

Can I stop my Penguins falling apart?

The short answer to this is that there may be some books that cannot be helped.

The medium answer is that some paperback books are going to be more fragile than others, especially those that are already deteriorating and those, like wartime publications, that are already more vulnerable. You will find that some of your books may be becoming brittle and this problem is only likely to increase over time.

The long answer is that Penguin books have their materials working against them. During the 1800s paper-making changed, away from being handmade and towards mechanisation. This meant the traditional material from which paper was made (rags) could no longer keep up with demand and a cheap and plentiful source of raw material was needed—and that was wood. From the mid-1800s the production methods with this new raw material have resulted in acidic paper—this is not a good thing! There is ongoing research on how to slow down or reverse this acidification; however, as it currently stands, options are intensive and require professional-grade setups, this means they are expensive.


The good news is that the deterioration process does not happen overnight and the majority of Penguin books will be relatively stable for a long time.

COLLECTING

CONSERVING

So what can be done?

The first thing to remember is that being in the libraries of a Penguin collector is automatically helping—after all, they are not discarded as unwanted. Next, it is need to tailor any advice to suit and how you want to display and you make your decisions, you might



on their way to the tip having been important to realise that you will you, your collection, your house, store your books. However, when like to consider the following.

The biggest impact on your collection and its deterioration will be the condition in which it is stored. Factors which increase the rate at which books deteriorate are light, relative humidity (RH) and temperature.

Temperature:

Given that collectors are generally looking to preserve for the long-haul, it may be helpful knowing that, because heat speeds up the chemical reactions that turn paper yellow and make it brittle, a 5°C reduction in temperature (from 25°C to 20°C) can double the life-expectancy of acidic paper. Higher temperatures can also soften the glue in bindings, so think cool conditions; but be aware that, as temperature decreases, RH increases.

Relative Humidity (RH):

As with temperature, decreases in RH can significantly improve life-expectancies of acidic paper. At 20°C, a reduction from 50% RH to 30% RH can double a book's lifespan. Keeping RH below 65% also helps to avoid the possibility of mould, which decreases the chance of pest infestation.

Books are hygroscopic, paper will absorb and desorb water vapour from the air and thus swell and shrink as a result. This means that, as well as a low RH, a stable RH is best. Damage from fluctuations in RH is, perhaps, a less immediate issue for books than it would be for some objects, but it is of particular note if collectors have any paper ephemera that is held in a stretched position. For books, keeping them shelved or stored in a tight—but not over-tight—manner will also help them stay supported and in shape.

Light:

Reducing the amount of both natural and artificial light, for as long as possible, will have an impact. Damage by light is irreversible and cumulative. So, while you might like to look at your collection and have your books available to read, can the amount of light be reduced at certain times of the day? Think creatively! Can some books be stored back to front? Are there certain bookcases that get less light than others, can a simple re-sort reduce the light on the most vulnerable books without impacting your enjoyment? Curtains, for instance, do not have to go over the windows, they could be designed to go over or in front of bookcases. For instance, an antique room divider directly in front of shelves could block some light and still be easy to move or remove to allow access and visibility.

Storage:

Most collectors have their books in shelving; however, if you have books in storage boxes or cardboard sleeves then this can increase the acidity of the environment. Boxes made from acid-free boards or from stable plastics (e.g. polyethylene or polypropylene) can help avoid cross-contamination from storage containers. If you have particular books that may be more acidic—e.g. they are notably brittle or yellow—then storing these away from your main collection, wrapping them in acid free tissue or placing them in plastic folders would be beneficial. If this would impact the aesthetic of your collection, then even placing acid-free paper between books would provide a small buffer.

Handling:

This was described by one Penguin collector as ‘book hygiene’. Small changes can reduce the cumulative impact caused by physical interactions with books. Examples include, washing hands before handling, avoiding holding or placing books down in ways that put stress on the pages or spines, and not reading in excessively humid places. A little bit of care can also minimise the chances of dropping a book or tearing a page.

Repairs:

All books are different, even two Penguin books next to each other on the shelf may use different printing techniques or materials. They will also have different histories and different conservation needs. Because conservation increases the potential for damage to objects, no active conservation methods will be provided here. Professional conservators will always consider ‘no action’ as a legitimate option and this is also my suggestion for owners. If the book is relatively stable, does any active repair work need to be done?

If you do feel that work needs to be done on a book, try and use the least intrusive method and most stable materials. Then proceed with caution. Any adhesives used should not be too strong because, if tension is put on the join, it is best that the glue fails before the paper tears. It is often difficult to know how commercially made paper adhesives age and whether they remain stable; for this reason, conservators use archival tapes rather than sticky tape; and adhesives like wheat-starch paste rather than commercial glue-sticks. Before a particular adhesive is used on an object, consider testing on a surrogate and also on an out-of-the-way place on the object itself, to ensure that there are no unintended consequences that could have been mitigated.

Where to go for more information:

The following links are provided for help with caring for your collection:

ICON (The Institute for Conservation) has resources and also a register of accredited specialists:

<https://www.icon.org.uk/resources/caring-for-your-collection/caring-for-your-treasures.html>

The British Library and the Canadian Conservation Institute also have excellent publications and information on caring for books and paper. Their websites are also good starting points for further information.

Author:

Written by Rachel Walker as advice to Penguin collectors as part of a dissertation for an MA in Conservation of Cultural Heritage. The dissertation considered the relationship between conservation and collecting with a focus on wartime Penguin books.