

## **3. Collections**

### **3.1. Amateur Collecting**

A permanent archival record requires a considerable financial commitment to correct materials, which may not be readily available to the amateur collector. Mounting techniques are many and varied, therefore it is worthwhile spending time and foresight into researching mounting materials, in preparation of a collecting project.

Always attempt to mount the specimen so that surfaces needed for study are visible, and use only enough tape to stop the specimen from moving around. The tape may need to be removed at a later stage as it is possible that your own herbarium collection may involve future interest as a permanent record.

It is becoming increasingly popular to replace the physical collecting of specimens by photographing them.

It is important to choose a representative sample of the plant and include in the photograph a scale in the form of a coin or ruler; this will provide a permanent description of the shape and size of the sample.

It is also worthwhile to note the colour of the plant parts, as films in general use can reproduce colour inaccurately. Other data to note includes scientific name, geographical information, collectors name and the date.

Most importantly, an ethical collector will ensure that their collecting activities do not pose any threat to the survival of an endangered species or of habitats. There are regulations in place pertaining to the collecting of plants in New Zealand; so it is important for you to make official contacts before proceeding.

### **3.2. Mounting tips for amateurs**

Re-mounting the original collection with correct archiving materials was necessary for its continued preservation. This then necessitated the removal of various types of Sellotape from each specimen, as some specimens had suffered prior damage and been temporarily repaired.

Due to the extremely delicate nature of some of the individual specimens, it was sometimes impractical to carry out this process, because of the high risk of seriously damaging the specimen further or destroying it altogether, therefore some specimens may show remnants of the original Sellotape.

The removal procedure often required chemical means, using a fume cupboard in the laboratory. Such a procedure is intensive and requires constant monitoring, and is seemingly dependant on the tape type and the composition of the dried plant material.

The archived collection is stored in a climate-controlled room to reduce damage caused by changes in humidity.

### **3.3. Revisions of Taxonomic Status**

You will notice that some ferns appear to have new names, this is due to revision and reclassification.

Since Jim Schultz collected these ferns, there has been a greater appreciation of relationships of ferns worldwide.

Researchers now have access to many more collections both in museums and online. Advances in molecular sequencing have allowed taxonomists greater certainty when assigning ferns to taxa.

Since the beginning of 2006 the filmy fern group has undergone international revision, but we have been advised that the names used in this project are still current, that both names are correct. Readers with an interest in this subject are advised to check a taxonomic status by visiting the New Zealand Plant Conservation Network, this is listed in the bibliography.

### **3.4. Threatened Status**

While investigating the taxonomic status, it was noticed that some of the collection has been assigned to the national list of threatened vascular plants. A complete list of these New Zealand threatened and uncommon plants can be downloaded directly from the New Zealand Plant Conservation Network web site.