

Buskin Track (80114) and Others

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A signpost points to one of the geospatial digital data gaps on the Otago Peninsula.

A PDF copy of this study is available from:
<http://homepages.vodafone.co.nz/~pete.mcd/bt/bt.pdf>

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Introduction

A month ago I mountain-biked down Buskin Track on the Otago Peninsula. On a bicycle you can judder down from the elevated spine of the peninsula to reach the Pacific Ocean in one long enjoyable or harrowing downwards plunge – slowed somewhat by the gate-opening and stile-crossing. By using the brakes, you can regulate the exhilaration and consternation to suit your skill level and age bracket. Buskin Track follows an unformed public road that slants across a hillside. Grass predominates. A few muddy sections add character. The track is one of Dunedin's recognised mountain-bike routes. It is also of course open to walkers.

By researching legal records, Bruce Mason of the Otago Peninsula Walkers rediscovered Buskin Road in 1989. Yet sixteen years later, in 2005, the latest topographic maps – the paper *Dunedin* 1:50,000 sheet (published in 2002)¹ and NZTopoOnline – still do not show this track. A rare omission? Or a symptom of a wider problem? We shall try to find out.

This study looks at the incomplete recording of accessways, walking tracks and tramping routes on the LINZ topographic maps of the Dunedin area. It also guesses on whether the findings might carry any national message.

I will present a user's view of the LINZ topographic maps. Although I refer once or twice to technical documents of the National Topographic/Hydrographic Authority, I do so as a layman whose understanding of those documents is limited and may need correcting.

When checking the paper maps of the Topographic Map 260 series, I used the most recent sheet available for each area. All my checking of NZTopoOnline was carried out in April 2005. The version available was Beta Release Version 2.0.

'Yet sixteen years later, in 2005, the latest topographic maps – the paper *Dunedin* 1:50,000 sheet (published in 2002) and NZTopoOnline – still do not show this track.'



A marker pole on Buskin Track, a public road on the Otago Peninsula.



A sign at the start of Buskin Track. The track has been well signposted and fully waymarked since the early 1990s.

A Premise: Topographic Maps as the Primary Source of Information on Walking Tracks

Throughout this investigation I will assume a premise that to me seems self-evident but which may not be obvious to, or accepted by, some readers. As I see it, our national series of 1:50,000 topographic maps, paper and online, should be the primary sources of information on walking tracks. These maps should be authoritative and indispensable. Guidebooks, leaflets, park rangers, track-managers, Department of Conservation offices, visitor centres, tramping websites, fishing magazines, etc form invaluable secondary sources. Guidebooks provide details that maps cannot show. Walkers and trampers will often use both primary and secondary sources. The secondary sources will sometimes be more up to date than the maps, but the fewer discrepancies between the maps and the secondary sources, the better.

The LINZ topographic maps warn recreational users to consult rangers or other authorities for the latest information on tracks. Yet outside the national parks and the conservation parks, many walkers will not know who to seek advice from for a particular track. In the Dunedin area, for example, 'for users of many tracks, it is very difficult to tell which agency or department has responsibility for the track as signage is poor, and there is little other indication about who owns the land.'² Sometimes, ironically, we go full circle: track leaflets often advise their readers to consult the topographic maps for detailed information. For example, from the Dunedin City Council leaflet *Fat Tyre Trails*:

Disclaimer: This pamphlet is intended as a general guide only. The changing nature of the physical environment means the information contained may not always be completely accurate. For detailed topographic information on the trails described in this pamphlet obtain the related 1:50,000 topographic map.³

What this disclaimer omits to mention is that one of the routes described in *Fat Tyre Trails* is located in the area covered by *Lawrence* Topographic Map 260-H44, which was published in 1987. No revision of this map has yet been published. This primary source of information is eighteen years old. It may be still reliable. And it may not. I will later give some examples that suggest that this map is overdue for a revision.

An extension of my premise is that New Zealand's topographic maps are not only vitally important for defence, rescue and government purposes but are also equally crucial for outdoor recreation and tourism.

This Study in Relation to the Wider Map Needs of Walkers and Other Outdoor Recreators

In August 2003 the Acland report on walking access to the New Zealand countryside emphasised the need for accurate information on access. One way of providing such information is on maps, either on paper or online. The maps that are at present readily available to the public only partially meet the needs of outdoor recreators. The process of improving these maps could involve three separate areas of revision and redesign:

- Firstly, our 1:50,000 topographic maps, whether of the paper Topographic Map 260 series (or the planned NZTopo50 series) or of NZTopoOnline, should show all the walking tracks that physically exist and that can be depicted at the scale of 1:50,000. (Some tracks in urban areas cannot be shown at 1:50,000.) These maps should also show waymarked tramping routes; but whether they should show all untracked routes is debatable and could be controversial. I will later detail how the present topographic maps for the rural area surrounding Dunedin fail to record, or only partly record, some long-established tracks. They also omit some well-travelled poled or ribboned routes.
- Secondly, outdoor recreators need freely available cadastral maps indicating legal access, such as public roads and the existing fragments of the Queen's Chain. This knowledge of public land could enable walkers to use previously undisclosed public roads, once the location of those roads on the ground has been confirmed and if necessary waymarked. The cadastral knowledge would also tell walkers and anglers which water margins are public land. Readily available cadastral information, therefore, could lead to the creation of new walking tracks. The Acland report identified the lack of such cadastral information as a key issue for both landowners and recreational users.⁴
- Thirdly, in the long term, outdoor recreators need a public-access topographic map series that distinguishes between public tracks and private tracks and which shows the boundaries of national parks, conservation parks, reserves and other public lands.

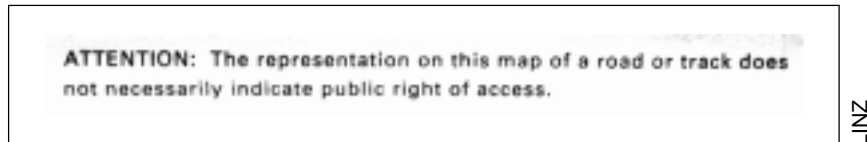
My aim in this investigation is solely to examine the first concern. I will be trying to discover the extent of unmapped tracks, irrespective of whether those tracks are open to the public. Our present topographic maps do not differentiate between tracks open to the public and tracks closed to the public; neither will my looking concern itself with this aspect – important though it is.

A minor point here is that a few land-barons might prefer that their private farmtracks and foot-tracks be absent from the topographic maps. I'm no lawyer, but my guess is that property rights do not stretch that far, even in New Zealand. A landowner can

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choose whether to allow people to walk along his or her private farmtrack or private foot-track. But the landowner cannot choose whether that physically-evident track appears on the topographic map, any more than a house-owner can choose whether his or her house is shown.

A Public Access New Zealand publication has suggested ways in which LINZ could respond to the second and third of the above bulleted needs.⁵ The government's proposed Land Access Strategy includes plans to map the footways that the access agency will establish along significant water margins and coasts.⁶



The advice-note that applies to all Topographic Map 260 maps and also to NZTopo*Online*. This is a major problem for many users of LINZ 1:50,000 topographic maps – but it is not the subject of this study.

Part 1:

The Dunedin Area



Buskin Track is waymarked clearly. Here, where a fence-line crosses the public road, there is a stile and a marker pole.

Track Classifications, Terminology, and Abbreviations

Two track classification systems are in use in the Dunedin area. The city council's *Track Policy and Strategy* (1998) uses a multi-use classification that caters for both walking and mountain-biking. This system has five categories: Accessible, Easy, Moderate, Hard and Route.⁷ The Department of Conservation (DOC) grades its tracks for different visitor groups and according to each track's degree of difficulty, standard of surface formation and gradient. DOC's classifications are: Short Walk, Walking Track, Tramping Track, and Route.⁸

The mix of classification systems in the Dunedin area illustrates a national messiness: there is a hotchpotch of standards for tracks in New Zealand. Locally, what is labelled Hard by the Autonomous Region of Dunedin may be labelled Walking Track by DOC. Nationally, what is called in one locality an easy tramp may be described in another area as a route.

The route category is potentially bewildering. Two different Route classifications are used by the two main track-managers in the Dunedin area.

The city council applies its Route label to a wider upper range of routes than what DOC calls Routes. The most demanding Routes in the council's track database – such as Rosella Ridge and Waikouaiti River (81128) – are unmaintained and largely unwaymarked.

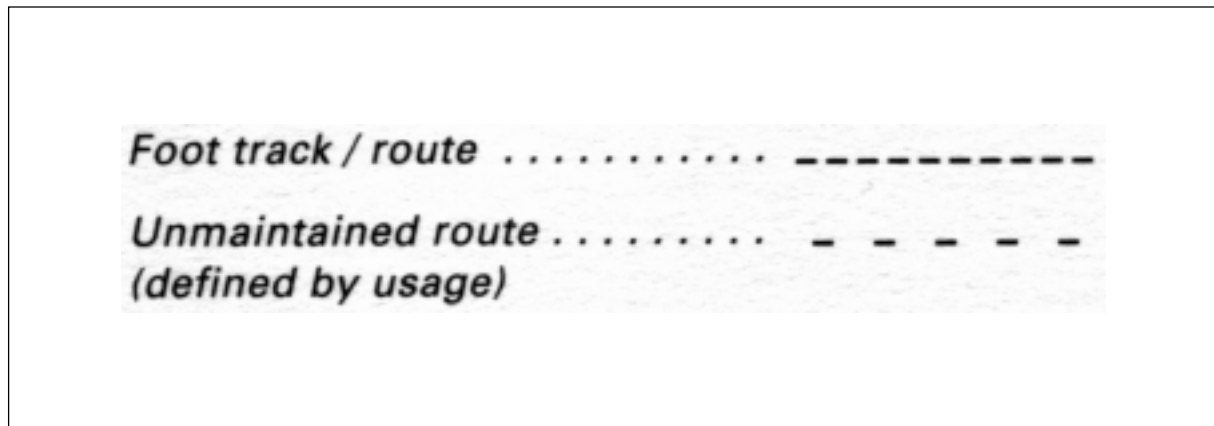
Like these upper-range city council Routes, the DOC Routes 'cater for experienced backcountry users who have navigation and river-crossing skills'.⁹ But – here is the difference – for a track to comply with the DOC standards for a Route, that track *must* be fully waymarked:

Marking on routes shall be by way of cairns, poles or markers and they shall be visible from one to the next, in either direction, in all weather conditions except moderate to heavy mist ... Unmarked routes (generally defined by use and with no marking or vegetation clearance) are not considered to be routes covered by this Handbook. [*Tracks and Outdoor Visitor Structures*, 2004.]

The inconsistent standards and the variety of terms can confuse track-users. They also complicate the efforts of this researcher to analyse and write objectively. The recent Standards New Zealand handbook from which I took the above quote may gradually bring more uniformity into the track standards.

How do these various categories of walks and tramps translate into symbols on maps? If you are not yet confused, you soon might be. Whereas Dunedin City Council has five track categories and DOC has four, the older editions of the Topographic Map 260 series used just one symbol for all foot-tracks, and the more recent

editions use two symbols. So on the recent paper maps (since about 1999), one symbol signifies a 'foot track / route', and the other signifies an 'unmaintained route (defined by usage)'.



Recent editions of the Topographic Map 260 series (since about 1999) use two symbols for foot-tracks and routes.

Get it? As clear as a Silver Peaks fog on a dark night? But we must press on or be benighted. We have a city council Route, a DOC Route, and two LINZ routes: their definitions all differ. Very Kiwi. Inclusive and multiformed. More on this later.

*

In this paper I will often use the terms 'walking track' and 'tramping route' without capital letters, in a loose way that does not refer to any particular system of classification.

I will use the term 'unmapped track' in a wide, encompassing sense to mean either:

- a foot-track that physically exists but which is not marked on the relevant Topographic Map 260 sheet or on NZTopoOnline; or
- an established tramping route that is waymarked or that follows a river or topographic feature such as a ridge, but which is not marked on the relevant Topographic Map 260 sheet or on NZTopoOnline.

Land Information New Zealand is still developing NZTopoOnline and might update it at any time. So the unmapped tracks could suddenly appear. This would render some of my facts and some of the map extracts – correct in April 2005 – agreeably out of date.

I will use the following abbreviations:

LINZ Land Information New Zealand
NTHA National Topographic/Hydrographic Authority
DOC Department of Conservation

Dunedin City Council's List of 178 Named Tracks

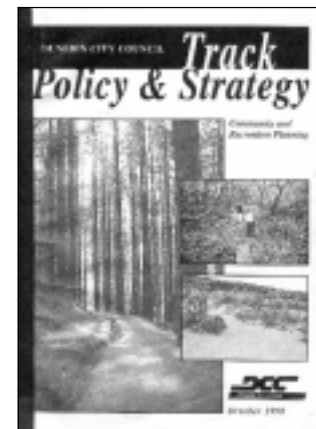
How many known, physically evident foot-tracks and commonly-used tramping routes are missing off the 1:50,000 topographic maps?

Just the odd one, perhaps? You might assume that our topographic maps show the majority of existing tracks and routes. But this assumption would be guesswork. To gain an accurate national picture of the number of unmapped tracks and routes would require the involvement of hundreds of interested members of the public and the cooperation of dozens of local and regional authorities. This may never happen. Instead I have completed a mini-survey, confined to the area administered by Dunedin City Council, which covers 3,341 square kilometres, slightly more than 1% of the total area of New Zealand.

