Konza-Kruger Experiment – Kruger Partial Data Species Composition Metadata

This data come from Kruger National Park (Kruger), Mpumalanga, South Africa near the Satara rest camp. This set from Kruger is of the partial exclosures, full exclosures, and paired plots that were established in 2007. Species composition was collect at the beginning (January) and end (March) of each growing season. Each plant species’ cover in 4 permanent 1x1m subplots inside and outside the exclosure was recorded to the nearest one percent twice a year. The maximum value of the two samplings was used, and data presented here are the mean of the 4 subplots.

Year – We have species composition data for years 2007-2013.

String – Kruger is set up with numerous Experimental Burn Plots (EBPs). These exclosures were established on two of these EPBs – N’wanetsi (N), and Satara (S) in the central region of the park. We use each of the different EBPs as a string.

Block – Each StingXFire combination has 5 replicates of each herbivore treatment. Plots are lettered A-H based off of proximity to exclosures from the Kruger Core Experiment. Since that experiment has 7 replicate, this experiment chose the closest replicate to keep the letters the same, and therefore, the letters do not go in sequence.

Herbivore – This experiment has three different herbivore treatments – Full (removal of all large herbivore; i.e. ungrazed), Open Access (grazed), and Partial (which removes all herbivore zebra size and above allowing things like impala, steinbuck, and warthog into the partial exclosure to still graze).

Fire – At Kruger, we work in three different burn treatments, each one replicated in each of the strings. The burn treatments we utilize are part of long term experimental manipulations (+50yrs) run by Kruger Scientific Services. The annual are burned every year. The intermediate are burned every 4 years, and the unburned have not been burned during this project. Please reference the Kruger National Park Scientific Services website for specific years when certain stringxfire trt combinations were burned.

Species are assigned a number as they are found in our sites to avoid mistakes in spelling while data entry is occurring from year to year. Below is the list of species numbers and the scientific names. Not all the species below are found in this dataset.

