



an agency of the
Department of Sport, Arts and Culture

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Incorporating the satellites:	Insluitend die sateliete:
Oliewenhuis Art Museum	Oliewenhuis-kunsmuseum
Freshford House Museum	Freshford-huismuseum
First Raadsaal	Eerste Raadsaal
Wagon Museum	Waenhuismuseum
Florisbad Research Station	Florisbad-navorsingstasie

24 March 2022

To whom it may concern,

Provision of antelope samples from the Florisbad Quaternary Research Station Modern Skeletal Reference Collection.

I hereby confirm that, for her palaeogenetics study, Dr Anri van Wyk has been granted permission by the HOD of the Florisbad Quaternary Research Station to:

- obtain samples from 10 specimens of the extant species *Connochaetes gnou* (Black Wildebeest, collected during the 1930's and 1940's), all which is kept in the Florisbad Modern Mammal Reference Collection (List A attached).
- obtain samples from 20 Black Wildebeest specimens from the +/- 3500 year old Heelbo Fossil Collection (List B attached).

The method of sampling required less than 1 gram per unit of dried teeth and/or bone, either whole, sectioned or powdered. The samples will be analysed at the Department of Biochemistry, Genetics & Microbiology, University of Pretoria. The samples have no restrictions. Should you require any additional information, please do not hesitate to contact me.

Kind regards,

Dr Lloyd Rossouw
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National Museum Bloemfontein
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List A. Extant *Connochaetes gnou*

Species	Museum Catalogue no	Specimen	Study ID	Comments
Connochaetes gnou	NMBF90	Tooth powder & pieces	CGH001	Male Juv
Connochaetes gnou	NMBF80	Tooth pieces	CGH003	Female Adult
Connochaetes gnou	NMBF82	Tooth	CGH004	
Connochaetes gnou	NMBF84	Tooth powder	CGH002	Male Adult
Connochaetes gnou	NMBF96	Tooth	CGH005	Male Adult
Connochaetes gnou	NMBF81	Tooth	CGH006	Female Adult
Connochaetes gnou	NMBF92	Tooth	CGH007	Female Adult
Connochaetes gnou	NMBF93	Tooth	CGH008	Female Adult

List B. Heelbo Fossil Collection

Species	Tooth/Bone	Site	age	Box ID	Packet/Sample ID
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot418	HB2723
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot406	HB1523
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot398	HB2600
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot406	HB2851
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot418	HB2666
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot398	HB1200
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot398	HB1041
Connochaetes gnou	Bone powder	Heelbo	±3500	Unknown	Unknown
Connochaetes gnou	Bone powder	Heelbo	±3500	Unknown	HB1218
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot398	HB1129
Connochaetes gnou	Bone powder	Heelbo	±3500	Lot392	HB1288
Connochaetes gnou	Bone powder	Heelbo	±3500	Unknown	Unknown
Connochaetes gnou	Tooth powder	Heelbo	±3500	Lot414	Unknown
Connochaetes gnou	Tooth powder	Heelbo	±3500	Lot414	HB2787
Connochaetes gnou	Tooth powder	Heelbo	±3500	Lot414	HB2973
Connochaetes gnou	Tooth powder	Heelbo	±3500	Lot390	HB1834
Connochaetes gnou	Tooth powder	Heelbo	±3500	Lot390	HB2078
Connochaetes gnou	Tooth pieces	Heelbo	±3500	Lot414	HB2976
Connochaetes gnou	Tooth powder	Heelbo	±3500	Lot390	HB1661
Connochaetes gnou	Tooth	Heelbo	±3500	Lot397	HB2770

**APPENDIX 1:
PHOTOGRAPHIC RECORD
OF SPECIMENS SAMPLED**

Samples AM van Wyk

25-26 Oct 2021

Black wildebeest 1930 - 1950



Black wildebeest 1930 - 1950



Black wildebeest ±3500 years, Heelbo



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo level
Time period: +/- 3500 yr
Museum: National Museum
Museum ID: HB 2723
Study ID: CGA002
Date: 25/10/2021

bat: 08/04/08 No: 2722
Layer: 2
Scale: X23
RH - 7760. 0226
NH 3151. 15. 8620
ZH 1798. 7866
Des: distal Metocarpal



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB 1523
Study ID: CGA002
Date: 25/10/2021

1523 1526
B17
P.O. Box 1000
25 8 00



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500 yr
Museum: National Museum
Museum ID: HB 2600
Study ID: CGA003
Date: 25/10/2021

bat: 08/04/08
No: 2600
Layer: 2
Scale: X23
RH - 7760. 0226
NH 3151. 15. 8620
ZH 1798. 7866
Description: dist. humerus



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500 yr
Museum: National Museum
Museum ID: HB 2351
Study ID: CGA004
Date: 25/10/2021

NH 3151. 15. 8620
ZH 1798. 7866
Description: prox. radius



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB 2600
Study ID: CGA005
Date: 25/10/2021

bat: 08/04/08
No: 2600
Layer: 2
Scale: X23
RH - 7760. 0226
NH 3151. 15. 8620
ZH 1798. 7866
Description: prox. metacarpal



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB 1200
Study ID: CGA006
Date: 25/10/2021

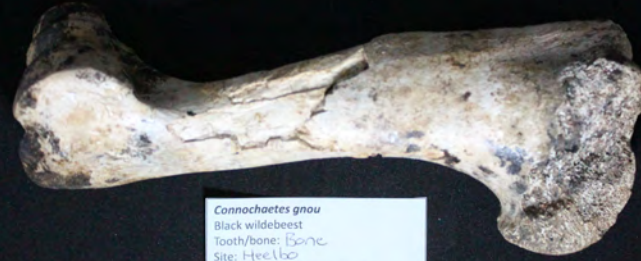
1200 - 1201
C 14

Black wildebeest ± 3500 years, Heelbo



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB1041
Study ID: CC09009
Date: 25/10/2021

1041-1042
10/17
10/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500 yr
Museum: National Museum
Museum ID: HB1042
Study ID: CC09009
Date: 25/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB1043
Study ID: CC09009
Date: 25/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB1029
Study ID: CC09010
Date: 25/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500
Museum: National Museum
Museum ID: HB1030
Study ID: CC09011
Date: 25/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Bone
Site: Heelbo
Time period: +/- 3500 yr
Museum: National Museum
Museum ID: HB1031
Study ID: CC09012
Date: 25/10/2021

Black wildebeest ± 3500 years, Heelbo



Connochaetes gnou
Black wildebeest
Tooth/bone: Tooth
Site: Heelbo
Time period: ± 3500
Museum: National Museum
Museum ID: HB2787
Study ID: CC19013
Date: 26/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Tooth
Site: Heelbo
Time period: ± 3500
Museum: National Museum
Museum ID: HB2787
Study ID: CC19014
Date: 26/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Tooth
Site: Heelbo
Time period: ± 3500 yr
Museum: National Museum
Museum ID: HB2973
Study ID: CC19015
Date: 26/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Tooth
Site: Heelbo
Time period: ± 3500 yr
Museum: National Museum
Museum ID: HB1834
Study ID: CC19016
Date: 26/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Tooth
Site: Heelbo
Time period: ± 3500 yr
Museum: National Museum
Museum ID: HB2078
Study ID: CC19017
Date: 26/10/2021



Connochaetes gnou
Black wildebeest
Tooth/bone: Tooth
Site: Heelbo
Time period: ± 3500 yr
Museum: National Museum
Museum ID: HB2976
Study ID: CC19018
Date: 26/10/2021

Black wildebeest ± 3500 years, Heelbo