Dunedin is an unusual city in that it includes extensive tracts of farmland and remote hill-country. To the north, a tongue of Dunedin extends to Hyde and the Rock and Pillar Range. To the west, the Old Dunstan Road leaves the city limits when it sidles over the Lammermoor Range. Spread unevenly around the city's area are a total of over 500 kilometres of tracks or routes.¹⁰

Dunedin City Council maintains a tracks database. Appendix B of the council's *Track Policy and Strategy* (1998) lists 178 named tracks, which include tramping routes. Fifty-five of these tracks are managed by DOC or by DOC and a private owner. Most of the rest are managed by city-council departments. A few are managed by their private owners. The list occupied four pages of small print. The tracks sat on my desk, begging for some cartomaniac to come along and check whether each one was marked on the relevant topographic map. So I could stay out of the rain and determine the facts at home in comfort. All that I needed for my mini-survey were a full teapot and six maps.

At the time of writing, Dunedin City Council is updating its *Track Policy and Strategy*. I have used the list of tracks from the old, 1998 *Track Policy and Strategy*. These tracks have been known about and officially inventoried for at least seven years. The 1998 list may contain a few inaccuracies, such as misgradings and misnamings, but these minor mistakes should not affect the overall results of this study.



In about 1995 a consultant's report recommended that Dunedin City Council develop a database of tracks. This database was subsequently built up, hence the extensive list of tracks in the city's 1998 *Track Policy and Strategy*.

1:50,000 Topographic Maps Available for the Dunedin Area

I will assume that readers are familiar with the varieties of 1:50,000 topographic maps that are available nationally. If you are not, please see page 38.

Ten years ago, most people had access to only paper maps. Now, we choose between paper maps and digital maps. So for each of the 178 named tracks in the Dunedin City Council list, I checked the latest edition of the relevant paper map and also NZTopoOnline. I did this checking in April 2005.

Paper 1:50,000 Topographic Maps of the Dunedin Area

Six sheets of the Topographic Map 260 series cover most of the area administered by Dunedin City Council. They are:

Sheet Name	Most Recent Publication Date
Dunedin. Topographic Map 260-I44 & J44.	2002
Waikouaiti. Topographic Map 260-I43.	2002
Middlemarch. Topographic Map 260-H43.	Edition 1, 1989
Lawrence. Topographic Map 260-H44.	Edition 1, 1987
Milton. Topographic Map 260-H45.	Edition 2, 1998
Taieri Mouth. Topographic Map 260-I45.	Edition 2, 1998

No other paper 1:50,000 topographic maps – such as Parkmaps or Terralink recreational maps – are published for the Dunedin area.

The National Topographic/Hydrographic Authority (NTHA) oversees topographic mapping programmes that maintain the data on the NZTopo database.¹¹ This topographic-data maintenance includes aerial photography, error reports from the public and field checks. The NTHA (or its contractor) obtains information on tracks from DOC and from local and regional councils.¹²

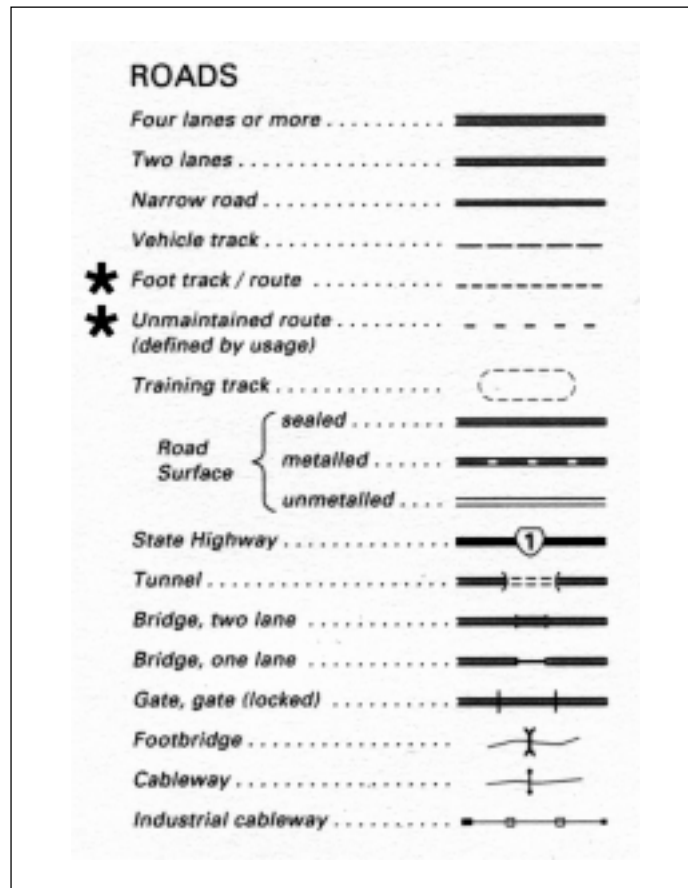
The NTHA also periodically revises the paper topographic maps. Some areas, such as Fiordland, are fairly static; the production cycle for the paper map of such an area may be ten years or more. The *Lawrence* map (Topographic Map 260-H44) is now eighteen years old. So it does not show any track built in the last eighteen years.

Urban and peri-urban areas and some rural areas may change dramatically in a couple of years; the production cycle for the paper map of such an area may be five years or less. The *Dunedin*

‘No other paper 1:50,000 topographic maps – such as Parkmaps or Terralink recreational maps – are published for the Dunedin area.’

map (Topographic Map 260-I44 & J44) underwent a limited revision in 1997 and underwent a full revision in 2002. Unfortunately these revisions apparently did not discover that a number of long-established tracks, such as Buskin Track, were missing off the map.

The *Middlemarch*, *Lawrence*, *Milton*, and *Taieri Mouth* maps use just one symbol for all foot-tracks. The *Dunedin* and *Waikouaiti* maps use two symbols; one signifies a 'foot track / route', the other signifies an 'unmaintained route (defined by usage)'. The maps carry a note advising users to consult rangers or other authorities for the latest information on tracks.



LAND INFORMATION NEW ZEALAND

Extract from *Waikouaiti* Topographic Map 260-I43, published in 2002. Recent editions of the Topographic Map 260 series use two symbols for foot-tracks and routes.

NZTopoOnline also uses these two symbols (NZTopoOnline Reference, Version 4.6, downloaded March 2005).

Digital 1:50,000 Topographic Maps of the Dunedin Area

LINZ provides an online topographic map, NZTopoOnline, freely available on the internet and covering the whole country. The topographic data of NZTopoOnline is cartographically generalised to suit a scale of 1:50,000. The version available during this investigation was Beta Release Version 2.0.

NZTopoOnline uses two symbols for foot-tracks, identical to those I've described above for the paper *Dunedin* and *Waikouaiti* maps. The NZTopoOnline website advises users to obtain the latest information on tracks from DOC or other authorities that manage the tracks. LINZ gives no warranties that the NZTopoOnline maps are free from errors, omissions or other inaccuracies.

Colour printouts of NZTopoOnline illustrate the miraculous digital age that we now live in: more correctly, they would do if they showed all the known walking tracks and tramping routes.

At the time of writing, NZTopoOnline is still in development. When fully developed, NZTopoOnline may generally be more up to date than the paper topographic maps. One would expect it to keep abreast of the changes to the NZTopo database. It could potentially become a reliable source of up-to-date information on foot-tracks. At present, though, a number of long-established tracks and routes in the Dunedin area are missing from NZTopoOnline.

A Problematic Exercise

The simple exercise – merely comparing a list of tracks with the maps – proved more problematic than you might expect.

Urban Detail

Sometimes urban detail or crowding of parallel tracks prevents the depiction of tracks at a scale of 1:50,000. I have listed the unmapped tracks in the Appendix, pages 44-6. This list excludes tracks that cannot be drawn at 1:50,000, such as some of the tracks in the city suburbs, most of the Botanic Gardens tracks, and all the Ross Creek tracks.

Short Sections of Track and Short Accessways

I'm going to stick my neck out here and be categorical. My viewpoint, as a walker map-user, is that if a track is short, say just two hundred metres, but is in open ground and is therefore plotable at 1:50,000, it ought to be on the maps. By 'plotable' I mean cartographically possible to fit onto the map among other detail.

Some of the tracks that I have listed as unmapped are fragments, sometimes merely a few hundred metres long. Yet a two-hundred-metre-long track may be a vital accessway to a river or to the foreshore. The presence of such a track on the map shows the user that there is physical (if not necessarily legal) access to the river or foreshore. Typical examples of short but important accessways that are not marked on the maps are the tracks to Victory Beach (track-name: Okia, number 80115) and to Long Beach (track-name: Long Beach, number 81911).

Outdoor recreators should not tolerate the omission of these short but plotable tracks. These short links form a crucial part of walking access to the New Zealand outdoors. Yet, on whether to record them, the technical specifications for the NZTopo database seem to be open to interpretation: 'In urban and rural areas, capture only significant foot tracks. Do not capture access [foot-]tracks from a road to a farmhouse or other dwelling unless they are particularly significant.'¹³

Insignificant? Significant? Particularly significant? LINZ engages contractors to update the NZTopo database. How do these contractors interpret the word 'significant'? I don't know. On page 14 I have described four short but important accessways that do not seem to have been notable enough to be captured for the NZTopo database.

Regarding foot-tracks to farmhouses being unimportant, it might provide food for thought if we reflect on the fact that Britain's vast network of public footpaths, which is completely mapped, has its roots in pedestrian travel from village to farm to farm to village.

The ideal solution for showing short accessways is a larger-scale map, such as 1:25,000. In the absence of such maps, New Zealand's cartographers need to maximise the track-showing capabilities of the existing and future 1:50,000 maps.

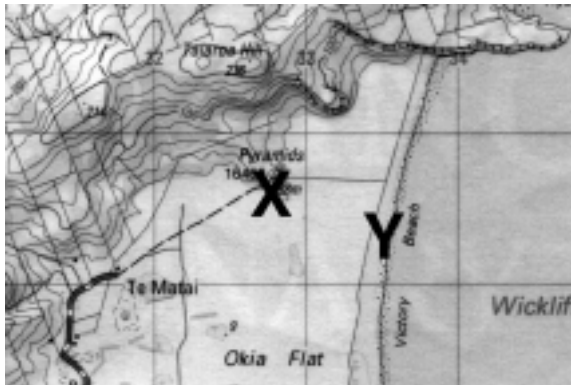
'In the absence of 1:25,000 maps, New Zealand's cartographers need to maximise the track-showing capabilities of the existing and future 1:50,000 maps.'

Short Accessways: Okia (80115), Quoin Cliff (80106), Nicols Falls (81402), and Long Beach (81911)

Short sections of foot-track often provide walking access to a river, the foreshore, or some other recreationally important place. The ideal solution for showing short accessways is a larger-scale map, such as 1:25,000. In the absence of such a map, New Zealand's cartographers need to maximise the track-showing capabilities of the existing and future 1:50,000 maps. Our 1:50,000 topographic maps can show foot-tracks as short as 200 metres.

LINZ policy is to show all features that exist on the ground, including unmaintained tracks (see page 16, top). So the maps should show all physically evident tracks, except when urban detail prevents this (and subject to national criteria on the showing of tramping routes). The landowner or the land-manager, whether of public or private land, is not the arbiter of whether a foot-track is shown. Showing tracks in their entirety will become increasingly important when New Zealand develops maps that show foot-tracks that are open to the public.

The four map extracts on this page are from 1:50,000 *Dunedin* Topographic Map 260-I44 & J44, 2002 edition.



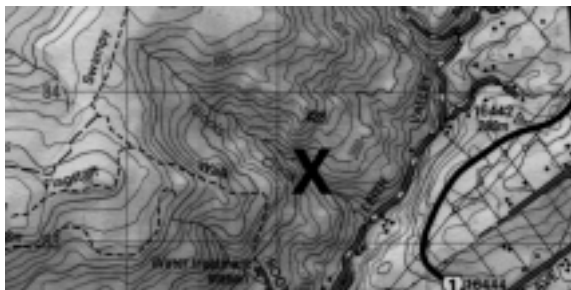
LINZ

The Okia track is a recognised and promoted track that gives access to the Pyramids and Victory Beach. The 700-metre section between X and Y is a foot-track through the dunes of Okia Reserve. This track is well defined and also poled. The map misses off this connection to the foreshore.



LINZ

The Quoin Cliff track is a permitted track over private land. Like many other Otago Peninsula walks, it is promoted in a Dunedin City Council leaflet. These walks are also promoted on the city council's website. From X, a short walk following marker pegs leads to the trigonometrical point on the clifftop (122m). The map does not show this waymarked link.



LINZ

Glow-worm watchers and walkers visited Nicols Falls in the late 1800s and still do today. The start of the track, on the Leith Valley Road, has a sign. A twenty-minute walk, first along a vehicle track and then a foot-track, leads to the waterfall. The map does not show these tracks. Nor does it show Nicols Falls, which are at about the X.



LINZ

Long Beach is one of Dunedin's safer swimming beaches. The beach is also a destination for rockclimbers. A short foot-track leads northwards from the road end X. This 300-metre-long track provides access to the foreshore and cliffs. It is a recognised track, managed by DOC. The map misses off this accessway.

Why make a fuss about showing just a couple of hundred metres of foot-track, when that track is impeccably obvious on the ground? The answer to this question is that the full importance of showing all plotable tracks, however short, will become more obvious when – possibly in the distant future – New Zealand develops maps that distinguish between foot-tracks that are open to the public and foot-tracks that are private. Putting this in technical terms, there may come a time when our cartographers will add a ‘public’ attribute to particular tracks on the NZTopo database; you can hardly add this attribute if the track is not there on the database in the first place.

