



2C



2D

2A



2B

Plates 2A–2D Present-day woody associations: lowland and lower montane shrub associations.

Plate 2A Broom-gorse association (C; dark green vegetation) beside the Taieri River in the beech-kowhai-cabbage tree (XI) and beech-mountain toatoa-kowhai-manuka (XII) pre-settlement woody vegetation zones (100 m a.s.l.). Other woody weed species include leafless *Sambucus nigra* (elderberry) and riparian *Salix fragilis* (willow).

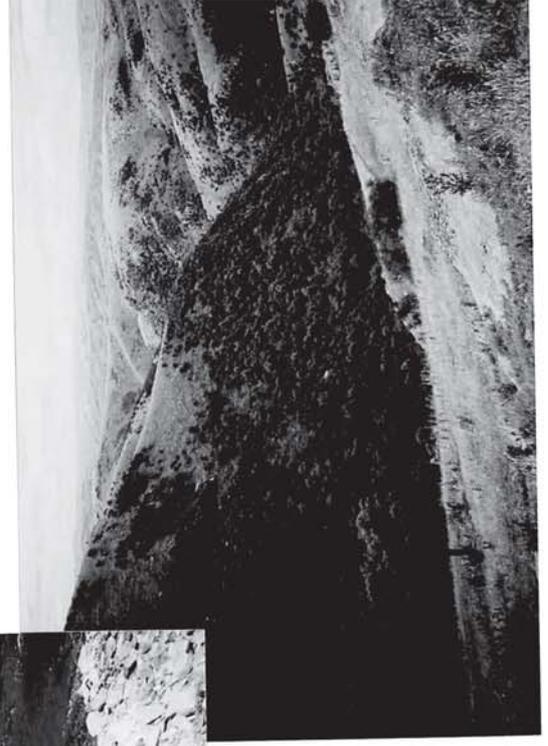
Plate 2B A dense, shin-high canopy of *Thymus vulgaris* (thyme) covers the hillslopes above Lake Dunstan in the Cromwell Gorge, giving the hillslopes a distinctive colour. From this distance, the community appears to have low woody plant diversity, but there are scattered bushes of *Rosa rubiginosa* (briar), *Coprosma propinqua* (mingimingi) and *Carmichaelia compacta*. This community is classified within the briar association (D), and occurs here in the kanuka-kowhai (I) and kanuka-kowhai-Hall's totara (IV) pre-settlement woody zones. Large relict *Sophora microphylla* (kowhai) trees remain within rocky gullies and outcrops along the gorge.

Plate 2C Briar association (D) at 300 m a.s.l. near Devils Creek walking track in the western slopes of the Dunstan Mountains, in the kanuka-kowhai pre-settlement woody vegetation zone (D). The community comprises flowering *Rosa rubiginosa* (briar), *Kunzea ericoides* (kanuka) with *Sophora microphylla* (kowhai) and *Coprosma propinqua* (mingimingi).

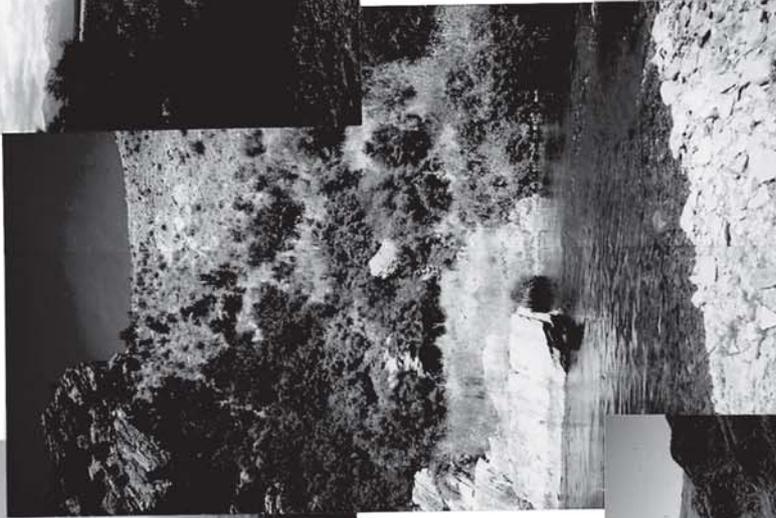
Plate 2D Briar association (D) in Doolans Creek (400 m – 800 m a.s.l.), straddling three pre-settlement woody vegetation zones: kanuka-kowhai (I), kanuka-kowhai-Hall's totara (IV) and beech-Hall's totara-snow totara (VII). The main woody species in the present vegetation are *Rosa rubiginosa*, *Coprosma propinqua*, *Olearia odorata*, and occasional specimens of *Coprosma vitrescens*. *Salix fragilis* (willows; light green) line the creek, and the tall tree near the centre of the frame is a wilding *Pinus radiata*.



