre of historic Bannockburn. Many of the small cottages of the area have been lost over the years, mainly from deterioration (one interviewee can recall at least 10 mud cottages in the vicinity of their property in Miners Terrace; now there are two). Sod or rammed-earth field walls, once a feature of the area, have largely disappeared as well, although there are some remnants left. Some vineyard owners have damaged or removed historic ruins where they got in the way of the new plantings. Other buildings or ruins are under threat from neglect.

Retaining the stories

Some people considered that there should be better interpretation (signs, brochures, etc.) of the historic features of the landscape so that both local people and visitors could better appreciate what they were seeing. People also noted that, as older people die, the stories of the place are lost. The stories should be held on to—they help create a greater sense of place, inform people about the land, and encourage people to care for important places. For example, many people spoke of the Short sisters, well known and well-loved local identities, who had been a very strong link to the past. Their cottage still remains, but is not protected in any way (Fig. 35).





Effects of establishing viticulture and forestry

People generally were not concerned at the sudden and recent spread of vineyards across the lower landscape. Most people enjoyed both the visual aspect (the seasonal changes in particular) as well as the vitality the industry had brought to the area. But concern was expressed about terracing hillsides for vineyards, which was considered to be visually intrusive (this has occurred only to a limited extent so far). Developing vineyards, if done without consideration, could also obliterate important signs of the past, such as old ruins, sod walls, and historic trees. The earthworks required when the vineyards were put in could also destroy archaeological sites. While there has been little forestry established to date, some people were concerned that if it expanded it could change the visual and cultural landscape in a major way. There was also a suggestion that there should be buffers between vineyards and historic areas, and between vineyards and residential development.

Access

Roaming, or the ability to wander freely on foot through properties owned by other people, was mentioned by many interviewees as being greatly valued. In the past, the absence of development meant an almost unrestricted ability to move through the landscape. Owners accepted this and there was an implicit trust that unwritten rural laws (shutting gates, not disturbing at lambing time) would be respected. A number of interviewees expressed sorrow at the gradual 'closing off' of the landscape from people due to the increasing limitations from fences, houses, vineyards, and different expectations of new landowners.

Some residents were concerned about a possible proposal to close a road which provides walking access from Hall Rd to Quartzville Rd. Others mentioned that it would be good to have a formalised walkway from the school (now used as a school camp) and Hall Road, for school parties to use.

Integrity of pastoral farming

There was some concern at the loss of pastoral farming in the area—at this stage both Cairnmuir Station and Mt Difficulty Station have been subdivided. There seemed to be a 'domino effect' from tenure reviews. Once land was freeholded, the more fertile terraces were subdivided and sold, and became lifestyle lots and vineyards. The upper mountain lands were retained by the Crown and managed by DOC. This left the mid-range hill country which was not able to stand alone as an economic farming unit without the lower flats. Unless the mid-range country could be amalgamated with an existing station, it was difficult to find an economic use and was therefore likely to be further subdivided into 'lifestyle' blocks, leading to urbanisation of the hill country. This is an issue not only for the two stations already freeholded, but also for other stations which have not yet been through tenure reviews.

Water races

Some interviewees were concerned about the incremental loss of water races. Many of these are historic features in the landscape, and some are still used today for irrigation purposes. They can be lost if owners bulldoze them or fill them, or if they refuse to allow water to be conveyed through their property. Water races are a direct link with the past.

Bannockburn Sluicings Historic Reserve

Many people expressed concern about the growth of weed species, including wilding pines, in the sluicings. Concerns included: the plants damaging the historic features; plants hiding the features from view; the spread of weeds on to neighbouring properties; and a belief that the sluicings should be preserved visually as they were originally—as a barren landscape.

Bannockburn Post Office Historic Reserve

Some interviewees were concerned that the Post Office was used predominantly for DOC employees rather than a community asset. It was not open to the community as other reserves are. It was suggested that it could be an information centre, museum, café, or other community facility.

Presbyterian church

Most people mentioned the impending sale of the church, and the fact that they would like to see it retained for the community. People referred to its historic importance, the fact that it was built from local funds, and its ongoing role in the spiritual and communal life of the community. It was referred to as the 'heart of the community'. Its significance as part of a cluster with the cenotaph and hall was also mentioned.

Bannockburn store

The store closed in 1973 and is still in the ownership of the family who ran it. It is currently used for storage. Some community members considered it to be a very important building for Bannockburn and were concerned about its state of repair. The building's owners were also keen to see the building retained and repaired.