Tramping Routes – the National Criteria Prescribed for the NZTopo Database

In the late 1990s, LINZ began changing one of the symbols on the Topographic Map 260 series maps. On new editions, it replaced the foot-track symbol with two symbols: a ‘foot track / route’ and an ‘unmaintained route (defined by usage)’. One of the first sheets to carry the new symbols was the 1999 edition of *Egmont* Topographic Map 260-P20. On 22 May 1999, the *Taranaki Daily News* ran a story titled: ‘Trampers Warned Off Using Hunting Tracks on New Map’:

Trampers in Egmont National Park are being warned to keep away from hunting tracks, even though the routes will appear on maps due out next month. Taranaki Search and Rescue heads and local Department of Conservation officers are concerned that the new LINZ maps could cost lives and public money. The new P20 *Egmont* topographic map will show all features that exist on the ground, including tracks not maintained, and will be available to the public.

Such information could cause major safety concerns with people wandering on to tracks never intended for public use, Taranaki Search and Rescue co-ordinator sergeant Noel Watson said yesterday. ‘There are no problems using the maps, just stay away from the hunting tracks,’ he said. People could get easily lost on the tracks, which were not [way]marked. Search and Rescue operations could escalate on Mt Egmont if people used the tracks, he believed.

DOC Stratford area manager Rex Hendry had the same concerns and was also angry his department might end up having to spend cash on tracks not intended for public use. ‘If you put a track on a map [of a national park] you imply it’s there for recreational use,’ he said. ‘Because the tracks are on the maps people will expect structures, signs, huts and that’s not what [the hunting tracks] are there for. We should not be forced into providing that level of service just because the tracks appear on a map ... We maintain hunting tracks to a minimum standard. There are no structures, no signs and the tracks are cut only about every five years.’

LINZ acting chief topographer Dave Mole said that after consultation with DOC, tramping clubs, Search and Rescue and police, LINZ included a note on the map stating [that] the un-maintained routes shown were not recommended for

‘We maintain hunting tracks to a minimum standard. There are no structures, no signs and the tracks are cut only about every five years.’

public use. He advised people to use DOC park maps. Mr Mole said LINZ policy for the maps, designed for emergency and defence purposes, was to show all features that existed on the ground including un-maintained tracks.¹⁴

I have reproduced a large part of the *Daily News* article because, as well as illustrating some people's concerns and views, it raises questions.

Firstly, in August 2003 the report *Walking Access in the New Zealand Outdoors* identified a lack of information as being a significant impediment to walkers' use of the outdoors.¹⁵ Walkers comprise the full spectrum from mushroom-collectors and novice walkers to deerstalkers and experienced trampers. Yet, if we are to judge from the above press story, in 1999 in Taranaki a DOC area manager and a Search and Rescue coordinator doubted – perhaps with some justification – the ability of map-users to fully understand the new track symbol. If map-users did not properly comprehend the character of an 'unmaintained route (defined by usage)', they might venture onto routes too exacting for their abilities. So the Taranaki experts held reservations about the wisdom of showing minimally maintained routes. The anxious officials appear to have suggested, albeit for reasons of safety, the deliberate withholding of information from outdoor recreators.

Secondly, I applaud the reported LINZ intention to 'show all features that [exist] on the ground including un-maintained tracks' – but not solely for the design reasons that Dave Mole is quoted as giving. Also, is this task as straightforward as it sounds? Far from it. The nitty-gritty of showing unmaintained routes is more complicated than it sounds. As I shall discuss in the context of the Dunedin area, it seems reasonable to show some unmaintained tramping routes but to omit others. National criteria must decide what sort of tramping routes the maps do show and what sort they don't show; local knowledge will be important in applying those criteria, but local influential voices should not be able to overrule the national yardsticks.

What are those yardsticks? What rules do LINZ contractors observe when deciding whether to add an unmaintained tramping route to the NZTopo database? The following is almost the whole specification on foot-tracks:

5.115.2 Foot Tracks ...

These are defined as deliberately formed tracks for the purpose of moving foot traffic.

Foot tracks are generally unable to be identified using the orthophotos. Verify track information in the field or by using a 3rd party authority. In remote, mountainous regions all foot tracks should be shown, regardless of length. In urban and rural areas, capture only significant foot tracks. Do not capture access tracks from a road to a farmhouse or other dwelling unless they are particularly significant ...

Where appropriate an attribute of 'poled route' should be added. Poled routes are normally in open country, above the bush line and will be marked by either strategically placed wooden poles stuck in to the ground, or metal standards and/or stone cairns.

'In urban and rural areas, capture only significant foot tracks.'

The 'unmaintained' attribute will in general either be on the data supplied [to the contractor] by LINZ or will be available from DOC. These tracks are maintained to the minimum Department of Conservation (DOC) Track Service Standards.¹⁶

The above LINZ description of a poled route is straightforward enough. But the LINZ explanation of an unmaintained route is sketchy. It is slightly ambiguous, in one sense self-contradictory. It seems that what appears on the map as an 'unmaintained route (defined by usage)' may also be described as a minimally maintained route. Remembering, though, that DOC's written standard for a Route specifies definite waymarking (see page 8), we can conclude that a LINZ unmaintained route covers a range of mischief above and beyond that of a DOC Route.

Perhaps the most important consequence of the introduction of this map symbol is a need to educate map-users about its meaning. My inclination would be to include an explanatory note on every map. (The 2002 paper *Dunedin* and *Waikouaiti* 1:50,000 sheets, whose legends include the new track and route symbols, do not carry the same warning note as the 1999 *Egmont* map.)

Thirdly, at least half of New Zealand will never have Parkmaps and may never have recreational maps of the sort that Terralink produces. The LINZ topographic maps are the only topographic maps for the Dunedin area. (Except for commercial CD-ROM products based on the same data.) So, even if we want to, which is questionable, we cannot advise a novice walker bound for the Silverpeaks to use a Parkmap. He or she will probably use the standard LINZ map, either paper or from *NZTopoOnline*. He or she will need to understand the potential indistinctness and seriousness of the tramps that are shown as unmaintained routes. The novice will need to realise that some unmaintained routes can quickly become overgrown. That appreciation will be a basic part of the novice's learning about map-reading, navigation and bushcraft.

Fourthly, it is anachronistic and narrow-minded for LINZ to keep on emphasising that it produces 1:50,000 maps primarily to meet the needs of defence, emergency services, and government departments. Our national topographic maps are crucial for recreators and outdoor tourists. The number-one user of the LINZ topographic maps should be the general public.

Tramping Routes in the Dunedin Area

Where have we got to, in this Routes saga? Giddy with confusion. We will struggle on. While bearing in mind the different definitions of a route, we will imagine ourselves to be LINZ contractors field-checking the tramping routes of the Dunedin area.

Firstly, any track that DOC classifies as a Route, such as the Silverpeaks Route, *must* (theoretically) be adequately waymarked and should therefore probably appear on the LINZ topographical maps as a 'foot track / route'. (But of course we would talk to DOC and other people about the Rocky Ridge section in the middle of the Silverpeaks Route.) Secondly, an unwaymarked route that is defined by significant use might be shown as an 'unmaintained

route (defined by usage)'. Thirdly, the most demanding unway-marked Routes in the Dunedin City Council database may not meet the LINZ criteria to be shown on the maps.

There will be borderline cases. Deciding whether to depict an unmaintained tramping route may present map-makers with conflicting considerations. For example, parts of Raingauge Spur (81121) are steep, rough, exposed, and poorly defined above the bush. Yet Raingauge Spur is well-enough established to be included in the city council's leaflet, *The Silver Stream Water-race Tracks*.¹⁷ This leaflet is available free from visitor centres and is also on the city council's website.

Similarly, some parts of the three Maungatua routes are only lightly waymarked through bush or tussockland; some parts can become overgrown. The Woodside Glen route is minimally maintained by DOC; the other two are unmaintained, except by use. Yet these three routes provide the main walking access to the Maungatua Scenic Reserve.

I have included Raingauge Spur and the three Maungatua routes in my list of mappable-but-as-yet-unmapped tracks (pages 44–6). **They and several other routes – entered in italics – are suggestions only, open to discussion.**

An example of a tramping route that is unmapped but which I have excluded from my list of plotable tracks is Wingatui Viaduct and Taieri River Gorge (81202). Before the afforestation of Mt Allen Station, the Taieri Gorge between Lee Stream and Mullocky Stream was traditionally one of the main western approaches to the Silverpeaks.¹⁸ The wild and untracked river gorge offers a five-hour tramp requiring bush navigation and river-crossing. On the one hand, this route ought to appear on the maps, being a long-established classic gorge journey; on the other hand, does it make sense to depict untracked, indeterminate routes that follow rivers? The point is contentious.

Another example of a tramping route that is unmapped but which I have excluded from my list of plotable tracks is Rosella Ridge and Waikouaiti River (81128). This route is in the Silverpeaks. It involves very challenging terrain only sparsely marked with ribbons. Much of it follows trackless ridges and creek beds. What track exists is often hard to find.

Routes, like Latin dancing, may not be every walker's cup of tea. Nevertheless, the Topographic Map 260 series and NZTopo-Online now have a symbol for an unmaintained route, and so I will presume that the national intention is to show some tramping routes that in the past may not have been shown.

Bearing in mind these complications and reservations, the reader should view the following results cautiously. At the time of writing, April 2005, 49 of the 178 named tracks listed in the *Track Policy and Strategy* (1998) are, arguably, of a type that ought to be shown on maps and are plotable at 1:50,000 but do not appear or only partly appear on the paper topographic maps. These forty-nine unmapped tracks are also absent from NZTopo-Online.

At least twenty other of the named tracks in the *Track Policy and Strategy* are unmapped unmaintained routes. I have included nine of these in my list in the Appendix. These nine tracks may or may not meet the LINZ criteria for being shown. They could be borderline cases, in the upper range of unmaintained routes.

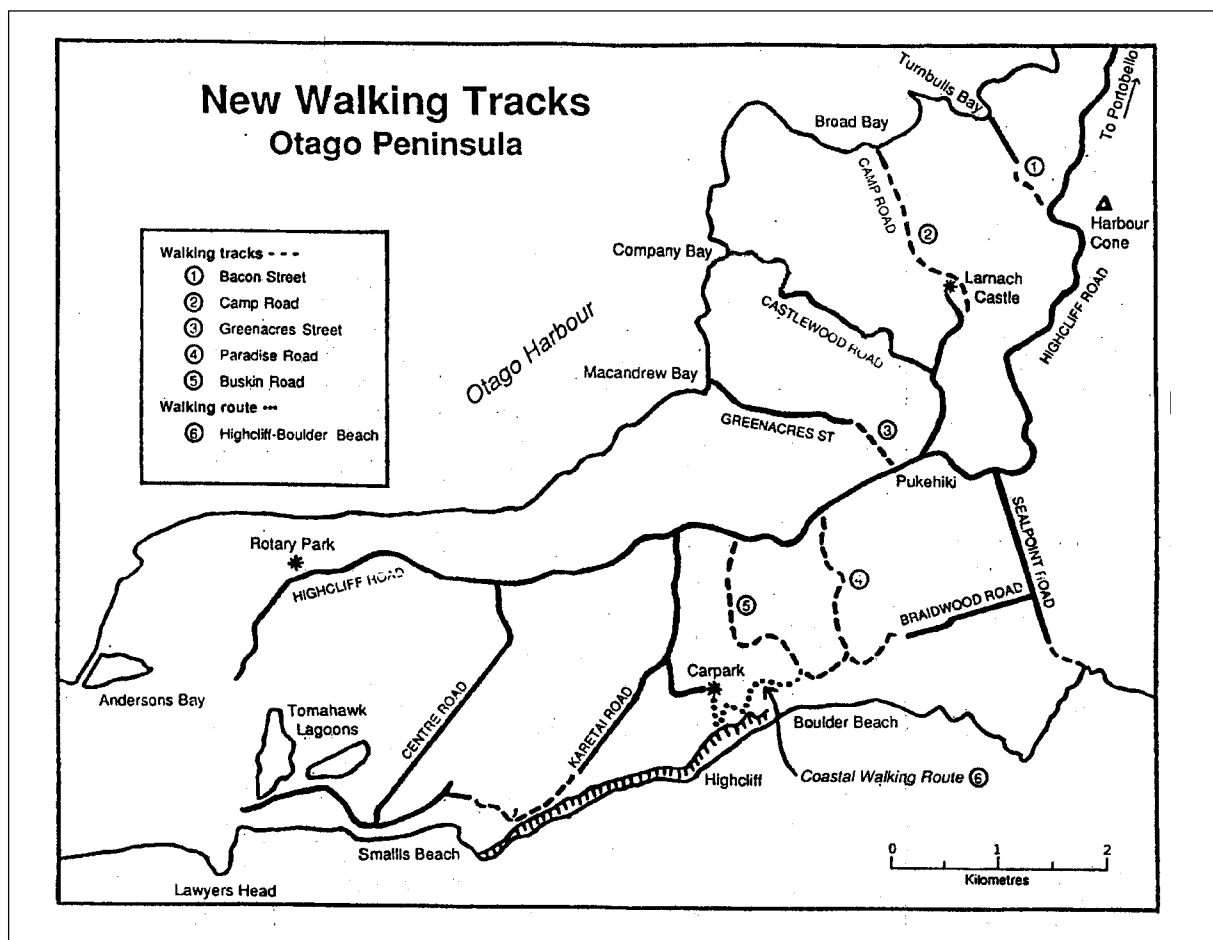
'... 49 of the 178 named tracks listed in the *Track Policy and Strategy* (1998) are, arguably, of a type that ought to be shown on maps and are plotable at 1:50,000 but do not appear or only partly appear on the paper topographic maps.'

