

New loose taxidermy storage

Introduction

Currently the vast majority of the Canterbury Museums taxidermy collection is loose taxidermy and is stored in shelved cupboards without any additional physical protection from damage from handling, movement or insect pests. It was proposed to develop a new storage and preventive conservation system for this section of the taxidermy collection that will go a long way to help solve these problems. A variety of methods have been used for storage of taxidermy and poor storage can often lead to damage (Hendry, 1999).

A pilot project was carried out in 2013 to develop a method and test the feasibility and practical application of the proposal. It is hoped this project will lead onto and inform future work to improve the storage of the rest of the collection.

Criteria

The new storage and preventive conservation system should satisfy the following criteria

1. Prevent damage through chemicals (e.g. acids) or biological (pests) factors
2. Prevent physical damage to the objects through handling or movement
3. All new storage solutions should take into account future curatorial activity such as object movements or store moves) so should be reversible.
4. Should be made from durable materials (e.g. waterproof and sturdy)
5. Should be easily accessible
6. Should not require additional storage space
7. Be efficient in terms of time

Aims

1. Improve storage conditions and long term care
2. Improve management of the collection
3. Free up storage space

Evaluation of potential storage methods

To get a feel for what might work in practice an email to the NATSCA emailing list asking for ideas on what works well and what works not so well. Based on the plentiful feedback I received I evaluated the advantages and disadvantages of the methods suggested and these are summarised in table 1.

Method	Advantages	Disadvantages	Applications
1.Purpose Made Cabinets	-Easy access -No conservation risk	-Very expensive -Not guaranteed pest proof	Any size specimen
2.Wire hoop and Bag (Bases fitted into holes in plastazote with a wire frame to keep the plastic bag from contacting the specimen).	-A good system for protecting very large specimens from dust and pests	-Fiddly to get them out. -Inefficient space use	Medium sized to large or awkwardly shaped specimens
3.Card hoop and Bag (as with wires above)	-A good system for protecting large specimens from dust and pests	-Fiddly to get them out. -Inefficient space use -Time consuming to produce	Medium size to large specimens
4.Really useful™ boxes to house multiple specimens lined with plastazote.	-Ready made so efficient in terms of time -Stackable -Sturdy and robust -Easy to transport -Available in many sizes. -Transparent -waterproof	-Fairly expensive -Limited range of sizes	Small to medium sized specimens Loans
5.Ready-made acid free boxes of generic sizes with plastazote linings that we already have a large stock of	-Low cost -Ready made so efficient in terms of time -Stackable -Sturdy -Easy to transport	-Limited range of heights. -Can be difficult to open. -Allows easy pest access so would require pesticides or additional bagging.	Most small to medium sized specimens
6.Corex boxes lined with plastazote to house multiple specimens	-Possible to make bespoke sized boxes for any size of specimen -Sturdy and stackable -Easy to transport	-Time consuming to make -Inefficient space use -Expensive materials -Problems with fastenings becoming loose	Any size specimen
7.Cling film	-Cheap	-Long term affects unknown. -Potential for damage during unwrapping.	Large and less fragile specimens. Short term emergency use
8.Pre-cut self-assemble boxes and bags	-Cheap -Easy to assemble	Limitations in terms of size	Small specimens
9.Bespoke acid free boxes made to order lined with plastizote	-Stackable -Sturdy -Easy to transport	-Inefficient in terms of space. -Expensive -Time consuming to specify. -prone to redundancy	

Table 1. A summary of the advantages and disadvantages of various storage methods for loose taxidermy specimens from methods suggested via the NATSCA JISC mail.

From this initial research it is clear that there is no single method that can satisfy the needs of the great variety of sizes and shapes of taxidermy that exist in museum collections. Some methods are of course better than others in satisfying similar aims but cost is also an issue.

Due to the specific needs of the section of the collection being used in the pilot project it was decided that method 4 provided the best solution. The main reasons were the amount of time needed to prepare each box was minimal, there were very good offers available to acquire the boxes at the time and the sizes available matched up very well to the storage cupboards.

Method

1. Plastazote sheets were cut to the size of the bottom of each box and fixed to a cutting table.



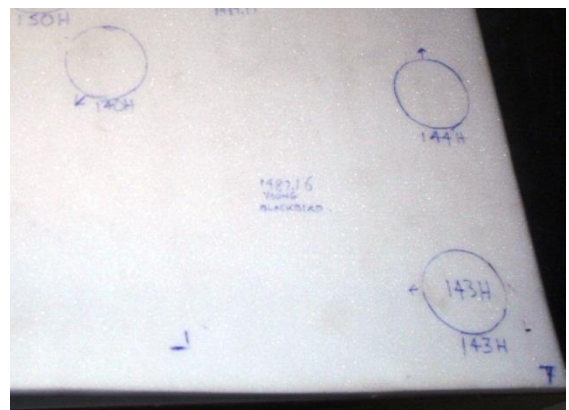
2. Specimens that lacked supports were placed on specially cut sections of thick plastazote



