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cabinet, and new genus labels for each shelf within each cabinet, using a word processor and thin card.

To facilitate the location of specimens, a comprehensive hand-held index, arranged in alphabetical order, was later compiled, indicating genus, species and their corresponding cabinet numbers. A word processor was also used to print an index of family and subfamily names, again with their cabinet numbers, which was attached to both ends of each row of cabinets.

With the reorganisation complete after a man-year of work, the Natural History Museum's avian spirit collection is now conveniently housed and easy to use. This not only improves accessibility to the collection for both visitors and staff, but also ensures a higher standard of preservation of specimens and therefore should increase the general 'shelf-life' of the collection.

References

Blandamer, J.S. and Burton, P.J.K. 1979. *Anatomical specimens of birds in the collections of the British Museum (Natural History).* Bull. Brit. Mus. (Nat. Hist.) 34, 125-180.

Zusi, R.L., Wood, D.S. and Jenkinson, M.A. 1982. *Remarks on a world-wide inventory of avian anatomical specimens.* Auk 99, 740-757.

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LABELLING OF SPECIMENS PRESERVED IN SPIRIT COLLECTIONS

Introduction

Many, if not most spirit collections in UK museums have traditionally used paper-based labels. In 1961 it was reported (Ross 1961) that so-called Goatskin Parchment was a satisfactory material for the long-term labelling of specimens immersed in alcohol and other aqueous-based materials. However, like the Holy Roman Empire, the term 'Goatskin Parchment' is somewhat of a misnomer and is actually a rosin-sized wood-pulp paper. Recent changes in the method of sizing (from tub-sizing) causes the parchment to soften and weaken in the preservative solutions after a relatively short period (Kishinami 1989).

The introduction of computer-based labelling systems offered the opportunity to generate large quantities of individual, neat labels quickly and easily. Unfortunately, laser-printed labels were found to be impermanent as they are based on a plastic powder, being heat-fused to the paper. Alcohol and other solutions caused the powder pigment to become disassociated from the paper and fall in a heap at the bottom of the jar.

Solutions

High quality and cellulose papers are found to be resistant to most preservative solutions. Byron-Weston Resistall papers which are of a high quality cellulose material have long been used in the U.S. and are now available in the U.K. Alternative materials have not been so successful for a number of reasons. Tyvek - a spin-bonded polythene material - although resistant to most solvents, floats in many of them and is sometimes difficult to write or print on. Plastic and plastic-coated papers such as Synteepe and Polypaper are also difficult to write or print on permanently (Pettitt 1976).

There appears to be a number of solutions to the labelling problems. Rotring 17 ink (Williams and Hawks 1986) is a suitable writing medium for most paper-based labels, being relatively fadeproof and solvent resistant. Most commercial oil-based printing inks are also fine for immersed labels, but standard typewriter inks can leach out into alcohol solutions colouring them a deep purple. Possible answers to long-life computer generated labelling may involve the use of dot-matrix and ink-jet printers and tests are currently being carried out to assess them.

Recently a number of firms have started producing so-called permanent labelling with both writing and bar-code options. For instance, Computer Imprintable Labels Systems Limited (Unit 30, Home Farm Business Centre, Home Farm road, Brighton, BN1 9HU. Tel 0273 681000) provide a range of durable labelling systems that offer hope for the future of rapidly produced permanent labels.

Perhaps the best current advice, is not to use any Goatskin Parchment that has been purchased in the last ten years, and to use a high quality paper alternative, such as Byron-Weston Resistall paper, or Atlantis Archival Copysafe. Tried and tested inks and printing methods should be continued until the new systems have been adequately evaluated.

References

Kishinami, C.H. 1989. *Archival Storage of Disintegrating Labels from Fluid-Preserved Specimens.* Collection Forum 5 (1) 1-4.

Pettitt, C. 1976. *Label Materials for Wet Preserved Biological Specimens.* Museums Journal 75 (4) 175-176.

Ross, G.C. 1961. *Labels for Biological Materials.* Museums Journal 61 (3) 177-179.

Williams, S.L. and Hawks, C.A. 1986. *Inks for Documentation in Vertebrate Research Collections.* Curator 29 No 2 93-108.

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