Examples of Unmapped Tracks in the Dunedin Area

The following examples are in no particular order. The purpose behind the detailed notes on each track is to indicate the age of that track and its likely permanence. Most of the exemplified tracks have existed for more than ten years. In many cases, historical use preceded a track's formal recognition. In a couple of cases, the pros and cons of showing the track on the topographic maps may be evenly balanced.

Buskin Track (80114)

Buskin Track is one of the seventeen unmapped Otago Peninsula tracks that I have listed in the Appendix. These seventeen tracks have been officially recognised, and have awaited mapping, for fourteen years. All of them appeared on the A3 sketch-map 'Otago Peninsula Plan for Public Access', approved by the full Dunedin City Council on 4 November 1991.¹⁹ Two revisions of the paper *Dunedin* 1:50,000 map have not picked up these popular way-marked tracks.



On 6 June 1990 the *Dunedin Star Midweek* carried an article titled 'New Walking Tracks'. The article invited the public to attend the opening day of the tracks on Sunday 10 June 1990. The article included this sketch-map. Buskin Track is number 5.

OTAGO PENINSULA PLAN FOR PUBLIC ACCESS

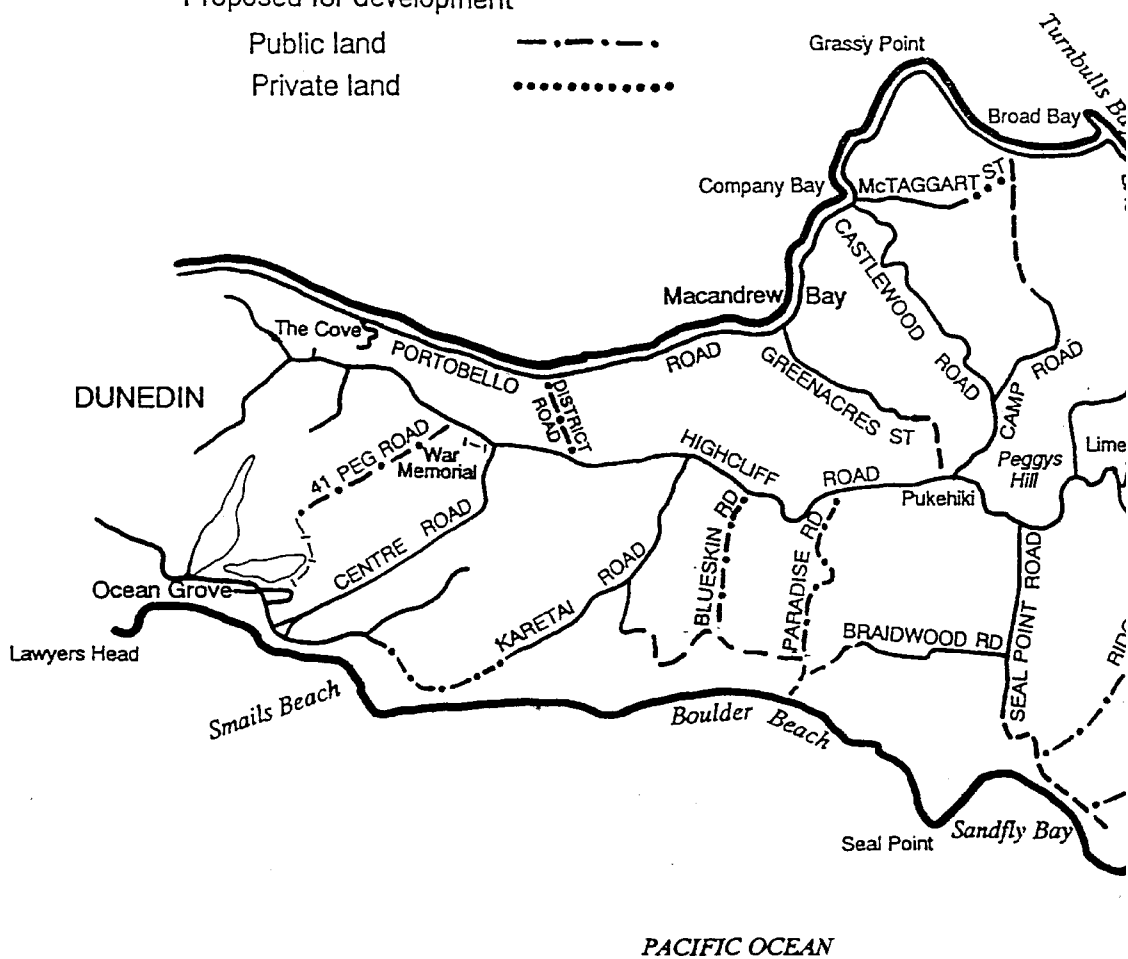
KEY

Existing

Formed Roads	—————
Public land	-----
Private land	- - - - -

Proposed for development

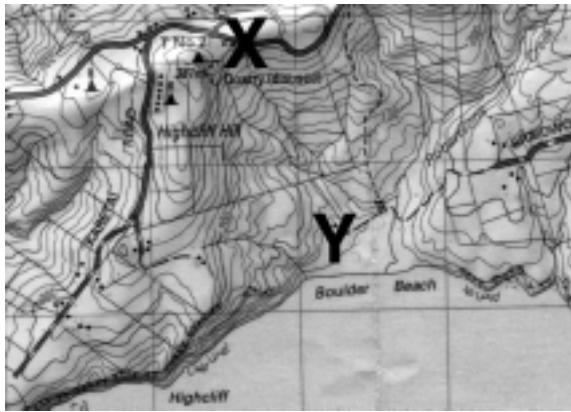
Public land	-.-.-.-.-
Private land



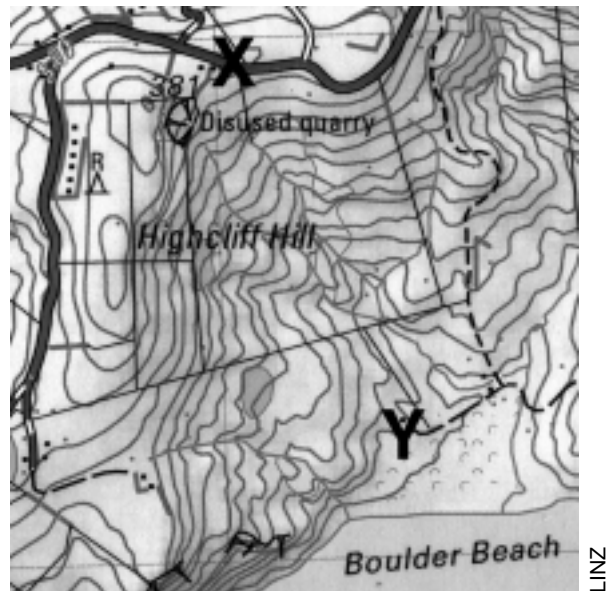
OTAGO PENINSULA PUBLIC ACCESS WORKING PARTY; DUNEDIN CITY COUNCIL

An extract from a sketch-map contained in the report 'Public Walking Routes – Otago Peninsula', dated 25 September 1991. (Buskin Road is mislabelled 'Blueskin Road'.) The full Dunedin City Council approved the sketch-map part of this report – and most other parts – on 4 November 1991.

Buskin Track (80114) and Others



An extract from 1:50,000 *Dunedin Topographic Map 260-I44 & J44*, 2002 edition. The un-mapped Buskin Track descends the hillside from X to Y.



An extract from *NZTopoOnline* (Beta Release 2.0), downloaded at a nominal 1:25,000, April 2005. The un-mapped Buskin Track descends the hillside from X to Y.

The full history of Buskin Track dates back to the 19th century, when some land-agent created it as a public road. The recent history of the track – of its rediscovery, its signposting and its non-mapping – is as follows:

- 1989. Bruce Mason of the Otago Peninsula Walkers rediscovered Buskin Road and a number of other public roads on the Otago Peninsula.
- 1990. The Otago Peninsula Walkers commenced signposting and waymarking the 'new' walking tracks. Where fence-lines crossed the unformed public roads, the Otago Peninsula Walkers built stiles.
- 6 June 1990. The *Dunedin Star Midweek* published a sketch-map of the 'new' walking tracks. This sketch-map included Buskin Road.
- 10 June 1990. About 450 people attended the opening day of the tracks. Some of the new signposts had been vandalised, allegedly by landowners. A new signpost pointing to Buskin Road had been snapped off.
- About August 1990. Dunedin City Council set up the Otago Peninsula Public Access Working Party to plan walking opportunities on the Peninsula.
- September 1991. After much careful and expert examination and a year of controversy, the twelve-member working party produced a sketch-map of walking routes and a proposed programme for their development.²⁰ The map included Buskin Road (mislabelled as Blueskin Road). On 21 October 1991 the Policy and Resources Committee approved the first five of these recommendations, with one minor amendment. On 4 November 1991 the Council approved this access plan.
- In the years that followed, the Council probably achieved the more immediate aims of the Otago Peninsula walking-access plan, such as improving the signposting.

Buskin Track (80114) and Others

- December 1995. Dunedin City Council published a free leaflet, *Mountain Bike Rides in Dunedin*, which included Buskin Track.²¹ (The leaflet included a code of behaviour, which asked riders to give way to walkers.)
- May 1997. Dunedin City Council published a free leaflet, *Otago Peninsula Tracks*, which included Buskin Track.²² This leaflet has since been reprinted four times.
- 1997. LINZ published a limited revision of *Dunedin* Topographic Map 260-I44 & J44. The revised map still lacked Buskin Track and the other sixteen Otago Peninsula tracks listed in the Appendix.
- 2002. LINZ published a new edition of *Dunedin* Topographic Map 260-I44 & J44. The new edition contained an appreciable amount of corrected or updated detail, and it incorporated some cartographic changes, but it still lacked Buskin Track and the other sixteen tracks.
- 1 March 2003. Pete McDonald wrote to LINZ, drawing attention to twelve of the Otago Peninsula's unmapped tracks. John Spittal, the chief topographer/hydrographer, replied: 'The DCC has been asked to identify the location of the tracks so they can be added to our NZTopo Database. It will be some years before they filter through to the next edition of the paper map but an electronic version with the additions will be available on NZTopoOnline in approximately 3 months.'
- March 2005. NZTopoOnline still lacks The Famous Peninsula Seventeen. A new edition of the paper *Dunedin* Topographic Map 260-I44 & J44 is probably several years away. The proposed new 1:50,000 series, the NZTopo50 series, is at least two years away.



The start of the Buskin Track is well signposted.



Buskin Track is well waymarked. Here use has worn an obvious narrow track.

Buskin Track and the other unmapped Otago Peninsula tracks are not some seldom-used esoteric trails out in the Otago back-blocks. They are approved and promoted tracks close to a town of 114,000 people. The starting-points of most of the tracks are clearly signposted. Often the tracks follow farmtracks, straightforward to follow. Elsewhere the tracks are poled ways across paddocks or rough pasture.

There will always be a delay between the building of tracks and their marking on the topographic maps; yet a fourteen-year wait, for important tracks close to an urban area, seems inefficiently long.

Sandymount - to Sandfly Bay (80112), Seal Point Road to Sandfly Bay (80118), Ridge Road (80119), and Sandymount - carpark to summit (80120)

These are four of the unmapped Otago Peninsula tracks mentioned above. They were shown on the sketch-map in the 1991 Dunedin City Council access plan.²³ They also appear on the 1997 city-council leaflet *Otago Peninsula Tracks*. These tracks are also promoted on the city council's website.²⁴ In addition, a DOC leaflet, *Sandymount and Sandfly Bay* (1998), promotes these tracks. This leaflet includes an aerial photograph on which the tracks are superimposed.

The 2002 edition of *Dunedin Topographic Map 260-I44 & J44* omits all four of these tracks. So does *NZTopoOnline* (April 2005).

Okia (80115)

The Okia track is another of the unmapped Otago Peninsula tracks. In 1991 the Yellow-eyed Penguin Trust and the Dunedin City Council bought the hummocky dune-lands of Okia Flat. The area became the Okia Reserve. As well as being a breeding ground for yellow-eyed penguins, the reserve is ecologically significant for insects, blue penguins, fur seals and Hooker's sea-lions.

No part of the reserve is closed to walkers, but the management plan uses tracks and signs to direct visitors certain ways, thus minimising the human intrusion into other, more sensitive areas.²⁵ Signs and leaflets direct walkers along Dick Road and Riddell Road towards the Pyramids and the north end of Victory Beach, rather than having them access the beach from the south.

The foot-track between the Pyramids and the beach, a fifteen-minute walk passing several interpretation signs, is an integral part of the reserve's management plan. The foot-track is well defined. It is also poled. It is not shown on the 2002 edition of *Dunedin Topographic Map 260-I44 & J44* (see page 14). Nor is it shown on *NZTopoOnline* (April 2005).

Nicols Falls (81402)

The walk to Nicols Falls starts in the Leith Valley, six kilometres from the centre of Dunedin. The short bush-walk to the twelve-metre-high waterfall takes twenty minutes.



This Dunedin City Council leaflet includes a sketch-map and details of nineteen mainly short walks. The council's Community and Recreation Services published this leaflet in 1997 and has since reprinted it four times.

