**LABELLING DECISION TREE**

**Dry Labels**

Archival paper and carbon based inks have been the standard for all dry collections due to the known longevity of archival papers and stability of carbon pigments. It is important to understand how to maintain these standards as methods of producing paper and printing technologies change.

**ISSUES:**
- Paper
  - High quality paper is known to last for centuries, while the same certainty does not exist for plastic yet. Low quality paper will yellow and become brittle in decades.
  - Physical damage can be avoided by carefully matching the properties of the paper to the labelling task.
  - Secondary concern: organic materials (paper) are prone to pest damage (insect, mice and mould) but can survive water damage (e.g flood)
- Ink
  - Pigmented inks e.g. Carbon black is always superior to dye based inks.
  - Abrasion and lifting pose the greatest concern. The relative risk depends on different printing/writing methods which result in different levels of adhesion or penetration of the ink. Problems can often be encountered with changing products or malfunctioning equipment, therefore overall quality control should be periodically assessed using the Peel Test developed by the US National Archives.
  - Fading is not a concern with carbon pigmented inks, as compared to fugitive dyes.
  - Secondary concern: solubility in water e.g. floods or leaks - Carbon based inks tend not to bleed when immersed in water and can be tested is outlined in ISO

**Out-of-house Printing**

Here are some things to consider:
- If printing catalogue numbers, there is less risk of human error or duplication.
- Ensure the materials are archival safe. This includes adhesives, inks, and substrate. See other sections of the decision trees to see what standards the printers should be meeting.

**Attachment of Labels**

**INDIRECT ATTACHMENT**
- High quality entomology pins
- Uncoated cotton or linen threads/cords
- Archival quality polyethylene bags (not Ziplock)

**DIRECT/ADHESIVE ATTACHMENT**
This could be glued on paper labels or a barrier layer beneath a handwritten mark.
- Use a stable acrylic resin (eg, Acryloid B-72) as an adhesive or barrier layer (meet ISO 18902:2013)
- Use pigmented inks (ISO 11798:1999)
- Apply a toecap to avoid abrasion

**Avoid:**
- Sharpies - they fade, are soluble in alcohol and are not archival.
- Ballpoint, gel pens, coloured pens or other common writing implements. These are fine for short term, but they will fade, and their chemical make up may vary

---

**What is the PAT?**

The PAT test is the Photographic Activity Test. It is a standard test to determine the archival quality of a material. It was developed specifically for the suitability of materials which come in contact with photos, but there are many parallels which are applicable. It was developed by the Image Permanence Institute and the ISO. [https://www.imagepermanenceinstitute.org/testing/pat](https://www.imagepermanenceinstitute.org/testing/pat)

---

**Attachment of Labels**

**INDIRECT ATTACHMENT**
- High quality entomology pins
- Uncoated cotton or linen threads/cords
- Archival quality polyethylene bags (not Ziplock)

**DIRECT/ADHESIVE ATTACHMENT**
This could be glued on paper labels or a barrier layer beneath a handwritten mark.
- Use a stable acrylic resin (eg, Acryloid B-72) as an adhesive or barrier layer (meet ISO 18902:2013)
- Use pigmented inks (ISO 11798:1999)
- Apply a toecap to avoid abrasion

**Avoid:**
- Nail polish - it was very popular in the past but is not a stable labelling material.