

Grass and sedge species in the diet of hippopotamus

The grasses and sedges in the tables which follow are taken from the faecal analysis of Scotcher, Stewart & Breen (1978) in Ndumu Game Reserve, Natal and are presented in the four categories of use into which they grouped species. Because of the difficulty of identifying some of the smaller epidermal plant fragments down to species level, they found it necessary to group certain species together under the generic name. The species thus grouped were –

Panicum spp. – *Panicum coloratum*, *Eriochloa meyerana* (syn. *P.meyerianum*)

Sporobolus spp. – *Sporobolus fimbriatus*, *S. nitens*

Eragrostis spp. – *Eragrostis rigidior*, *E. heteromera*

Aristida spp. – *Aristida stipitata* var. *graciliflora*, *A. congesta congesta*, *A. c. barbicollis*

Digitaria spp. – *Digitaria pentzii*, *D. swazilandensis*

Chloris spp. *Chloris gayana*, *C. virgata*

Eriochloa spp. – *Eriochloa borumensis*, *E. sp.*

Bothriochloa spp. – *Bothriochloa glabra*, *B. insculpta*

Paspalum spp. – *Paspalum commersonii*, *P.urvillei*

Grass and sedge species recorded in the diet of hippopotamus in Kruger National Park by Brynard & Pienaar (1960) and by Pienaar, Van Wyk & Fairall (1966) are indicated by a “✓” in Column **A** and additional species not recorded by Scotcher (*et al* 1978) are given in the table which follows their list.

Grass and sedge species recorded in the diet of hippopotamus on the Mara River in Serengeti, Tanzania, by Olivier & Laurie (1974) are indicated by a “✓” in Column **B** and additional species not recorded by Scotcher (*et al* 1978) are given in the table which follows their list. Species not grazed by hippo in the Mara are listed in the last table.

In Column **C** a “✓” or an “*” indicates that Mendelsohn & Roberts (1997) have listed the species or genus as occurring in the vegetation of the Caprivi.

Child & von Richter (1969) give a comprehensive list of grass and sedge species eaten by waterbuck, lechwe and puku on the Chobe floodplain grasslands in Botswana and these data are presented in the Background Study on the Wetland Grazers (Martin 2004a). Many of the grass species eaten by buffalo (Martin 2002, p5) and roan, sable and tsessebe (Martin 2003, p10) also occur in the diet of hippo.

(i) Species occurring abundantly in the diet

Species	A	B	C	Notes
<i>Panicum maximum</i>	✓	✓		
<i>Cynodon dactylon</i>	✓		✓	
<i>Urochloa mosambicensis</i>				Most preferred spp in Gonarezhou NP (Mackie 1976)
<i>Hemarthria altissima</i>	✓		✓	
<i>Cyperus fastigiatus</i>			*	
<i>Echinochloa pyramidalis</i>			✓	Young plants only in diet

(ii) Species occurring commonly in the diet

<i>Sporobolus virginicus</i>				Species not listed in van Oudtshoorn (1999)
<i>Sporobolus</i> spp.		✓		
<i>Eragrostis superba</i>				
<i>Sporobolus smutsii</i>				Species not listed in van Oudtshoorn (1999)
<i>Eragrostis</i> spp.			*	
<i>Aristida</i> spp.			*	
<i>Digitaria</i> spp.			*	
<i>Panicum</i> spp.	✓	✓		
<i>Paspalum</i> spp.				
<i>Chloris</i> spp.	✓			

(iii) Species occurring uncommonly or randomly in the diet

<i>Schmidtia pappophoroides</i>			✓	
<i>Themeda triandra</i>	✓	✓		
<i>Setaria sphacelata</i>				
<i>Dactyloctenium australe</i>			*	
<i>Panicum deustum</i>				
<i>Eustachys paspaloides</i>				
<i>Heteropogon contortus</i>		✓		
<i>Trichoneura grandiglumis</i>				
<i>Eragrostis cilianensis</i>				

(iii) Species occurring uncommonly or randomly in the diet *(continued)*

<i>Hyperthelia dissoluta</i>			✓	
<i>Pogonarthria squarrosa</i>				
<i>Eriochloa</i> spp.	✓			
<i>Bothriochloa</i> spp.		✓		
<i>Ischaemum brachyatherum</i>				Species not listed in van Oudtshoorn (1999)
<i>Phragmites australis</i>	✓		✓	

(iv) Species absent from the diet but present in the Ndumu study area

<i>Tragus berteronianus</i>				
<i>Oplismenus hirtellus</i>				
<i>Setaria chevalieri</i>				Now <i>Setaria megaphylla</i>
<i>Enteropogon macrostachyus</i>				
<i>Diplachne eleusine</i>				
<i>Enteropogon monostachys</i>				
<i>Leptochloa uniflora</i>				<i>L. uniflora</i> var. <i>africanus</i>
<i>Perotis patens</i>				
<i>Heterocarpha schiemaniana</i>				
<i>Tricholaena monachne</i>				
<i>Enneapogon cenchroides</i>				
<i>Digitaria gymnostachys</i>			*	Species not listed in van Oudtshoorn (1999)
<i>Rhynchelytrum repens</i>				Now <i>Melinis repens</i>
<i>Panicum infestum</i>				
<i>Cenchrus ciliaris</i>				
<i>Triraphis schlechteri</i>				Now <i>Triraphis schinzii</i>
<i>Sorghum verticilliflorum</i>				Now <i>Sorghum bicolor</i> subsp. <i>arundinaceum</i>
<i>Dinebra retroflexa</i>				
<i>Diplachne fusca</i>				
<i>Leptochloa panicea</i>				Species not listed in van Oudtshoorn (1999)
<i>Phragmites mauritianus</i>				

Additional species in hippo diet recorded in the other studies

<i>Loudetia filifolia</i>	●		*	Species not recorded in van Oudtshoorn (1999)
<i>Cyperus sexangularis</i>	●			
<i>Typha capensis</i>	●			
<i>Panicum deustum</i>	●			
<i>Andropogon schirensis</i>		●	✓	
<i>Sporobolus stapfianus</i>		●		
<i>Eragrostis cilianensis</i>		●		
<i>Eragrostis racemosa</i>		●		
<i>Hyparrhenia filipendula</i>		●	*	
<i>Eragrostis tenuifolia</i>		●		
<i>Cyperus merkeri</i>		●		

Additional species absent from the diet but present in the Serengeti study area

<i>Loudetia kagarensis</i>		●		Species may not occur in southern Africa
<i>Sporobolus pellucidus</i>		●		Species may not occur in southern Africa
<i>Sporobolus pyramidalis</i>		●		
<i>Eragrostis humidicola</i>		●		Species may not occur in southern Africa
<i>Cymbopogon excavatus</i>		●	✓	
<i>Setaria sphacelata</i>		●	✓	