Mick Finnerty constructed a track to Nicols Falls in the 19th century. 'The falls were extraordinarily popular in the late 1800s, with reports of chaos and confusion on the road as up to 20 horse-drawn vehicles jockeyed and manoeuvred for turning and parking space.'²⁶

A 1914 booklet listed this walk as being on private property, with an admission charge of sixpence.²⁷ A H Reed, in a 1954 book, described the walk as private.²⁸

For a long period in the 20th century, it was the policy – somewhat controversially – to exclude the public from water catchment basins.²⁹ Nicols Creek lay in such an exclusion zone. A 1980 guidebook explained that Nicols Creek was 'now closed to the public because it lies in a water catchment area'. The authors hoped 'that at some future date the public may again be admitted'.³⁰

We are now admitted. Over a century after Mick Finnerty built his track, Dunedin's evening strollers and muscular trampers began again to visit Nicols Falls. In 1993 the first edition of the walking guidebook *From Sea to Silver Peaks* described the walk.³¹ The December 2004 issue of *City Talk* (Dunedin City Council's magazine) mentioned Nicols Creek in an article about the city's tracks. On 8 April 2005, during a Tracks Week organised by the city council and DOC, about forty night-walkers visited the creek, spotlighting its glow-worms and its waterfall.

The 2002 edition of *Dunedin Topographic Map 260-I44 & J44* does not show Nicols Falls or the Nicols Falls track (see page 14). Neither does *NZTopoOnline* (April 2005). Furthermore, the LINZ technical specifications for updating the NZTopo database seem to forbid the discovery of any new waterfalls, especially ones merely twelve metres high:

5.120 Waterfalls ...

Maintenance level: Not required.

Definition: a sudden descent of water over a step or ledge in the bed of a river.

All waterfalls regarded as significant features have been captured. All named waterfalls have been captured and attributed. Heights of measured waterfalls have been captured ...

There we go again. The word 'significant'. People have been visiting Nicols Falls for over a hundred years. That history should make this little cascade important enough to appear on our topographic maps.

Rocky Ridge (81112)

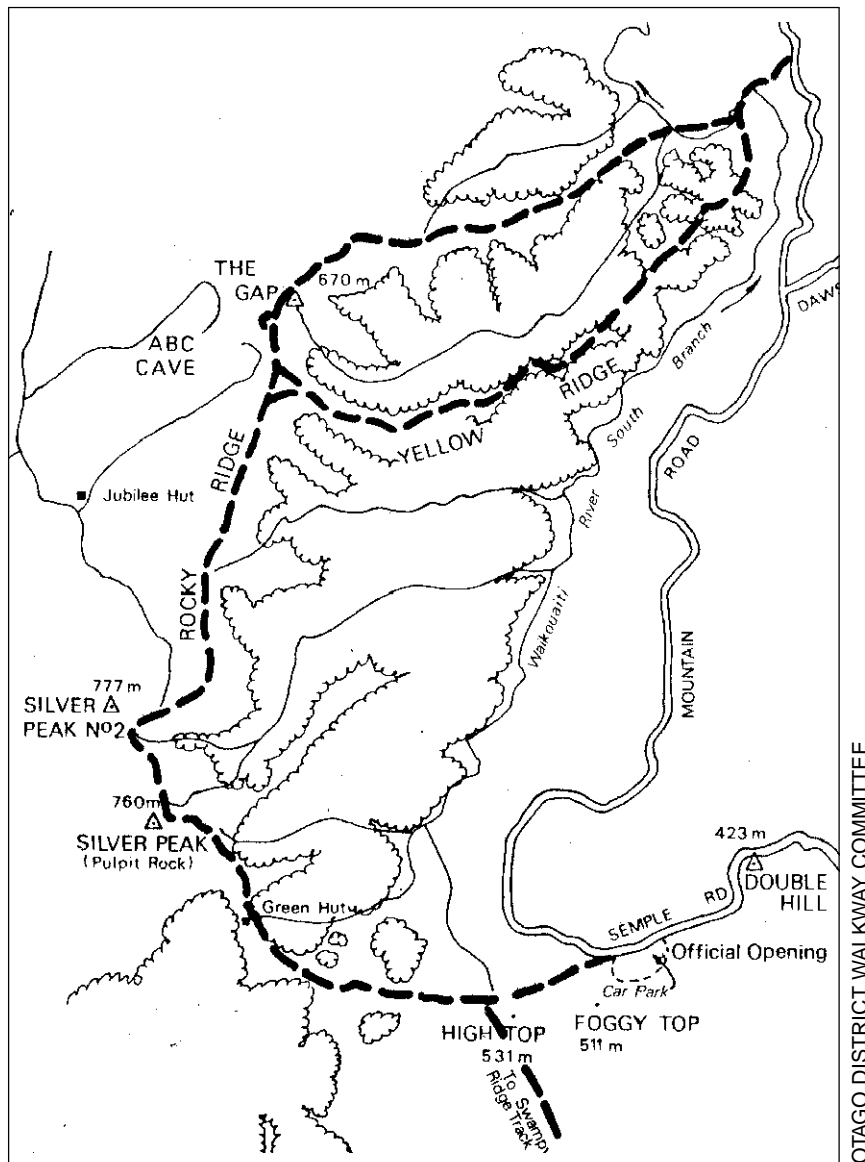
For many years the Silver Peaks has been a major recreation area for Dunedin trampers. Since the 1920s, Dunedin trampers have regularly organised excursions into these tussock-clad schist hills. Rocky Ridge is the backbone of the Silver Peaks and is the central part of the Silverpeaks Route, a walkway formalised under the New Zealand Walkways Act.

A 1978 New Zealand Forest Service leaflet anticipated this walkway: 'A section of the national walkway ... crosses Flagstaff and will be extended over Swampy Summit to Hightop and along the

'Nicholl's Creek. No visitor should miss seeing this creek, with its Falls and the beautiful fern-clad gorge between the Main Road and the Falls. Follow the track in the bed of the stream to the Falls, and return by the track on the south side of the creek.'

From *A Guide to Dunedin and Surrounding Districts* (Dunedin Expansion League, 1914).

Silver Peaks ridge.³² The Silverpeaks Route (then called the Silverpeaks Walkway) was officially opened on 13 March 1983 during National Walk Week.³³



A sketch-map produced for the opening day of the Silverpeaks Route (then called the Silverpeaks Walkway), which was on 13 March 1983. The sketch-map shows the whole of the route, including Rocky Ridge. (From *Walk Week 12–20 March 1983: An Evaluation*, Otago District Walkway Committee, 1983.) A promotional article in the *Otago Daily Times* on 10 March 1983 pointed out that this walk was ‘for more experienced walkers, accustomed to tramps over rough hill country, through forest and tussock land’.

The 2002 edition of *Dunedin Topographic Map 260-I44 & J44* does not name Rocky Ridge. Although this map shows most of the Silverpeaks Route, it does not show the central part, which follows Rocky Ridge. Nor does *NZTopoOnline* (April 2005).

***Otago Daily Times*,
3 April 1954**

**Silverpeak Is a
Tramping Ground
of Easy Access.**

Dunedin is fortunate in having such things within a few miles of the city. In the Silverpeaks area we have a block of wild country some 100 square miles in extent, where mountain solitude reigns supreme and can be enjoyed at the cost of a few hours tramping over tussock-covered ridges.

OTAGO DISTRICT WALKWAY COMMITTEE

Relatively few of New Zealand's official walkways are exacting mountain walks that require tramping experience; the Silverpeaks Route is an exception. A 1983 guidebook, *Walkways of the Dunedin Area*, described Rocky Ridge:

[Rocky Ridge] runs approximately north and the walkway follows it up to the Gap, along the rise and fall of the ridge crest, occasionally skirting around the higher, more rugged points. Once on this main backbone ridge of the Silverpeaks look out for weather changes. High winds and driving rain can make exposure a reality in the tussock, so beware! Those who are not familiar with the track should also be wary of mist. Many have lost their bearings in the rolling 'pea-soup' on the ridge.³⁴

A 1983 New Zealand Forest Service leaflet recommended the Silverpeaks Route 'for well-equipped and experienced trampers only'.³⁵ A DOC leaflet, produced in 1993 and still available today, carries a caution overprinted in red:

WARNING. The routes/tracks shown on this guide are for experienced trampers only. You are advised to obtain and use a Dept of Survey and Land Information infomap (260 topo series).³⁶

Rocky Ridge, then, is a potentially demanding tramp whose marking on the topographic maps would probably call for the symbol for an 'unmaintained route (defined by usage)' rather than the symbol for a 'foot track / route'. The 2002 edition of *Dunedin Topographic Map 260-I44 & J44* offered this choice of symbols. Yet this revision did not pick up Rocky Ridge, a renowned classic tramp.

Some veteran and knowledgeable trampers could argue that adding the spaced black dashes to Rocky Ridge might tempt inexperienced walkers onto an undertaking beyond their abilities. If this is a valid argument against the showing of a route on the maps, it will need answering nationally, with consistent national criteria.

A related matter is the mishmash of standards for tracks in New Zealand, mentioned earlier (pages 8–9).

Long Beach (81911)

Since the early 1980s, rockclimbers have walked from the Long Beach domain to the cliffs near the north end of the beach.³⁷ The present accessway to the foreshore and the cliffs was opened on 8 October 1994.³⁸ It resulted from three years of planning involving the Long Beach Neighbourhood Support Group, the Department of Conservation, the Dunedin City Council, the Otago Coastal Environmental Action Network (Ocean), and sponsors.

The Long Beach foot-track epitomises the short but indispensable accessway. The track is three hundred metres long: long enough to be shown clearly at 1:50,000. The 2002 edition of *Dunedin Topographic Map 260-I44 & J44* omits this track (see page 14). So does NZTopoOnline (April 2005).



At the north end of Long Beach. This DOC notice marks the start of the 300-metre-long track that leads to the foreshore and which gives access to the basalt cliffs used by rockclimbers.



Long Beach. The track to the foreshore is well defined but is not shown on the 1:50,000 topographic maps.

Heyward Point (81704)

Heyward Point projects from the Pacific coastline about six kilometres to the north of the entrance to Otago Harbour. In a 1954 guidebook, A H Reed described a walk to Heyward Point from Aramoana.³⁹ This three-kilometre walk is now a walkway, gazetted on 28 August 1997 and officially known as Aramoana–Heyward Point Walkway.⁴⁰ The track-name in the Dunedin City Council tracks list is Heyward Point. The track-name on the DOC sign at the southern end of the track is Heyward Point Tramping Track.

DOC defines a Tramping Track as ‘a track catering for back-country trampers ranging from relatively inexperienced to experienced’.⁴¹ Contradicting the DOC sign, a Conservation Authority booklet published in 2003 classifies this walkway as a Walking Track.⁴² DOC defines a Walking Track as ‘a well-defined track, suitable for relatively inexperienced people with little back-country skill ...’

A city-council leaflet, *Fat Tyre Trails*, promotes part of the Aramoana–Heyward Point Walkway as a mountain-bike ride. The descent to Aramoana traverses above loose and sloping cliff-edges, and so the leaflet cautiously advises: ‘Walk your bike down the DOC track to Aramoana (grass slippery when wet).’⁴³ Another council leaflet, *Wandering West Harbour*, includes an aerial photograph on which the whole of the track is marked.⁴⁴

A sign near Aramoana Road and one on Heyward Point Road mark the starts of the walkway. All of the walkway is amply way-marked.

The topographic maps show only the northern section of the walkway. They omit the southern section, about a kilometre of track, the link to Aramoana. It is possible that this omission was deliberate, because of the seriousness of harmless-looking grassy slopes that overlook cliffs. You could argue, however, that the dangers of this route make it doubly necessary to show the track and cliffs accurately on the map.



A DOC sign marks the Aramoana start of the walkway. The sign warns walkers to beware of the cliff edge. The first kilometre of the track, after this sign, is not shown on the topographic maps.

Buskin Track (80114) and Others



On the Heyward Point track. Looking south on the descent to Aramoana. Use has worn a narrow track.



Heyward Point track. The descent to Aramoana is adequately waymarked. The route traverses harmless-looking grassy slopes above a loose cliff-edge.

LINZ



An extract from 1:50,000 *Dunedin* Topographic Map 260-I44 & J44, 2002 edition.

The unmapped part of the Heyward Point track climbs the hillside from about Y to about X, traversing above some loose and sloping cliff edges.

Cleghorn Street (81409)

The Cleghorn Street track forms a logical part of the obvious ridge-walk over Signal Hill and McGregors Hill, parallel to North East Valley and Otago Harbour. Ten minutes' drive from the city, the area is quintessential urban-fringe open space. As early as 1914, a Dunedin guidebook was sending walkers this way: 'From the top [of the Government Scenic Reserve on Signal Hill] the visitor may ... proceed along the range northwards and strike the Port Chalmers road close to the Upper Junction.'⁴⁵ Nowadays

Buskin Track (80114) and Others

walkers can still head this way, thanks to a permitted track across private farmland. According to a recent newspaper report, the farmer has allowed the public to use this track for the last twenty years.⁴⁶

Some parts of the central section of the Cleghorn Street track are only faintly visible as a foot-track across paddocks, but the whole track is sufficiently waymarked with orange triangles and three stiles.

The 2002 edition of *Dunedin* Topographic Map 260-I44 & J44 does not show the central two kilometres of this track. Neither does NZTopoOnline (April 2005).



The north end of the Cleghorn Street track is doubly signposted.



On the middle section of the Cleghorn Street track. Parts of this section, which crosses paddocks, are faint, but the waymarks are adequate. Here there is an orange triangle on the gatepost, as well as the notice on the gate.