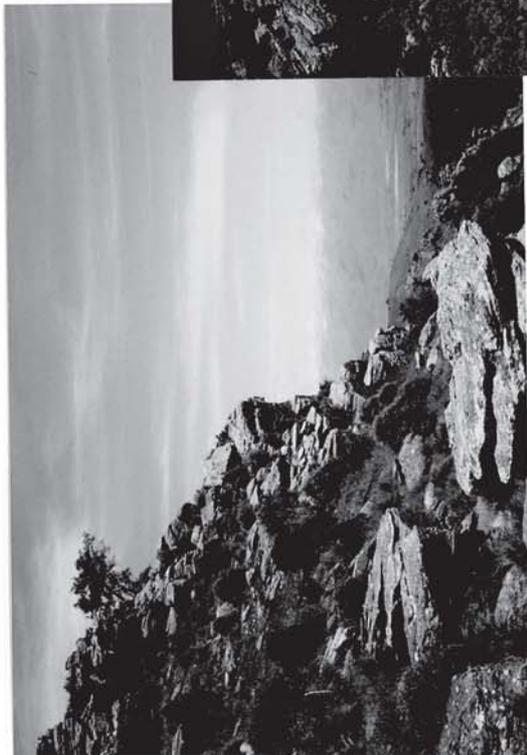
3D



3E



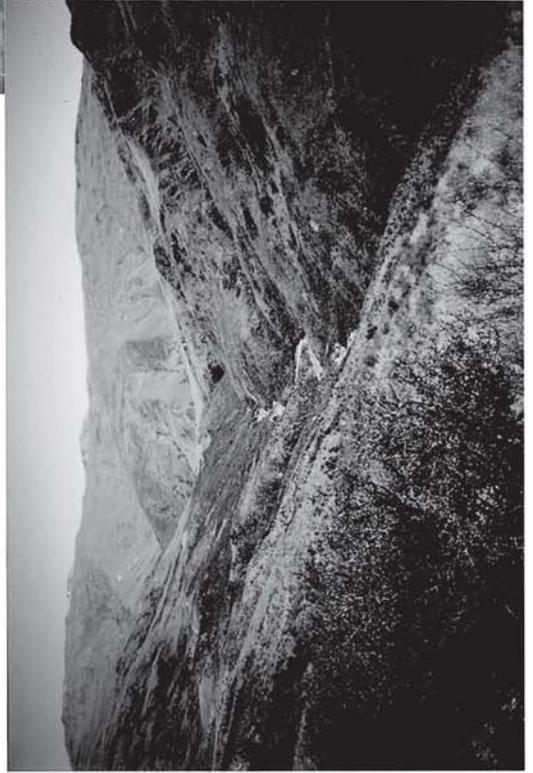
3C



3A



3B



Plates 3A–3F Present-day woody associations: montane shrub associations.

Plate 3A Dry *Melictytus* association (F) on the Raggedy Range, in the kowhai-kanuka woodland pre-settlement woody vegetation zone (II) at 500 m a.s.l. *Sophora microphylla* (kowhai) is silhouetted in the background, and shrubs in the foreground include *Melictytus propinqua*, *Coprosma colomeaster*, *Corokia colomeaster*, *Coprosma propinqua* and *Pimelea aridula*.

Plate 3B Matagouri-mingimingi association (E) above the left branch of Doolans Creek, in the beech-Hall's totara-snow totara (VII) and Snow totara-mountain toatoa (VIII) pre-settlement woody vegetation zones (c. 600–1000 m a.s.l.). Shrubs in the foreground include *Discaria toumatou* and *Olearia odorata*, which are also the major woody species on the hillslopes beyond.

Plate 3C Matagouri-mingimingi association (E) in Dunstan Creek, at 750 m a.s.l. in the kowhai-Hall's totara (V) and beech-Hall's totara-snow totara (VII) pre-settlement woody vegetation zones. This shrubland presently comprises *Aristotelia fruticosa*, *Carmichaelia petriei*, *Coprosma intertexta*, *Coprosma propinqua*, *Hebe salicifolia*, *Melictytus alpinus*, *Muehlenbeckia complexa*, *Olearia odorata*, *Pimelea traversii* and the hane *Rubus schmidtioides*. The rare shrub *Hebe cupressoides* is also present.

Plate 3D Matagouri-mingimingi association (E) near the confluence of the Luggate Creek and Clutha River at 300 m a.s.l., in the kanuka-kowhai pre-settlement woody vegetation zone (D). The presence of *Coprosma crassifolia* and *Myrsine divaricata* suggests a forest origin, perhaps of similar composition to the nearby Luggate Creek beech forest remnant at 400 m. Other woody species at this site include *Coprosma intertexta*, *Corokia colomeaster*, *Discaria toumatou*, *Hebe salicifolia*, *Kunzea ericoides*, *Melictytus alpinus*, *Muehlenbeckia australis*, *M. complexa*, *Olearia odorata*, *Parsonsia capsularis* and *Rubus schmidtioides*, and the exotic species *Crataegus monogyna* (hawthorn), *Cytisus scoparius* (broom), *Rosa rubiginosa* (briar) and *Ulex europaeus* (gorse).

Plate 3E Matagouri-mingimingi association (E) at 500 m a.s.l. in the Benger Burn, at the junction of three pre-settlement woody vegetation zones: beech-kowhai-cabbage tree (XI), beech-mountain toatoa-kowhai-manuka (XII), and beech-Hall's totara-snow totara (VII). The tree in the left foreground is *Sophora microphylla* (kowhai), and the mixed shrubland on the true left of the creek includes rare *Fuchsia perscandens*, and several *Olearia* (*O. bullata*, *O. lineata*, *O. odorata*) and *Coprosma* spp. (*C. ciliata*, *C. propinqua* and *C. taylorae*) species.