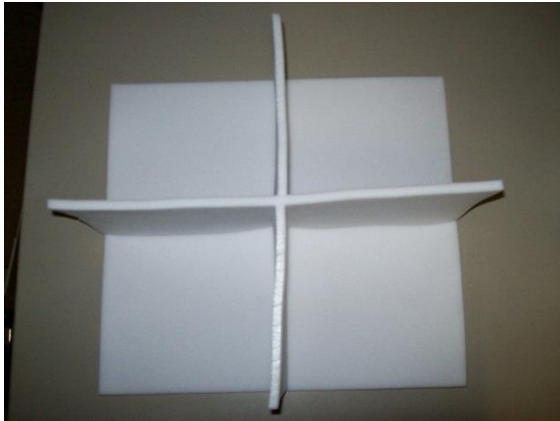
3. Specimens were arranged on the sheet but not too close as to restrict future access once they were boxed up. A cardboard box placed against the edge of the foam served as a useful gauge to ensure that the beaks and tails did not contact the sides of the box.



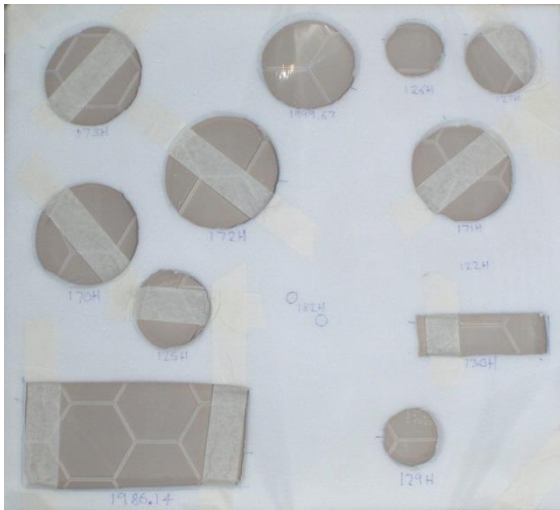
4. The bases were drawn around using biro with the number of the specimen written alongside and orientation to enable easy identification of what goes where. A list was also kept of the contents of each box.



5. Additional levels were created by making compartments out of the foam fixed together with brass nails which could then take another layer on top.



6. The foam was cut using a Stanley knife and affixed to the bottom of the box using masking tape.



8. The database was updated with the new locations. The birds were also photographed and their condition checked as part of a collections review project and this information is being added to the database

Resources Breakdown and Costs

Really Useful boxes x 10 = £110
Approximate cost of Plastizote used =£20
Fixings and adhesives=£1
Mothballs= £4
Total for materials= £135
Curatorial Time (including planning) = £300
Volunteer time (for photography and documentation) = 10 hours
Total cost=£435

Summary

Bird Cupboard 11 before



Bird Cupboard 11 after



Were the projects aims met?

Aim	Was it met?
1. Improve storage conditions and long term care.	It has been met on the basis that the collection can be moved and inspected without specimens falling over and without need for unnecessary handling. Whether this criterion has been met fully is slightly subjective and only time will tell.
2. Improve management of the collection	This criterion has certainly been met as it is much easier to find each specimen from the database.
3. Free up storage space	This criterion has been met although the amount of free storage space is much lower than anticipated and is represented by half of a box.

The main conflicts arising are related to the efficiency of space vs. accessibility. It was noted that where birds were spaced closely together it may be difficult to remove them without touching other specimens. One solution could be to affix the cut Plastizote to a removable cardboard base attached to wire pull handles.

Summary

127 items of taxidermy have been rehoused and are well supported in robust, waterproof and conservation standard materials that are easily moved without toppling of the birds and they are transportable. This will limit damage to the collections through preventing unnecessary handling, toppling and pest attack so will increase their long term care. Each specimen now has a specific box location linked to the database so can be found easily when required. Should the same cupboards be used to house them then the cost of doing the rest of the collection would be £2000-£3000 of which £1000 would be for curatorial time (assuming same salary as in pilot project) £1485 for materials. Volunteers would be used to do a much larger proportion of the work. The exact cost would depend on the costs of materials at any one particular time and the methods deemed appropriate for some of the largest specimens.

Acknowledgements

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The NATSCA (Natural Sciences Collections Association) network for their ideas and input.

The Volunteers

References:

Hendry, D. (1999). Vertebrates. In: Carter, D. & Walker, A. (eds). (1999). Chapter 1: Care and Conservation of Natural History Collections. Oxford: Butterwoth Heinemann, pp. 1 - 36.

NATSCA JISC MAIL <https://www.jiscmail.ac.uk/cgi-bin/webadmin?A2=NATSCA;83bf256d.1401>