On the Cleghorn Street track. This farmtrack section is shown on the topographic maps. The whole of the Cleghorn Street track is amply waymarked with orange triangles.



A part of the unmapped section of the Cleghorn Street track. The route is faintly visible as a four-wheel-drive track. The fence-post carries a waymark.

Buskin Track (80114) and Others

LINZ



An extract from 1:50,000 *Dunedin* Topographic Map 260-I44 & J44, 2002 edition.

The unmapped part of the Cleghorn Street track lies between X and Y. The track is sufficiently waymarked and therefore should be shown in its entirety. Showing every inch of a track will become increasingly important when New Zealand develops maps that show foot-tracks that are open to the public.

Frasers Gully (81001)

Frasers Gully is a popular walk on Dunedin's urban fringe. 'Although never more than a few hundred metres away from houses, the Frasers Gully walk through native bush beside a lively stream provides an unexpected oasis of tranquillity in the heart of suburbia.'⁴⁷

An *Otago Daily Times* article on 24 January 1987 mentioned work on the Frasers Gully walking track, so I surmise that the track has existed for at least eighteen years. A DOC 1997 leaflet, *An Introduction to Dunedin Walks*, includes Frasers Gully in a sketch-map showing the locations of walks. Dunedinites cherish this walk. It is almost certainly here to stay.

Although the Frasers Gully track is close to suburbs, it is probably mappable. I can see no reason why it cannot be fitted onto the 1:50,000 maps.



LINZ

An extract from 1:50,000 *Dunedin* Topographic Map 260-I44 & J44, 2002 edition.

The map does not show Frasers Gully, which is a 1.5-kilometre walk from X to Y. A better scale for showing foot-tracks near suburbs would be 1:25,000. But there seems to be room here to show Frasers Gully at 1:50,000.

Mihiwaka (81703)

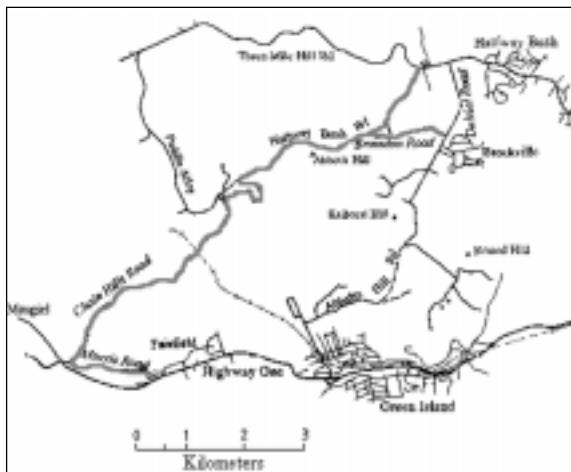
Mihiwaka is a rocky volcanic dome situated four kilometres north-west of Port Chalmers. Early settlers arriving at Port Chalmers climbed to Mihiwaka's 561-metre summit to obtain a vantage-point. The field-book of J T Thomson, a land-surveyor, records that on 9 October 1857 he climbed to the top of Mihiwaka and took bearings on South Silver Hill, Silver Peak, and North Silver Peak.⁴⁸

Since the early 1970s, rockclimbers have used an unmarked route through the bush to reach the base of the main outcrop of basalt. The widely used walking guidebook *From Sea to Silver Peaks* (1993) describes a route that starts up the rockclimbers' way and then continues to the top of Mihiwaka. The guidebook warns readers that the route is a narrow bush track easily lost.

The present 1:50,000 maps do not show this route up Mihiwaka. The route would probably meet the criteria to be shown as an 'unmaintained route (defined by usage)'. It is less than a kilometre in length, but, as I have already argued, shortness should not be a reason for non-mapping. Short access routes are as vital as long ones and are every bit as mappable (except when among urban detail).

Chain Hills Track (80602)

Halfway Bush Road marks one of the mid-19th-century routes out of Dunedin for travellers who were heading for the Taieri Plain, or swamp as it was then. If you are following Halfway Bush Road westwards, after you pass Abbots Hill and descend towards the plain, a vital one and a half kilometres of foot-track provides a link to the north end of Chain Hills Road, which is a gravel road that overlooks Mosgiel. The grass track is signposted, waymarked, and stiled. It is a multi-use track. A 1995 Dunedin City Council leaflet promoted this route as the Chain Hills Road Mountain Bike Track.⁴⁹ A more recent council leaflet, *Fat Tyre Trails*, maintains the promotion. So this route has been officially sanctioned for at least ten years. Yet the crucial linking 1.5 kilometres of track is missing off the 2002 edition of *Dunedin Topographic Map* 260-I44 & J44. It is also missing from NZTopoOnline (April 2005).



A sketch-map from the Dunedin City Council website, showing the Chain Hills Road Mountain Bike Track.



An extract from 1:50,000 *Dunedin Topographic Map* 260-I44 & J44, 2002 edition. The map does not show the middle 1.5 kilometres (XY) of the Chain Hills Road Mountain Bike Track.

Flagstaff Creek Exotic Forest Track (81139)

Two thousand people used this two-kilometre track during Trees and Forests Week in August 1991. City Forests Ltd then decided to open it permanently. The company spent \$10,000 developing this track and a neighbouring track, Douglas Fir Grove Track. The two tracks were opened officially on 16 February 1992.⁵⁰ The City Forests website promotes the tracks, providing a sketch-map and a brief description.⁵¹

The 2002 edition of *Dunedin* Topographic Map 260-I44 & J44 does not show the Flagstaff Creek Exotic Forest Track. Neither does NZTopoOnline (April 2005).

Taieri River - South⁵² Bank (81304) and Taieri Mouth (81305)

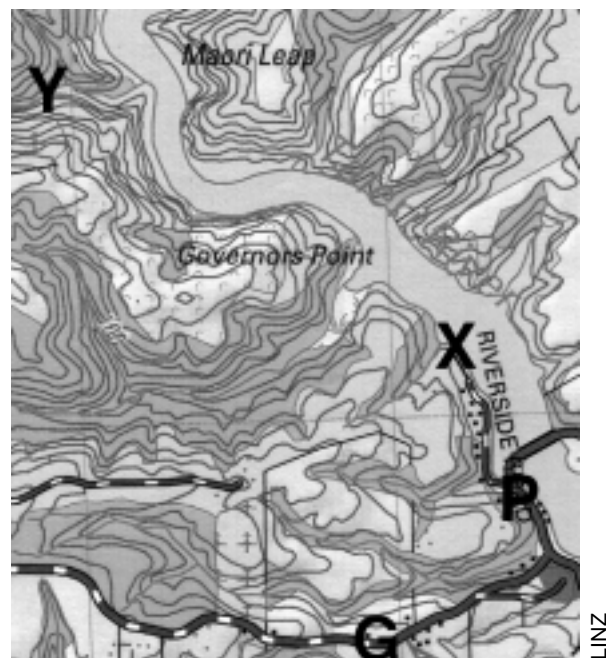
Taieri Mouth (81305) is also known as Picnic Gully. The High-cliff-based Conservation Corps, a group of volunteers funded through the Ministry of Youth Affairs, improved this track in about 1990. The track was officially opened on 19 April 1991.⁵³

In 1993 the first edition of *From Sea to Silver Peaks* included both these tracks.⁵⁴ The Department of Conservation, which manages these two tracks, promotes them in a leaflet, *Taieri River and Picnic Gully Tracks*. DOC published this leaflet in 1995. You can obtain it from DOC's Dunedin office.

The last edition of *Taieri Mouth* Topographic Map 260-I45, published in 1998, did not pick up these two tracks. NZTopoOnline does not show them (April 2005).



An extract from the DOC leaflet *Taieri River and Picnic Gully Tracks*, published in 1995 and still available in 2005.



An extract from NZTopoOnline (Beta Release 2.0), downloaded at a nominal 1:25,000, April 2005. The map does not show the Taieri River Track (XY) or the Picnic Gully Track (PG).

**Steve Amies Track to Racemans (81103),
MacRaes Weir Track (81106), Raingauge Spur
(81121), Racemans (81130), Steve Amies to
Trig Q (81140), and Tunnel Track Racemans
(81205)**

These tracks explore the Silver Stream water-race, completed in 1881. In the late 1980s a Dunedin track-clearing group began to reopen and develop these tracks. The first edition of *From Sea to Silver Peaks*, in 1993, included Raingauge Spur and Racemans.⁵⁵

The track-clearing continued through the 1990s. The tracks are now sensitively waymarked with colour-coded symbols on unintrusive wooden posts. In 2001 Dunedin City Council produced a free leaflet describing and promoting this interesting part of the city's early European history.⁵⁶

Partly understandably, in view of the only-recent development of some of these tracks, the 2002 edition of *Dunedin Topographic Map 260-I44 & J44* does not show them. Neither does NZTopo-Online (April 2005).

**Maungatua Track/Woodside Glen (81101),
Three Kings (81110), Grainger Road to
Maungatua (81158)**

Maungatua is a long hump of a hill whose summit, 895 metres, stands in the direct line between Dunedin and the Tuapeka gold-field. On 4 June 1861 Gabriel Read wrote to the superintendent of the Otago Province, announcing that he had discovered an extensive goldfield in the district traversed by the Waitahuna and Tuapeka rivers.⁵⁷ The following midwinter months saw lines of men and beasts streaming over the north shoulder of Maungatua, which quickly gained the name Mount Hard-struggle. The mountain, therefore, holds a pre-eminent place in any ranked order of Dunedin's heritage routes.

It is doubtful whether many, or any, of the trekking gold-miners that winter deviated from the shoulder route to enjoy the views from the icy top of Maungatua. But just over fifty years later, in 1914, a Dunedin guidebook was encouraging visitors to Outram to stretch their legs: 'Side trips from Outram may be made to Woodside and the Glen, both favourite scenic grounds; or a climb to the top of Maungatua is recommended.'⁵⁸

A large part of Maungatua is now a scenic reserve. The guidebook *From Sea to Silver Peaks* describes three routes to the mountain's summit.⁵⁹ Dunedin City Council's *Track Policy and Strategy* (1998) lists the same three ways. None of these three routes are shown on the current 1:50,000 topographic maps (apart from one kilometre of track to the north of Three Kings). According to these maps, the main ridge of the mountain overlooking the Taieri Plain, between Woodside Glen and the southern spur of Maungatua, is route-less for seven kilometres. In fact this ridge is an established tramping route, albeit untracked and not particularly well waymarked.



DUNEDIN CITY COUNCIL

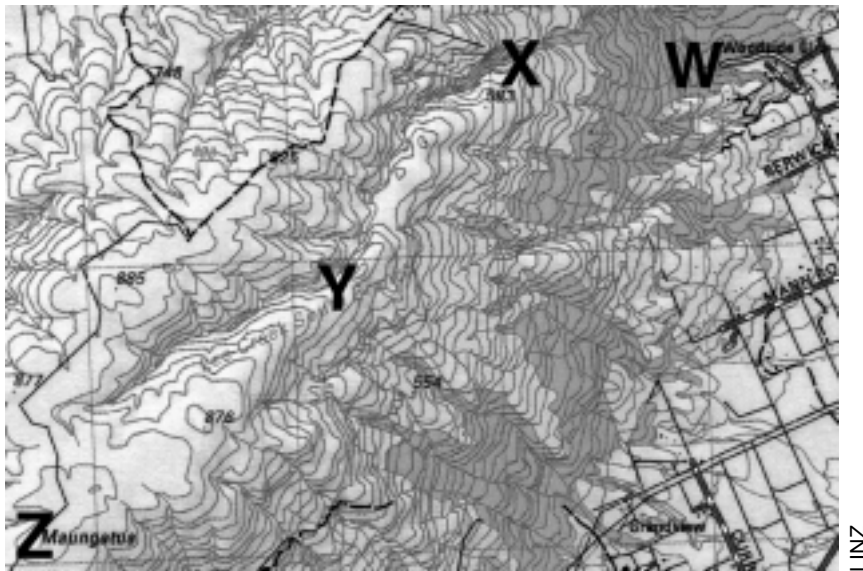
This Dunedin City Council leaflet includes historical information, a sketch-map and details of eight circular walks.

Buskin Track (80114) and Others

The paper map, *Lawrence Topographic Map 260-H44*, is the 1987 edition. This map does not have a symbol for a tramping route; this is one reason why the map does not show the Maungatua routes.

In contrast to the paper map, *NZTopoOnline* does have a symbol for an 'unmaintained route (defined by usage)'. Also the *NZTopoOnline* rendering of Maungatua is more up to date than the paper map. But *NZTopoOnline* does not yet (April 2005) show the three Maungatua routes that I have listed above.

A decision whether to show these three routes on the topographic maps may not be straightforward. Several places on the Maungatua routes can become overgrown with gorse, broom and other vegetation. The route from Woodside Glen is waymarked to above the bushline; DOC minimally maintains this route, clearing growth every three to five years. The other two routes are unmaintained, except by use. But the three routes provide the main walking access to the Maungatua Scenic Reserve and are therefore likely to remain in use.



An extract from *NZTopoOnline* (Beta Release 2.0), downloaded at a nominal 1:50,000, April 2005. This map does not show the eastern-spur route up Maungatua from Woodside Glen. The route climbs the steep hillside from W to X and then follows the spur XYZ, which is only lightly waymarked.