|  |  |  |
| --- | --- | --- |
| ID | Genus | species |
| spp1 | Bothriochloa | radicans |
| spp10 | Aristada | congesta barbicollis |
| spp100 | Cucumis | hirsutus |
| spp101 | Gisekia | c.f. africana |
| spp102 | Trianthema | salsoloides transvaalensis |
| spp103 | Rhynchosia #1 small |  |
| spp104 | Rhynchosia #2 (totta like, narrow) |  |
| spp105 | Rhynchosia creeper (3 leaf) |  |
| spp106 | Ruellia | Sp. |
| spp107 | Saxafrag basal rosette |  |
| spp108 | Scilla (Ledebouria apurtifolia?) |  |
| spp109 | Seedling? |  |
| spp11 | Chloris | virgatum |
| spp110 | Sida | dregei |
| spp111 | Hibiscus | micranthus |
| spp112 | Solanum | panduriforme |
| spp113 | Spiny blepharis |  |
| spp114 | Ipomoea | plebia africana |
| spp115 | Acalypha | villicaulis |
| spp116 | Stinging nettle-like non leucas |  |
| spp118 | Tephrosia | purpurea leptostachya |
| spp119 | Tephrosia | semiglabra |
| spp12 | Dactylotenium | aegyptium |
| spp120 | Tribulus | terrestris |
| spp122 | Tulbaghia |  |
| spp123 | Dolichos | trilobus transvaalicus |
| spp125 | Yellow flowering stalk (dead) |  |
| spp127 | Tragia | rupestris |
| spp128 | Crotoleria 4 (narrow, glabrous leaves) |  |
| spp129 | Barleria proper |  |
| spp13 | Enneapogon | cenchroides |
| spp130 | Vernonia | fastigata |
| spp1301 | Digitaria | sp. |
| spp1302 | Digitaria | sp2 |
| spp1303 | Indigophera | holubii |
| spp1304 | Ipomea | obscura |
| spp1305 | Ocimum | sp. |
| spp1306 | Orbica | rogersii |
| spp1307 | Unknown redflower |  |
| spp1308 | UnknownQuilted |  |
| spp1309 | UknownOpp |  |
| spp131 | Ipomoea | sp. |
| spp1310 | UnknownOpp2 |  |
| spp1311 | UnknownMidVein |  |
| spp1312 | UnknownCrotolaria |  |
| spp132 | Acacia | borlea |
| spp133 | Amnocharis | sp. |
| spp134 | Aristida | adscensionis |
| spp135 | Pergularia | daemia var. daemia |
| spp136 | Ceratotheca | triloba |
| spp137 | Ceropegia |  |
| spp139 | Crotoleria | podocarpa |
| spp14 | Eragrostis | nidensis |
| spp140 | Crotalaria | sphaerocarpa |
| spp141 | Monechma | debile |
| spp142 | Eragrostis | sp. |
| spp143 | Evolvulus #2 |  |
| spp144 | Felicia | clavipilosa transvaalensis |
| spp145 | Holly type (Gradera?) |  |
| spp146 | Becium | obovatum |
| spp147 | Ormocarpum | tricocarpum |
| spp148 | Senecio like |  |
| spp149 | Securinega | virosa |
| spp15 | Eragrostis | superba |
| spp150 | Setaria | incrassata |
| spp151 | Sporobolus | nitens |
| spp152 | Vigna narrow leaf |  |
| spp153 | Melhania |  |
| spp154 | Dangle flower narrow |  |
| spp155 | Aster opposite |  |
| spp156 | Hibiscus | prusillis |
| spp158 | Lantana | rugosa |
| spp159 | Velvety silver sida |  |
| spp16 | Eragrostis | sp. |
| spp160 | Opposite leaf axil |  |
| spp161 | Sida 3 (red margin) |  |
| spp162 | Convolvulus hairy (Turbina?) |  |
| spp163 | Abutilon | austoafricanum |
| spp164 | Cyperus white |  |
| spp165 | Corchorus #3 |  |
| spp166 | Stachys-like creeper |  |
| spp167 | Barleria | transvaalensis |
| spp168 | Coccinia | rehmannii |
| spp169 | Commicarpus | pentandrus |
| spp17 | Eragrostis | lehmanniana |
| spp170 | Ledebouria striped |  |
| spp171 | Portulaca | oleracea |
| spp172 | Seddera | suffruticosa |
| spp173 | Sericorema | sp. cf. sericea |
| spp174 | Sida | cordifolia |
| spp175 | Unknown woody |  |
| spp176 | Ledebouria | spp |
| spp177 | Acacia | exuvialis |
| spp178 | Acacia | tortillis |
| spp179 | Becium | sp. |
| spp180 | Cassia | sp. |
| spp182 | Cleome-like aster |  |
| spp183 | Commicarpus green |  |
| spp184 | Dichrostachys | cinerea |
| spp185 | Digitaria | gigantum |
| spp186 | Egg-like aster (Felicia) |  |
| spp187 | Evolvulus white |  |
| spp188 | Grey velvet amaranthus |  |
| spp189 | Heliotropium | sp. |
| spp19 | Heteropogon | contortus |
| spp190 | Ocimum | americanum |
| spp191 | Priva | africana |
| spp192 | Unknown |  |
| spp194 | Asclepias | sp. |
| spp195 | Wood Shrub |  |
| spp196 | Triceiia |  |
| spp198 | Trifoliate unknown |  |
| spp199 | Ericostema | axillare |
| spp2 | Cenchrus | ciliaris |
| spp20 | Schmidtia | pappophoroides |
| spp201 | Lily | sp. |
| spp202 | Socurinega | verrusa |
| spp203 | Senna | italica |
| spp204 | Acacia | sp. |
| spp205 | Chloris | roxburgeana |
| spp206 | Cleome palmate leaf |  |
| spp207 | Combretum | heroensis |
| spp208 | Commelina | africana |
| spp209 | Crassenea | romania |
| spp21 | Setaria | sphacelata |
| spp210 | Dicoma | tomentosa |
| spp211 | Elongated, serrated leaf |  |
| spp212 | Hibiscus-like |  |
| spp213 | Ipomea-like climber |  |
| spp214 | Ledebouria |  |
| spp215 | Leonotis |  |
| spp216 | Milkweed |  |
| spp217 | Sedge |  |
| spp218 | Trifoliate very narrow long leaves |  |
| spp219 | Unknown creeper |  |
| spp22 | Sporobolus | pyramidalis |
| spp220 | Corbichonia | decumbens |
| spp222 | Unknown opposite |  |
| spp223 | Unknown forb thorn |  |
