



JOHN DOWDING

Sheep stray for several hundred metres into the beech forest of the Eglinton Valley in Fiordland National Park, browsing beech seedlings and understorey plants.

transforming forest, shrubland and grassland ecosystems and threatening native bird and insect populations. Domestic stock have a similar impact except that they are concentrated on valley floor grasslands, wetlands and forest margins. These high-fertility ecosystems support rich native plant communities.

STUDIES of grazing patterns in South Westland show that the natural regeneration of forest on stable river flats is inhibited by domestic stock. Even light grazing and camping within the forest margin eliminates palatable understorey species, prevents the regeneration of broadleaved plants and can eventually lead to changes in the forest canopy. Concentrated grazing causes the forest margin to retreat. In beech forests east of the South Island's main divide, grazing animals inhibit the establishment of seedlings by camping and browsing in the shelter of the forest margin. Ironically, there is often healthier regeneration at beech forest margins on nearby pastoral lease country, where strict stock limits apply to the grazing of sheep, than in the major valleys of some national

and forest parks. Natural succession of shrubland and forest on many river flats has been thwarted for years by domestic stock.

The impact of stock on forests is not limited to the grazing of palatable plants.

Trampling at forest margins and along cattle tracks compacts the soil, restricts plant root development and reduces plant vigour. Compaction reduces the soil water holding capacity and increases runoff and soil erosion. Heavy trampling



MIKE HARDING

In Lake Sumner Forest Park sheep and cattle have a major impact on forest margins, inhibiting regeneration and, in serious cases, causing the forest margin to retreat.