Conclusions for the Dunedin Area

My premise was that our national topographic maps should be walkers' and trampers' primary source of information on walking tracks and tramping routes; I argued that these maps should show most of the plotable tracks, except possibly some untracked tramping routes. I extended this premise, contending that topographic maps are crucial for outdoor recreation and tourism. The evidence I have presented indicates that many of the tracks listed in Dunedin City Council's *Track Policy and Strategy* (1998) are mappable at 1:50,000 but do not appear on the area's 1:50,000 topographic maps. From these findings – and if you accept the premise – the obvious inference is that the present topographic maps for the Dunedin area are not the reliable and authoritative sources that walkers and other outdoor recreators need and expect. If LINZ agrees with the premise (it might not) it may need to reconsider the way that the National Topographic/Hydrographic Authority (or the Authority's contractor) detects or discovers the existence of foot-tracks and tramping routes in the Dunedin area.

The problem of unmapped tracks has not resulted solely from *too-infrequent* revising of the maps; the problem is also connected with the *thoroughness* of the revising. Maybe LINZ has had insufficient resources at its disposal. Or maybe the difficulty centres on the interpretation of the word 'significant' in the LINZ technical specifications on foot-tracks. Perhaps the main question that this study leaves hanging is: why did the 2002 edition of *Dunedin Topographic Map 260-I44 & J44* fail to acquire many well-established tracks that are officially recognised and promoted?

How should Dunedin's map-users view the omission of Buskin Track, rediscovered sixteen years ago? Their viewpoints may depend on their priorities. Some people might consider the goal of showing all plotable tracks as unrealistic and utopian. Many walkers and other outdoor recreators, though, might view the prolonged omission of Buskin Track as evidence of a systemic inadequacy, at least locally – if not nationally.

Inevitably our topographic maps will always be slightly out of date. The challenge that LINZ faces in the Dunedin area is to restore some normal meaning to the word 'slightly'. Guidebooks and leaflets should complement the topographic maps. They should not, however, need to substitute for numerous basic map omissions.

The remedy seems obvious to me. We have moved on from large survey teams and plane-tabling. Give a field-checker a GPS gizmo and three or four weeks in the Dunedin area and they could quickly transform the appendix of this study into garden-fresh digital data.

'... why did the 2002 edition of *Dunedin Topographic Map 260-I44 & J44* fail to acquire many well-established tracks that are officially recognised and promoted?'

Part 2:

National Aspects

‘ ... there may come a time when our cartographers will add a “public” attribute to particular tracks on the NZTopo database; you can hardly add this attribute if the track is not there on the database in the first place.’

National Topographic Mapping – A Spectator’s Overview

Part 1 of this study simply recorded the facts about the existence of specific tracks and about their non-mapping. Part 2 will be more tentative and conjectural. I will be guessing, hypothesising on the question: have these Dunedin-area findings any national ramifications? Should we and can we improve the way we go about mapping our walking tracks and tramping routes? Before I speculate on these questions, I will broadly overview the recent life of our topographic mapping. The following is a layperson’s impression, looking in from the outside.

Decades of Change Nationally

The last twenty years have seen several changes in the body responsible for New Zealand’s state mapping. Sweeping changes in 1987 split up the ancient and sprawling Department of Lands and Survey. A new state-owned enterprise, Landcorp Limited, took over the landownership and land-management functions. The Department of Conservation took charge of the environmental work. What was left became the Department of Survey and Land Information (DOSLI), which also took in the former Forest Service’s surveying and mapping activities. One of the first topographic maps published by DOSLI was the *Lawrence* 1:50,000 sheet, produced in 1987 and still unrevised.

The structural reforms of 1987 presented challenges for DOSLI. The department ‘created a completely new model for the regulation and management of New Zealand’s survey and mapping systems, including cost recovery and new financial systems’.⁶⁰ DOSLI also had to cope with rapid technological advances, including the beginnings of global positioning systems (GPS).

The year 1996 saw more structural change. The government split DOSLI into two parts. A new state-owned enterprise, Terralink New Zealand Limited, assumed control of the more-commercial survey and mapping functions. The remaining part of DOSLI became Land Information New Zealand. A newspaper article reassured the public that ‘government maps of New Zealand will still be readily available after restructuring ... [LINZ] would contract Terralink to produce the national topographic map series’.⁶¹

Terralink New Zealand’s commercial functions were perhaps not commercial enough, because in January 2001 the government placed Terralink New Zealand Limited into receivership. On 1 June 2001 the organisation became Terralink International Limited, a private company.

In April 2004 Tony Bevin, the surveyor-general of LINZ, retired after a distinguished career of over forty years. He had joined the Lands and Survey Department in 1962, had become a qualified land-surveyor, and had remained with the organisation through its various name-changes and upheavals. Over the course of his career he had seen a major outflow of front-line land-surveyors from the department:

When I started, there were 220-250 survey staff, as well as a larger number of survey draughting staff. In the LINZ of today there is barely 10 percent of that number. Much of what used to be core government work is contracted to the private sector.⁶²

The body now responsible for state mapping is the National Topographic/Hydrographic Authority of Land Information New Zealand.

The Varieties of 1:50,000 Topographic Maps Available Nationally

Paper 1:50,000 Topographic Maps

The current national series of paper 1:50,000 maps is the Topographic Map 260 series, published by LINZ for the New Zealand government. This series covers the whole of New Zealand. There are 297 sheets.

LINZ is planning a new 1:50,000 series, called the NZTopo50 series. The NZTopo50 series will eventually replace the Topographic Map 260 series. At the time of writing, the government has not yet formally approved this new series of paper maps; the NZTopo 50 maps may not be available until 2007 or later.⁶³

Alternative paper topographic maps, auxiliary to the Topographic Map 260 series, are available for some areas. DOC publishes about thirty-one Parkmaps and Trackmaps for national parks and popular recreational areas such as Banks Peninsula. Terralink International Limited publishes about ten recreational maps, mainly at 1:50,000 and covering New Zealand's most popular recreational locations.

Digital 1:50,000 Topographic Maps

LINZ provides an online topographic map, NZTopoOnline, freely available on the internet and covering the whole country.

Several companies sell digital topographic maps on CD-ROMs. Vision Software offers TUMONZ: The Ultimate Map of New Zealand. Terralink International offers Terramap Digital. PolyMEDIA offers New Zealand Mapped GPS. Integrated Mapping offers MapToaster Topo/NZ. These products are based on digital data provided by LINZ from the NZTopo database. I do not know whether any of these intermediary firms field-check or augment the track data that they obtain from the NZTopo database.

LINZ's Topographic Information User Survey, August 2004

On 19 August 2003 the *Library News* of the Department of Geography, University of Canterbury, carried a short piece titled 'The Future of Government Topographic Mapping in New Zealand'. Apparently the Topographic/Hydrographic Authority had announced that it would continue printing topographic maps until only 30 June 2005. 'After June 2005, there will be no printed maps available to purchase from LINZ, although perhaps a private company will take the opportunity to fill the gap.'

If this *Library News* story was accurate – which it may not have been – LINZ seems to have subsequently reversed or delayed its decision to phase out the paper maps. In June 2004 a LINZ newsletter announced that LINZ was ‘developing a long-term strategy for the future of topographic mapping information on-line’. The strategy would define LINZ’s future role in providing topographic information online. It would also identify LINZ’s role in the delivery of topographic information and would identify the impact of the phasing-out of paper maps. But no decision had been made to phase out paper maps.⁶⁴

For about four weeks in July and August 2004, LINZ conducted a survey of users of topographic information. LINZ invited individual users and representatives of user-groups to complete an online questionnaire. The situation at the time of writing, April 2005, is that the long-term strategy will be released soon.

The Queen’s Chain: Mapping the Proposed Footways, December 2004

On 22 December 2004 the government released a Cabinet paper containing some details of its proposed response to the Acland report. The government’s plans include the provision of footways along identified parts of the coast and along water margins that have been picked out as having access value. The proposed access agency will produce draft maps showing the footways. After consideration of public submissions, final maps will be approved and published.⁶⁵

The government has not yet released any details about these footway maps. It will be interesting to see what scale the access agency uses. We don’t know whether the maps will be digital or on paper.

Another don’t-know is whether the 1:50,000 LINZ topographic maps will show the footways. If these maps cannot show the footways, some map-users could need to consult two different types of map on each occasion they venture out.

Foot-tracks: Unmapped and Impermanent

I was glancing through a LINZ newsletter recently when my eyes scanned a couple of lines: 'Although we're a young country, New Zealand has been well mapped. Be it topographic, cadastral or geodetic, our land information base is reliable and comprehensive – until you start getting your feet wet, that is.'⁶⁶ The context of this statement was about surveying the edges of New Zealand's continental shelf. I suggest that, before they venture out to sea, the LINZ contractors need to get their feet wet on land.

The results of my look at the mapping of tracks in the Dunedin area may not necessarily reflect the national situation. I do not know whether other regions of New Zealand contain long-established foot-tracks that are not shown on the topographic maps. Even so, I will speculate a little and add a few discursive comments.

My hunch is that the problem of unmapped tracks is not confined to the Dunedin area. In 2003 the Ministry of Agriculture and Forestry examined walking access in the New Zealand outdoors. This examination involved oral submissions, written submissions, and both stakeholder and public meetings. Remarks about maps were common:

Is there any point in having footpath access if it is not mapped?
[Blenheim public meeting, 14 October 2003.]⁶⁷

It would be great to have a map of the walkways or accessways in the whole Waikato. [Hamilton stakeholder meeting, 20 October 2003.]⁶⁸

Two years ago, in my submission on the Acland report, I reflected on the multiple legal statuses of our national collection of foot-tracks.⁶⁹ The mix of legal statuses seemed to me to present a problem of impermanence. Foot-tracks based on any legal status other than public roads could be vulnerable to closure. One particular concern was the prospect of spending public money developing walkways that might prove to be short-lived. The Federated Mountain Clubs submission to the Land Access Ministerial Reference Group described one example, on Mt Karioi near Raglan, where the landowner closed a walkway a few months after it had been opened.⁷⁰ As recently as 1 February 2005, the *Otago Daily Times* ran a story titled 'Residents Oppose Sale of Karitane Walkway'. Dunedin City Council, apparently, was considering selling a strip of grass-covered land that had come to be used as a community walkway.

Three months later, another walking track, a part of one of Dunedin's classic skyline walks, came under threat:

Abuse May End Access

Dunedin man Doug Hall is threatening to close his farmland to the public because some people are not respecting his stock or property. Mr Hall has allowed the public to cross his land – part of a Dunedin City Council walkway from Cleghorn St ... to Signal Hill Rd – for the past 20 years. But having to

destroy a cattle beast with a broken leg after a herd of 140 bulls was spooked and stampeded through a gate has left him with second thoughts. 'It's just getting worse and worse. People have no respect.'

Against this background of walkways being vulnerable to closure, LINZ – and the New Zealand taxpayer – could justifiably ask: is it worth surveying and mapping a foot-track that can easily cease to exist?

Yet there is a circular argument here, because walkers might equally justifiably ask: is it any wonder that some foot-tracks cease to exist, when it takes twenty years for them to appear on the topographic maps?

There seem to be two different but related national problems. One is that our walking tracks, both on private land and on public land, are too vulnerable to closure. The government's proposed Land Access Strategy aims to provide walking access that is enduring. Our foot-tracks across private land need to be legally strong enough to survive even when the land becomes RIPE FOR DEVELOPMENT. Those across public land need to be secure enough to survive the ebb and flow of local and national politics; they should be legally fixed to remain in existence even if the public land undergoes a change in use or is sold.

The other national problem, if my conjecturing is correct, is that our topographic maps are not the reliable primary sources of information on walking tracks that they ought to be. The Land Access Strategy, still under development, aims 'to provide more readily accessible information on public access'.⁷¹ An initial way to do this (perhaps the first of several mapping developments) would be to improve the up-to-dateness of our present topographic maps.

Improving the Recording of Foot-tracks and Routes on the Topographic Maps

There are map-users and map-makers. This paper, and the opinions it contains, stems from the perspective of one recreational map-user who knows little about map-making. My car is not performing as I'd like it to, but I haven't a clue what's under the bonnet. So I await a reply from the garage or from the manufacturers: from Land Information New Zealand. Meanwhile, I have a couple of constructive suggestions.

Involving the Recreational Public

Two years ago, when I decided to contact LINZ about the Otago Peninsula's unmapped tracks, I looked on the LINZ website, expecting to find specific contact details to enable the public to feed back comments about the topographic maps. I didn't find these particular details. I didn't look long enough. LINZ uses an award-winning 'virtual contact centre'. If I had simply emailed info@linz, my message would have ended up in the right place. Also, which I didn't discover at the time, NZTopoOnline contains a user-feedback link. Instead I wrote a letter addressed to the general LINZ address, which reached the relevant department.

Recently I happened across the advice that I had been looking for. Printed on the 2002 *Dunedin* 1:50,000 sheet is the request: 'Users noting errors, omissions or changes are encouraged to

forward the information to the Chief Topographer/Hydrographer, Land Information New Zealand, P.O. Box 5501, Wellington.' Interestingly, the older maps gave slightly more precise guidance: 'Users noting errors or omissions on this map are urged to mark hereon and forward to the Surveyor General, Department of Lands & Survey, Private Bag, Wellington. Maps so forwarded will be returned.'⁷²

The advice on those paper maps has not yet reached the digital age. It needs updating. To tell LINZ about errors and omissions, map-users can click a Notify Errors button in NZTopoOnline. This ease of user feedback has much to commend it. LINZ could further promote and encourage the process by adding a user-feedback section to the existing Map Users web page. Some users might be able to supply track coordinates obtained from global positioning systems, which LINZ land-surveyors could then field-check. Apart from feedback's purely practical function, the process would also stimulate user interest and pride in the topographic maps. It would bring users into personal contact with a body that, without such contact, might appear to be a remote bureaucracy.