Loss of orchards and trees

Many orchards have been lost from the area, largely replaced by vineyards. This was seen to be losing the diversity of the economic base as well as removing an attractive landscape feature.

Several people spoke of the importance of old trees in the landscape—oaks, fruit trees, lombardy poplars (Fig. 36), etc. They are not only attractive landscape features, but also show where and how people used the land in the past. Some of these are 120-140 years old and nearing the end of their lives. A whole cohort of trees will disappear unless replanting occurs.

5.4 CONCLUSION

In summary, the landscape is highly valued by people in the community and those associated with it for many reasons. Valued physical aspects include the 'natural' tussock and tor landscapes. Valued human-modified features include those associated with the mining era, historic structures and historical plantings. The quality of light and colour in the landscape is valued, as is its openness and lack of development. There are many stories and meanings associated with the land, some personal to particular families and some shared by the community or tangata whenua. Valued traditions and activities include

Figure 36. Corrugated iron house and shed with lombardy poplars, Bannockburn. Heather Bauchop 2003.



exploring and walking through the landscape, community activities, and land uses (such as pastoral farming) that have been around a long time. Orchards and vineyards were also largely valued.

There were many concerns relating to the landscape. The issues did not centre around change per se, as some changes were not of particular concern or were enjoyed (e.g. vineyards). Concerns were more related to change or loss of particular valued aspects of the landscape—either physical changes, visual changes, or changes to people's relationship to the landscape.

There was also quite a bit of discussion about a sense of community and the loss of community buildings. There is a strong synergy between a sense of community and the existence of places or events in which members of a community can interact. If there are no places or occasions for people to meet, the bonds that come from knowing others—support, friendship and mutual interest—will fail to develop. A strong community is one where people can come together in times of sadness and joy, for celebration, spiritual enrichment, relaxation, work, and play.

Community interactions can be linked to landscape features—places where people meet, and activities that they meet for. In many settlements these places are the shops, service centres, social, religious and sporting venues, and places of entertainment. Historically (at least over the 20th century) Bannockburn has had at least seven main places where people came together. These included the school, pub, store, post office, Methodist church, Presbyterian church, and hall.

Many of these have been lost in recent years. Since the 1970s the school, shop and post office have all closed (the school is now used as a school camp). The closure of the local store, greater mobility, and more affluent lifestyles have meant that community members shop at Cromwell or even further afield. The Methodist church was sold into private ownership. This leaves only the pub, the hall, and the Presbyterian church as community meeting places, and the church is under threat of sale and closure. Unless there is a retention of community meeting places, the focus of community events is likely to shift to Cromwell, and Bannockburn may become more akin to a satellite suburb of Cromwell than a community in its own right.

6. Analysis

In this section, an attempt is made to consider the physical, historic, and cultural information as a whole.

6.1 DIFFERENT SCALES IN THE LANDSCAPE

The landscape can be seen at three main scales:

Largest scale. A tilted bowl of hills, with Lake Dunstan visible at the northern end and the Carrick and Old Woman ranges encircling in the southern end. A gradation of wild tussock and tor country down to relatively ordered Valley floor, dissected by rivers.

Mid scale. Ridges and terraces separated by (often) deeply cut gullies. Many features influenced by humans. Alluvial mining has created most of landforms in and around Bannockburn settlement, Felton Rd and Cairnmuir. Cliffs and steep gullies created or deepened by sluicing. Water races create complex networks across hillsides. Roads have created old and new patterns. Settlements, existing and abandoned. Lake Dunstan, Bannockburn Arm created from the Clyde Dam. Patterns of fences; clusters, lines, and ribbons of trees (e.g. along creeks); orchards; vineyards and paddocks.

Smallest scale. Site-specific changes caused by humans. Historic aspects include abandoned hard rock mines, coal mines, alluvial areas. Cottages, mudbrick, corrugated iron, and other. Sod walls predating fences. Individual trees. Modern aspects include new sections, new houses, new gardens, wineries, internal vineyard patterns, new tree plantings.

6.2 PATTERNS AND ORDERING IN SPACE

The dominant physical order to the landscape is the difference between the upper hill country and the lower Valley/terrace country:

- Upper country: hill/mountain slopes, brown/grey, tussock and rock, shrublands in gullies, untamed, sometimes threatening, steep to rolling, dominantly 'natural', abandoned settlements and mining areas, threaded with water races.
- Lower country: gentle to flat, grass, trees, shrublands, dominantly 'cultural', alluvial mining remains, vineyards, orchards, some (decreasing) 'wild' areas, expanding urbanisation.

