

WASC 1927

Papers relating to
thickness of Elephant
& Hippo hide
Dec 1976

EN9 1BP

XXXXXXXXXXXXXXXXXXXXX LEA VALLEY 713030 Ext 235

Miss M Levitt
Head of the Mammalian Division
British Museum of Natural History
Cromwell Road
London SE7

ENQ 2921

10 December 1976

Dear Miss Levitt

MAMMALLIAN HIDES

We spoke recently concerning the upper ranges of thicknesses of animal hides particularly the elephant, hippo, rhino, buffalo and cow hides.

The Establishment holds in the Historical Museum the remains of part of a hide and researches have revealed that these hides used to line the floor and walls of some of the wooden single storey buildings. These buildings formed part of the gunpowder factory which was based upon this site some time ago. By suitable footwear and other preventative measures, the hides in the buildings tended to reduce to a minimum the danger of a spark in the gunpowder area.

Any information on the above topic of the hides that is able to be provided would be gratefully received at ERDE.

Yours sincerely

C M Chapman

ENQ 2921

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10 Porchester Gardens London W2 4DE

Explosives Research & Development
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Powder Mill Lane
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ext
67
Telex 22717

Your reference

Our reference
ENQ 76289/GJ/FAA
Date

15 December 1976

~~Dear Mr Chapman~~

Your telephone enquiry about the thickness of hides was passed to me for reply.

I made enquiries from the British Leather Manufacturers Research Association, Milton Park, Egham and received the following information.

- Elephant :- 4 cms to 6 cms.
- Hippo :- 4 cms to 5 cms.
- Cowhide :- 0.5 cms to 2.0 cms.

All these figures depend upon which part of the hide is sampled. For example buffalo is very light on the spine and thick on the belly. Hippo hide tends to thickness where the animals are exposed to battle scars.

Rhino hide was thought to be about the same thickness as Hippo; however in Grzimek's "Animal life encyclopaedia" Rhino hide is said to be thin in comparison with hippo hide which takes up to six years to tan satisfactorily and is then 4.5 cms thick. Elephant hide was given as 2 cms to 4 cms thick. It should however be realised that the hide of the living animal is not the same as the specimens usually measured, there being a high percentage of water in living skins.

The Zoological Society (London) may be able to help you further in so far as they deal from time to time with uncured specimens of the species you mentioned.

Yours sincerely

G Jackson
Public Services

ENQ 2921

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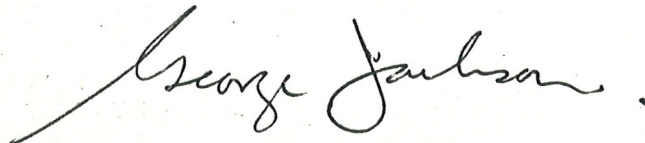
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G Jackson
Public Services

~~XXXXXXXXXXXXXXXXXXXX~~
Lea Valley 713030

235

G Jackson Esq
Public Services
Science Reference Library
Bayswater Branch
10 Rochester Gardens
London
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ENQ 76289/GJ/FAA

ENQ 2921

17 December 1976

Dear Mr Jackson

Many thanks for your letter of 15 December concerning
different animal hides.

I am sure our enquirer will find solace in the
information and the statistics provided.

All best wishes for the season.

Yours sincerely

C M Chapman

ENQ 2921



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Department of Zoology

Mr C M Chapman
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Establishment
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WALTHAM ABBEY
EN9 1BP

Your reference

Our reference DMH/JD

Date 7 January 1977

Dear Mr Chapman

I am sorry there has been a delay in answering your enquiry. Miss Levitt is at present on sick leave but I will give you the measurements she has obtained to date from her notes.

The Life of the Hippopotamus by Bradley Smith quotes the hide of a hippopotamus as being "almost one inch thick". Sylvia K Sikes in The Natural History of the African Elephant says that the skin of Loxodonta africana may reach 3cm, that is over 1 inch. It seems to me most unlikely that such exotic skins would have been used for the purpose you mention, as they would have needed large quantities.

I have forwarded your original letter and a copy of this reply to the British Leather Manufacturers Research Association in the hope that they will be better able to advise you in this matter.

Yours sincerely

DAPHNE M HILLS
Mammal Section