

## How Surveys Work

So, faced with an ecological district for PNAP survey, how is the job done? There are broadly four phases. Firstly, before rushing in, there is a lot of preparation to do. What information on natural values is already available for the district? Who might have first-hand knowledge relating to any of the natural values of the district? Is there any written material available? What is the air photo coverage like? Whose land or lease is where? These are all basic questions which have to be followed up at the start of any survey. The land occupiers on whose land access may be required, are all contacted by letter and then in person, in the extremely important initial public relations stage.

The second phase in PNAP surveys is that of field reconnaissance. Generally, the area of land to be surveyed is substantial (greater than 100,000 ha) and a broad idea of the range of natural values present within a district is needed. Once an overview can be obtained, decisions can be made as to which areas within a district deserve more detailed study. This must be related to the survey's aim of identifying the full range of natural values representative of the district. In many districts, unfortunately, there is no choice for some ecosystems — there may be only one small fragment left, or worse still, the habitat has gone forever.

The third phase is to document the natural values within particular study areas — this might be a wetland, or a catchment ranging from forest through tussock grassland to the alpine zone. Information is gathered to answer such questions as: What plant communities are present? What native species of plant and animal are found there? What condition is the habitat in? Has it been greatly modified? What landform features are present? Are there any special values that should be recorded — a rare plant or animal species, or an unusual landform?



Top: At 1430 metres above sea level in the upper Nevis Valley of southern Central Otago are found these spectacular string bogs. Rare outside the boreal zone of the arctic region (in countries such as Scandanavia and Canada), these string bogs of several hundred hectares are ranked as of international importance in a recent report on the Nokomai District. The photo was taken from 200 metres. Photo Alan Mark



Upper Jordan Creek below Mt Whitecomb (1566m) on the Umbrella Mountains was recommended for protection in the Umbrella PNA report because of its good representation and diversity of both landforms and vegetation plus the good condition of its plant cover. Photo: Katharine Dickinson