The upper country is open and highly visible. The lower country is notable for its sense of mystery. The landscape is not easy to understand compared to, say, a simple river Valley. The strongly dissected terraces, steep-sided gullies and winding roads mean it is easy to get lost, or at least feel uncertain about what might be around the next corner. A sense of mystery or discovery in the

landscape was noted by a number of community members, in the Council's planner's report in the 1970s (Paterson 1976), and also by the writers.

Vineyards and orchards create strong patterns in the landscape (Fig. 37). Rows of old trees (mainly lombardy poplars) indicate earlier field boundaries. Clusters of trees show where old house sites were. Streams are often lined with willows, providing a meandering form in the land. Water races contour around hillsides and through the terraces, sometimes linking to abandoned dams. In some places, the remnants of sod fences still remain; elsewhere fences delineate boundaries.



Figure 37. Looking northeast from Bannockburn sluicings towards Cromwell over vineyards on Kawarau River terraces. Peter Petchey 2003.

The Bannockburn is distinctive in its layout—rather than being clustered in one place, its historic remnants are in various locations, and new development is tending to fill the spaces in between.

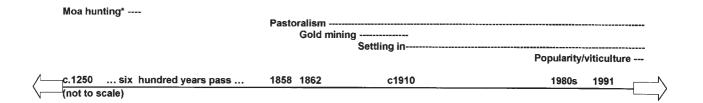
6.3 MAIN LAYERS OF THE PAST THAT HAVE PHYSICALLY CHANGED THE LANDSCAPE

Human interactions within the study area have been characterised by relatively rapid surges of change followed by periods of relative stability. The surges of major change that have left their physical imprint on the landscape have been:

- Moa hunting (c. 1250-1400)
- Pastoralism (1858-)
- Gold (1863-c. 1910)
- Settling in (1910-)
- Popularity: urbanisation and viticulture (1980s-)

See Fig. 38, which presents these 'surges' in a diagrammatic form.

There have of course been many other changes to the landscape, but these have tended to have less impact or are outside the study area. The Clyde Dam project, for example, changed the steeply-gorged Kawarau River into a slow-moving lake



^{*} lasted approx 150 years

Figure 38. The main surges of change in the landscape.

and flooded the lower Bannockburn Creek A new visual element in the landscape was created. However, the lake is the boundary of the study area, so this is not considered here. Orcharding, while being an important part of the local economy, developed slowly over time and created relatively minor changes to the landscape. It is therefore not considered here as a major surge of change.

The five main surges of change can be considered as layers in the landscape, each of which has left a legacy of physical change and of human relationships with the land. These changes are analysed in terms of the webs and layers model, described in Box 15.

6.4 IMPORTANT NODES, NETWORKS, AND SPACES

This section attempts to break down each of the five main layers of change into its component nodes, networks, and spaces, and to state what has remained of these. The timeline for these changes is shown in Fig. 38.

6.4.1 Moa hunting

What major changes were created in the landscape?

The major change was the rapid alteration of the vegetation from a mosaic of forest to predominantly tussock. By the time of first European occupation in the late 1850s, the land in the Bannockburn area was a mixture of shrublands and tussock.

Important nodes, networks, and spaces created during this era

Nodes. None known. The Hawksburn archaeological site is a node but is outside the study area.

Networks. There were various known routes used by Maori through Otago, although it is not certain whether these same routes would have been used during the Moa Hunter period. None of the known routes appear to have run directly through the study area, except possibly up to the Nevis Valley (see Sections 4.2.2 and 4.2.3). Minor trails are likely to have branched off from these.

Spaces. The dominant spatial pattern would have been the patchwork of native vegetation and tussock, changing to a tussock-dominated landscape over time.

BOX 15: WEBS AND LAYERS MODEL

A **web** is created by a network of strands. Nodes are formed by the intersections of these strands. The web as a whole, however, only exists because of the open spaces between the strands. A web therefore creates an interconnected space with nodes, networks, and spaces. These spatial characteristics of the web give it its form and integrity.

Similarly, it is possible to conceive of heritage features in the landscape as nodes, networks, and spaces. Heritage webs can be considered as an interconnection of all aspects of a landscape which relate to a particular era (e.g. the 1860s gold rush), and/or land use (e.g. pastoral farming), and/or to a particular cultural or spiritual relationship with the land. In reality, history cannot of course be neatly divided into 'webs'—it is continuous and interrelated. However, the concept as explained below has proved to be a useful way of considering heritage in the landscape and linking different forms of information.