| spp224 | Unknown forb serrated |  |
| spp225 | Panicum | sp |
| spp227 | Unknown forb |  |
| spp228 | Unknown zebra wood |  |
| spp229 | Blepharis | saxatilis |
| spp23 | Tragus | berteronianus |
| spp230 | #581 Kevin; squared serrated leaves | 5 |
| spp231 | Creeper |  |
| spp232 | Creeper (Cuclemis-like) |  |
| spp233 | Creeping Claw Foot |  |
| spp234 | Chamaecrista | absus |
| spp235 | Elongated, point tips (Chris-375) |  |
| spp236 | Unknown grass |  |
| spp237 | Fabaceae, purple flower (Picture 531 & 532, Kevin |  |
| spp238 | Hybanthus-like |  |
| spp238 | Unknown hybanthus-like forb |  |
| spp239 | Indigofera | schimperii |
| spp24 | Pavonia | burchelii |
| spp240 | Indigofera | sp |
| spp241 | Justicia | sp |
| spp242 | Lamunacea (blue flowers) |  |
| spp243 | Ledebouria | sp |
| spp244 | Pea |  |
| spp245 | Rhynchosia | sp |
| spp245 | Trifoliate very narrow long leaves; 1620-1622 |  |
| spp246 | Shrub |  |
| spp246 | Shrub (check 2010; eritia?) |  |
| spp247 | Species A (collected) |  |
| spp248 | Unknown (opposite, simple non-serrated leaves; ha |  |
| spp249 | Unknown cotyledons |  |
| spp250 | Unknown hairy leaf |  |
| spp251 | Unknown seedling (KW # 585) |  |
| spp252 | Unknown seedling; Pic KW #565; 3 leaved; possible |  |
| spp253 | Woody sp - no leaves |  |
| spp254 | Aptosimum | lineare |
| spp255 | Aristida | sp |
| spp256 | Crotelaria | hydmannii |
| spp257 | Delosperma | herbeum |
| spp258 | Diospyros | lycioides |
| spp259 | Hibiscus | vitifolius |
| spp26 | Acacia | nigrescens |
| spp260 | Kohautia | cephoides |
| spp261 | Ledabouria | sp. |
| spp262 | Ledabouria | stenophylla |
| spp263 | Neorautenia | filifolius |
| spp264 | Ophioglossum | polyphyllum |
| spp265 | Orinithaligum | sp |
| spp266 | Pellaea | sp |
| spp267 | Portulaca | quadrifida |
| spp268 | Seddera | capensis |
| spp269 | Syncolostemon | sp |
| spp27 | Albuca |  |
| spp270 | Vigna | vexillata |
| spp271 | Clerodendrum | ternatum |
| spp272 | Denekia | capensis |
| spp273 | Combretum | imberbe |
| spp274 | Purgularia |  |
| spp275 | Rhychnia | albinnima |
| spp276 | Ruellia |  |
| spp277 | Serringia | virosa |
| spp278 | Sesimum |  |
| spp279 | Stipelia |  |
| spp28 | Aloe |  |
| spp29 | Alysicarpus | rugosus perennirufus |
| spp3 | Digitaria | eriantha |
| spp30 | Limeum | pterocarpus var. pterocarpus |
| spp31 | Indigofera | vicioides |
| spp33 | Asystasia | schimperi |
| spp35 | Commicarpus | pilosus |
| spp36 | Cucumis | zeyheri |
| spp37 | Jatropha | sp. |
| spp38 | Black jack type |  |
| spp39 | Blepharis | integrifolia |
| spp4 | Themeda | triandra |
| spp40 | Heliotropium | strigosum |
| spp43 | Chamaecrista | mimosoides |
| spp44 | Cheilanthes-like fern |  |
| spp45 | Cleome | augustifolia |
| spp46 | Commelina | benghalensis |
| spp47 | Commelina | erecta |
| spp48 | Corchorus #1 |  |
| spp49 | Corchorus | asplenifolius |
| spp5 | Panicum | coloratum |
| spp50 | Talinum | caffrum |
| spp52 | Crassula type |  |
| spp53 | Amnocharis | coranica |
| spp54 | Crinum | sp. |
| spp56 | Indigofera | rhytidocarpa subsp. Rhytidocarpa |
| spp57 | Crotalaria | virgulata grantiana |
| spp59 | Dalbergia | melanoxylon |
| spp6 | Panicum | deustum |
| spp60 | Hybanthus | enneaspermus serratus |
| spp61 | Ehretia | rigida |
| spp62 | Eriosema | sp. |
| spp62 | Rhynchosia | densiflora |
| spp63 | Chamaesyce | inaequilatera |
| spp64 | Evolvulus | alsenoides |
| spp67 | Achyropsis | leptostachya |
| spp68 | Hairy leaf seedling narrow |  |
| spp7 | Panicum | maximum |
| spp70 | Helichrysum type (parallel veins) |  |
| spp71 | Heliotropium | steudneri |
| spp72 | Hermannia | sp. (cf. glanduligera) |
| spp73 | Hibiscus big furry leaf |  |
| spp74 | Merremia | palmata |
| spp75 | Hibiscus type? |  |
| spp76 | Indigastrum | parviflorum |
| spp77 | Justicia | protracta |
| spp78 | Justicia | flava |
| spp79 | Linum | thunbergii |
| spp8 | Urochloa | mosambicensis |
| spp80 | Kyphocarpa | angustifolia |
| spp81 | Lactuca-like forb |  |
| spp82 | Ledebouria #1 |  |
| spp83 | Ledebouria #2 |  |
| spp84 | Ledebouria narrow |  |
| spp85 | Ledebouria | revoluta |
| spp86 | Ledebouria seedling (crinum) |  |
| spp87 | Leucas | glabrata |
| spp88 | Mariscus sedge |  |
| spp89 | Sclerocarya | birrea supsp. Caffra |
| spp9 | Urochloa | panicoides |
| spp90 | Cleome | monophylla |
| spp91 | Narrow leaf seedling |  |
| spp92 | New purple leaf |  |
| spp93 | Opposite leaf, red margin |  |
| spp94 | Opposite narrow-leaf forb |  |
| spp95 | Phyllanthus | burchellii |
| spp96 | Phyllanthus | maderaspatensis |
| spp97 | Phyllanthus | nummulariifolius |
| spp98 | Polygala | sphenoptera |
| spp99 | Polygala fleshy |  |
| spp995 | Termite mound |  |
| spp996 | Carnivore dung/mushroom |  |
| spp997 | Dung |  |
| spp998 | Bare ground |  |
| spp999 | Litter |  |