Feedback, however, should involve more than the encouraging of comments from individual users. It should also encompass routine consultation with representative bodies. But recreational map-users do not seem to have a voice at LINZ, although LINZ does have a number of formal advisory groups. It has a special group, the Officials' Committee on Geospatial Information (OCGI), from which it seeks 'advice on standards and programme priorities' for topographic information.⁷³ Arguably, none of the OCGI committee members directly represent outdoor recreators. Putting this another way, if one of these experts spoke for walkers, fishers and hunters, I probably wouldn't need to be writing this paper. Our topographic maps might have been improved years ago.

Track Databases

In 1995 Dunedin City Council engaged consultants to identify track issues. The resulting report recommended, among other things, the development of a database of tracks. This database was subsequently built up, hence the comprehensive list of tracks in the city's 1998 *Track Policy and Strategy* and the accompanying maps on which the tracks and track-numbers are marked. One of the written policies deals with the need to periodically maintain the database: '10.3 The track database is kept up-to-date.'

Track databases play a vital role in the inventorying and managing of foot-tracks. The existence of Dunedin City Council's track database has greatly assisted my researching the facts for this study and my presenting the results. Numbering each track, whether the track is two hundred metres long or ten kilometres long, enables track-managers, planners and researchers to avoid ambiguity and misunderstandings. Many local authorities in England and Wales have numbered their definitive public foot-paths since the 1960s.

A commendable feature of the city council's track database is that it contains most of the tracks in the area, irrespective of whether those tracks are managed by the city council, DOC, or a private landowner. A less endearing feature of Dunedin's database is its autonomous allegiance to a different track-classification system from DOC's.

'To tell LINZ about errors and omissions, map-users can click a Notify Errors button in NZTopoOnline.'

'The existence of Dunedin City Council's track database has greatly assisted my researching the facts for this study and my presenting the results.'

In December 2004 the government announced some details about the proposed access agency. One of the agency's jobs will be to 'build a central and regional database of existing and new walking access opportunities and actively disseminate that information to stakeholders'.⁷⁴

Improving the Mapping of Tracks – Summary

In summary, the following seem to be points worth considering nationally:

- The LINZ 1:50,000 topographical maps should be walkers' primary source of information on foot-tracks and routes.
- Many areas of New Zealand will probably never be covered by DOC Parkmaps or by Terralink recreational maps.
- Can LINZ involve the recreational public more, for example by widely publicising the Notify Errors provision of NZTopoOnline?
- Short foot-tracks may provide crucial access to the foreshore, rivers, and other areas of recreational importance. The 1:50,000 maps should show all plotable short accessways.
- Does LINZ need to review the NZTopo technical specification 5.115.2, which includes the instruction: 'In urban and rural areas, capture only significant foot tracks. Do not capture access tracks from a road to a farmhouse or other dwelling unless they are particularly significant'?
- Our oldest paper maps have not been revised for twenty years or more. For example, Hikurangi (1983), Tokomaru Bay (1983), Three Kings (1984), Ahipara (1984), Patea (1985), Whangamomona (1985).⁷⁵ Theoretically, NZTopoOnline should become map-users' first port of call for the most up-to-date information. But, if we are to judge from the Dunedin area, the full potential of NZTopoOnline has yet to be realised. Can LINZ add newly-notified foot-tracks to NZTopoOnline more speedily than seems to have been the case?

*

Where does this leave us, regarding Buskin Track and the sixteen other unmapped tracks of the Otago Peninsula? In 1954 the Dunedin publisher and walker A H Reed published his own guide-book, *Walks Around Dunedin*. The book's front matter included a little preamble:

There can be no New Zealand city more favoured than Dunedin in extent, variety and beauty of walks within comparatively easy reach of the city dweller ...

When, however, you read Reed's book, it becomes clear that there were times when he wandered wherever he wanted to, with impunity, even on some farmland of the Otago Peninsula. Fifty-one years later, in 2005, we cannot stroll around the northeastern coast of the peninsula as he did, asking permission in arrears. Instead we have a far-from-ideal incomplete collection of accessways, based largely randomly on public roads. It is a partial network. To make matters worse, in terms of topographic maps, we have only a partial map of this partial network. A month ago I cycled down Buskin Track not because of the map's help but in spite of its lack of help. An alternative title for this study might have been *Blank on the Map*. With the advent of NZTopoOnline, we now have an unprecedented opportunity to fill in those blanks, at least digitally if not on the paper topographic maps.

Appendix – List of Plotable Tracks in the Dunedin Area That Are Not Shown or Are Only Partly Shown on the 1:50,000 Topographic Maps (April 2005)

The fifty-eight tracks listed in the following table are not marked or are only partly marked on the paper Topographic Map 260 maps. Similarly, they are not marked or are only partly marked on NZTopoOnline (Beta Release Version 2.0). I have taken the track-names, track numbers, and locations from the Dunedin City Council's *Track Policy and Strategy* (1998), pages 55–8. The track-names in guidebooks and in city-council leaflets sometimes differ from the track-names in the *Track Policy and Strategy*.

Some of the tracks I've listed are managed by DOC or by DOC and a private owner. Some are managed by city-council departments. A few are managed by their private owners.

Most of the tracks listed are open to the public. A few are private tracks that are not open to the public except by permission. I have not listed these legal statuses; the need for maps to differentiate between tracks open to the public and private tracks is an issue beyond the scope of this investigation.

The Dunedin City Council multi-use track classifications comprise five degrees of difficulty: Accessible, Easy, Moderate, Hard, and Route.

As I see it, many of the tracks in the list – forty-nine out of the total of fifty-eight – demand mapping.

The other nine tracks, whose names are italicised, are unmapped unmaintained routes, selected from at least twenty such routes listed in the *Track Policy and Strategy*. **I stress that these italicised entries are only suggestions, open to discussion.** These nine tracks may – or may not – meet LINZ's criteria for being shown on the topographic maps. They could be borderline cases, in the upper range of unmaintained routes. They may be ill-defined and only sporadically waymarked, thus presenting demanding navigation and tricky route-finding.

Track-name	Number	Location	Dunedin City Council multi-use track classification	Notes (blank means that none of the track is shown)
McTaggart Street	80103	Otago Peninsula	Hard	Eastern part not shown.
Camp Track	80104	Otago Peninsula	Hard	
Bacon Track	80105	Otago Peninsula	Hard	Southern part not shown.
Quoin Cliff	80106	Otago Peninsula	Hard	Eastern part not shown.
Mt Charles	80108	Otago Peninsula	Hard	
Hoopers Inlet to Highcliff Rd Track	80109	Otago Peninsula	Route	
Nyhon Track	80110	Otago Peninsula	Hard	
Sandymount - to Sandfly Bay	80112	Otago Peninsula	Route	
Buskin Track	80114	Otago Peninsula	Hard	

Buskin Track (80114) and Others

Track-name	Number	Location	Dunedin City Council multi-use track classification	Notes (blank means that none of the track is shown)
Okia	80115	Otago Peninsula	Hard	Eastern part not shown (access to foreshore)
Highcliff Track	80116	Otago Peninsula	Hard	
Seal Point Road to Sandfly Bay	80118	Otago Peninsula	Hard	
Ridge Road	80119	Otago Peninsula	Hard	Southern part not shown
Sandymount - carpark to summit	80120	Otago Peninsula	Hard	
41 Peg Track	80201	Otago Peninsula		
Greenacres Street	80203	Otago Peninsula	Hard	Southeastern part not shown
District Road	80204	Otago Peninsula	Hard	
Between Surf Club Track	80501	Between St Clair and St Kilda	Route	
Second Beach Track	80502	St Clair	Moderate	
Chain Hills Track	80602	Fairfield - Wingatui	Hard	Northeastern part not shown
Frasers Gully	81001	Kaikorai Valley - Brockville	Hard	
<i>Maungatua Track/Woodside Glen</i>	81101	Maungatua	Route	
Steve Amies Track to Racemans	81103	Swampy Summit Road	Route	
<i>Mill Creek</i>	81105	Maungatua	Route	
MacRaes Weir Track	81106	Whare Flat	Hard	
Bivi Rock via Fire Break (Big Rock)	81108	Three Mile Hill	Route	
<i>Three Kings</i>	81110	Maungatua	Route	Mostly not shown, apart from the kilometre north of Three Kings
<i>Sanatorium Site & Craiglowan Falls</i>	81111	Three Mile Hill	Hard	Western part not shown
<i>Rocky Ridge</i>	81112	Silverpeaks	Route	
Rustlers Ridge - Burns	81117	Leith Saddle	Hard	
<i>Raingauge Spur</i>	81121	Silver Stream	Route	
Powder Ridge (Pulpit Rock)	81123	Silver Stream	Route	
The Chalkies (Powder Hill)	81125	Silver Stream	Route	Northeastern half of the circuit not shown
Racemans	81130	Whare Flat	Hard	
Flagstaff Creek Exotic Forest Track	81139	Three Mile Hill	Moderate	

Buskin Track (80114) and Others

Track-name	Number	Location	Dunedin City Council multi-use track classification	Notes (blank means that none of the track is shown)
Steve Amies to Trig Q	81140	Swampy Summit Road	Hard	
<i>Grainger Road to Maungatua</i>	81158	Maungatua	Route	
[<i>Eucalypt Spur</i> . See footnote *]	81159	Silver Peaks	Route	
Silverstream Esplanade Reserve	81203	Mosgiel	Moderate	
Tunnel Track Racemans	81205	Whare Flat	Route	
Taieri River - [South] Bank	81304	Taieri Mouth	Route [?]	
Taieri Mouth	81305	Taieri Mouth	Hard [?]	
Island Park Inlet Track	81306	Waldronville	Easy	
Nicols Falls	81402	Leith Valley	Hard	
Cleghorn Street	81409	Signal Hill	Hard	Central part not shown
Morrison's Burn	81412	Leith Valley	Route	
Quarantine Island	81702	Otago Harbour	Moderate	
Mihiwaka	81703	Purakanui / Port Chalmers	Route	
Heyward Point	81704	Aramoana	Hard	
Deborah Bay Road Track	81707	Port Chalmers	Moderate	
Port Chalmers Water Reserve Track	81711	Port Chalmers	Moderate	
Sullivan's Dam	81908	Leith Saddle	Moderate	
Purakanui Inlet Track	81909	Purakanui	Hard	Middle part not shown
Sullivan's Dam pipe line	81910	Leith Saddle	Route	
Long Beach	81911	Long Beach	Moderate	Access to foreshore not shown
Mopanui to Orokonui	81912	Orokonui	Route	Western part not shown
<i>Sawmill Track</i>	81915	North Coast	Route	Western part not shown
Whaitiripaka Falls	81919	Evansdale Glen	Route	

* Page 56 of the *Track Policy and Strategy* (1998) names 81159 as Rosella Ridge Track. The map on page 47 of the *Track Policy and Strategy* places 81159 on Eucalypt Spur.

Endnotes

The first occurrence of a source gives the reference in full. Repeat occurrences use the author and title or author and shortened title.

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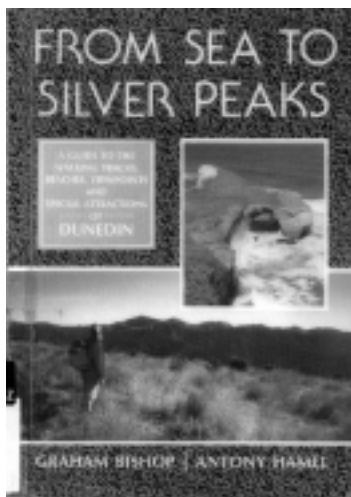
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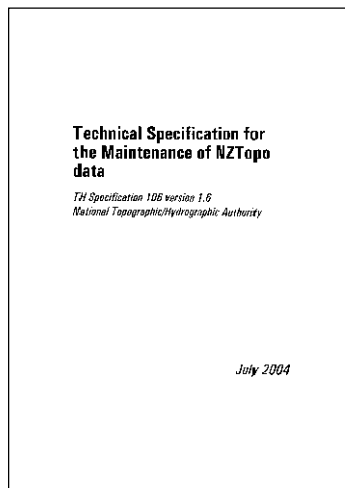
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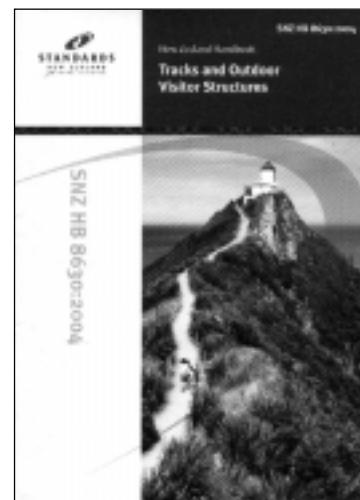
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From Sea to Silver Peaks, 1993. This guide to walking tracks has appreciably extended many Dunedinites' knowledge of their local tracks.



Technical Specifications for the Maintenance of NZTopo Data, July 2004. These prescriptions aim to achieve uniform maintenance of NZTopo data. The document includes a definition of foot-tracks. It also includes brief advice to field-checkers about which foot-tracks they should capture for the NZTopo database.



Tracks and Outdoor Visitor Structures, 2004. This Standards New Zealand handbook could bring greater national consistency into the classification of walking and tramp-ing tracks.

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