The heritage sites we are most accustomed to seeing are **nodes**—for example a church or a miner's cottage. But each of these is related to other parts of the landscape—the cottage was there because a mine was nearby; the pattern of mining can still be seen in the land forms; the track to the local store can still be seen. All of these form part of the 'web' in which the cottage is a node.

Networks in the landscape include tracks, supply routes, railway lines, road lines, and water races. Networks convey people, resources and even ideas. Some networks may have become invisible, such as historic routes through mountains, or rivers used for transport. Myths and histories may link one site or landform to another.

Spaces may include such things as undeveloped mountain slopes, field patterns, Maori gardening activities and associated storage pits, layouts of settlements, and patterns in the land formed by earth-shaping activities such as mining. Spatial features can themselves be of heritage significance or can contribute to the significance of a single feature. Open space or landscape patterns around an individual site may contribute greatly to its integrity. Spatial significance can also include the physical relationships of individual sites to each other, and view-shafts to and from sites.

Heritage landscapes, however, are far more than just the physical changes resulting from human activity; they also exemplify human relationships with their surroundings. The **stories** (including meanings, histories and myths) embedded in the landscape provide the richness of association and are fundamental to a sense of belonging and a sense of place. They can include the stories associated with an area which have their basis in the landscape and people who lived in it, and the spiritual aspects of a landscape, where gods or ancestors have formed or changed the land or are part of it. Sometimes the signs of these stories only remain in a name, sometimes in the stories rooted in the land and passed down by individuals and communities. Stories explain human relationships with the landscape.

Where several eras of heritage are significant in a landscape, webs can become *layered*. Parts of the layered web may become eroded and lost, but other parts may remain or take on new uses. Only parts of each layer will be visible at any one time and often, such as with archaeological sites, some of the physical evidence may be buried or eroded (Stephenson 2002).

What is left of this era today in the study area?

The main legacy of the moa-hunter period is the *tussock-dominated landscape*. Some *names* appear to relate to this period. Two archaeological find-spots also indicate Maori presence at some stage.

6.4.2 Early pastoralism

What major changes were created in the landscape?

Land use associated with pastoralism was characterised by an isolated and minimal human presence over most of the land. The first part of the Kawarau Station homestead, farm buildings and woodshed were build on the flats of the Bannockburn Creek. It is likely that there were some outlying buildings on the station, used by shepherds and rabbiters.



Figure 39.
Shearing in the Kawarau
Station woolshed
has been going on for
around 140 years.
Peter Petchey 2003.

The most significant change relating to pastoralism was again a change to the vegetation patterns. Burning, and grazing by sheep, goats, and rabbits changed the distribution of native species (e.g. native bluegrass was particularly vulnerable and has largely disappeared). Introduced grasses, trees, and weeds began to dominate in the lower country.

Important nodes, networks, and spaces created during this era

Nodes. The Kawarau Station buildings were and continue to be the central node for this activity.

Networks. The pack track over the Cairnmuir Range from Earnscleugh station near Clyde.

Spaces. Open grazed tussock hillsides and the patterns of fields, fences, tracks and trees in the Bannockburn Valley.

What is left of this era today in the study area?

Kawarau Station homestead and farm buildings are

still essentially unchanged from the 19th century (Fig. 39). The *old road* over the Cairnmuir range still exists though it is no longer the main route to the station.

The tussock billsides and undeveloped nature of the main Bannockburn Valley are in part a legacy of pastoral farming and pastoral leases. Cairnmuir and Mt Difficulty Stations in contrast have been freeholded and subdivided, with a resulting mosaic of lifestyle blocks, vineyards, and grazed land.

6.4.3 Mining

What major changes were created in the landscape?

The miners altered the face of the land in their search for wealth. Virtually all of the terraces between the Kawarau River and the foot of the Carrick Range were mined, mostly by sluicing. Sluicing continued up all of the gold-bearing streams to high in the Carrick Range. The 'rich loam' described by early surveyors was washed away.

The slopes of the Carrick Range, where quartz mines were established, were scarred by mines and scored by tracks and water races. Settlements associated with mining came and went, leaving huts, tracks and settlement patterns. Gold dredges worked along the edges of the Kawarau River and up Bannockburn and Shepherds Creeks. Coal mines were more localised but also involved large amounts of earthworks. While some coal pits were open, there were also extensive underground workings.

Important nodes, networks, and spaces created during this era

Nodes

- Close settlement areas such as Carricktown, Quartzville, Stewart Town
- Community facilities—school, stores, slaughteryard, etc.

- · Hard-rock mines and battery sites
- · Coal mines
- Alluvial mining sites (continually changing locations)

Networks

- · Tracks and roads, evolving over time
- Water race systems (races and associated dams)
- · Sludge channels

Spaces

- Pattern of scattered settlement areas, e.g. Miners Terrace, Chinese settlements
- Reshaped landforms caused by alluvial workings over the terraces, including sluiced faces, buttes and sluiced grounds
- The pattern of miners occupation leases (which included their house, garden and sometimes smallholding)
- Surveyed layout of Bannockburn Township

What is left of this era today in the study area?

Many of the settlements associated with gold mining are largely abandoned but *clusters of ruins* can be seen. The *store* and *a few houses* still exist in Bannockburn. There are still some *cottages* remaining of the clusters of dwellings at Miners Terrace and along Domain Road, some still lived in and some unused or in ruins. There are no obvious relics of Chinese settlement.



Figure 40.
Carrick water race,
Carrick Range—still used
for irrigation today.
Peter Petchey 2003.

Traces of coal mining are hard to identify on the ground. *Hard-rock mines* are recorded archaeologically, but most are not easy to identify in the regrown tussock.

Some of the earlier *tracks* now form roads, or walking tracks, but others have been lost. The track up to Carricktown and beyond is still accessible by foot or 4WD. The main *Carrick water race* is still used today (Fig. 40), although it no longer flows as far as it used to. Other races can be traced running across the hillsides and terraces, but most have been abandoned. Some *dams* still remain, but are not used.

Today, vegetation has largely masked the devastated and barren landscape of the mining period. It is often difficult to differentiate between 'natural' and 'cultural' features except where vegetation has refused to grow. *Sluice faces* and *sluiced gullies* are the most obvious spatial features remaining.

6.4.4 Settling in

What major changes were created in the landscape?

Kawarau Station was subdivided in 1910 into 16 stations. The smaller pastoral stations each developed a new cluster of farm buildings (woolsheds, farmhouses, etc.) most of which were built around 1910/11.

People also took up permanent residence on small rural allotments, mainly in the vicinity of Bannockburn. In some instances these would have been where they already were living. Gradually the landscape became more domesticated. Trees, orchards, pastures, and gardens gradually covered the waste lands left by mining.

The patterns that we see in the landscape around Bannockburn today were largely established at this time.

Important nodes, networks, and spaces created during this era Nodes

- Station buildings built around 1910/11 following breakup of Kawarau Station
- Community facilities, e.g. Bannockburn Post Office, Presbyterian and Methodist churches, hall

Networks

· No known significant changes to existing networks

Spaces

- New, smaller pastoral stations
- · Scattering of small rural allotments especially in the vicinity of Bannockburn
- Orchards and small field patterns in the vicinity of Bannockburn, sometimes defined by rows of trees or sod walls

What is left of this era today in the study area?

Homesteads and farm buildings of the stations created in 1910 still exist and most are still used for their original purpose. The Post Office and ball still exist, as do the churches. Small-farm allotment patterns are still visible in the vicinity of Bannockburn with their associated cottages, outbuildings, trees. A few orchards are still present. Trees and remnant sod walls still define some boundaries.

6.4.5 Popularity—urbanisation and viticulture

What major changes were created in the landscape?

The first significant plantings of grapes occurred in the early 1990s, and rapid growth occurred from 1995. Today, probably 75% of the suitable viticulture land has been planted, although this may change as science and technology develop.

The vineyards have created a major change in the landscape as well as new activities and a new economic base for the area. Visually, the vineyards strongly occupy space rather than define it (cf. fences or rows of trees). The vineyards have formal rows and hard edges. They show great variations in colour according to the season.

Important nodes, networks, and spaces created during this era

Nodes

- Bannockburn as a substantial settlement
- Wineries
- · Bannockburn pub

Networks

• New roads to serve new subdivisions

Spaces

- Pattern of new subdivisions: vineyards, lifestyle blocks, and urban sections
- Vineyards with their distinctive patterns of blocks and rows of grapes

What is left of this era today?

All is still present.

6.5 DOMINANT PROCESSES TAKING PLACE TODAY

The main processes of change occurring over the last 10-15 years (and showing no signs of ceasing) include:

- Subdivision for urban, lifestyle, and vineyards
- New buildings—mainly houses
- Viticulture—vineyards and wineries
- Orchards predominantly being removed (one being expanded)
- · Land price rises
- · Population increase from new people moving in
- · Introduction of much greater wealth
- Mobile population; dormitory settlement for many commuters
- Tenure reviews possibly freeing up further land for subdivision
- Decay of historic features