

GAME COUNTS IN NORTH-WEST NAMIBIA

Conservancies north of the veterinary fence

June 2018



Total Population Estimates

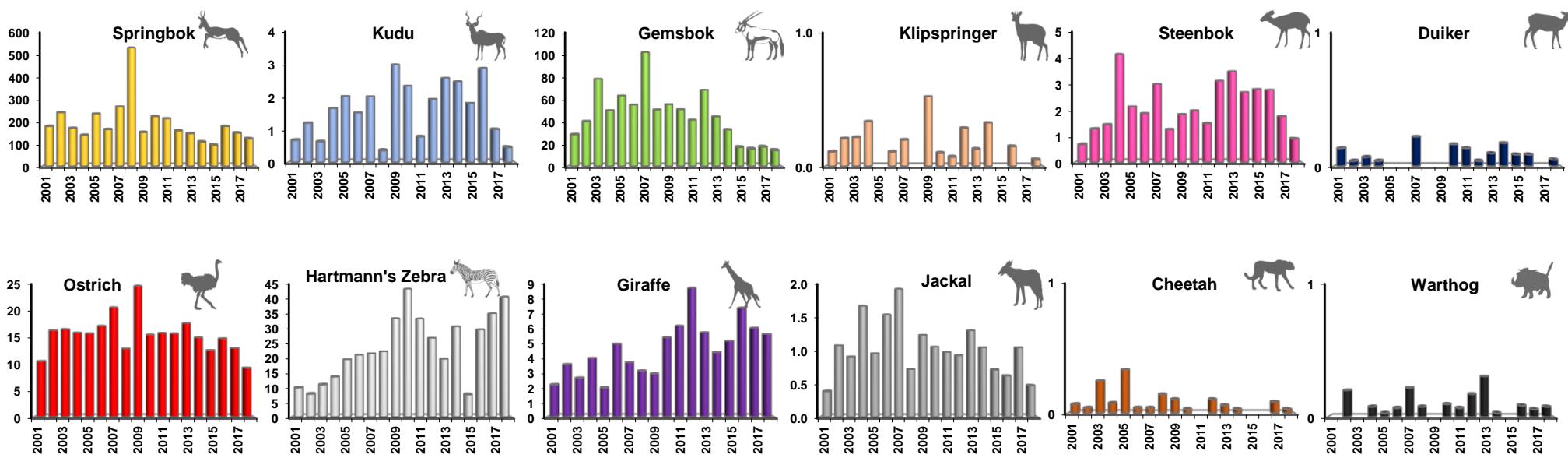
| Species | Population estimate | Lower 95% CL | Upper 95% CL |
|-----------------------|---------------------|--------------|--------------|
| Gemsbok (HN) | 3,680 | 1,890 | 7,180 |
| Kudu (HN) | 140 | 55 | 340 |
| Ostrich (U) | 2,650 | 1,830 | 3,840 |
| Springbok (HN) | 36,950 | 25,700 | 53,140 |
| Steenbok (HN) | 1,980 | 1,220 | 3,210 |
| Hartmann's Zebra (HN) | 9,990 | 6,320 | 15,810 |

All above estimates are derived using DISTANCE analysis. This takes account of drop off in detection with distance from the transect line. They are conservative estimates as 35% of the count area is not sampled (due to inaccessibility) and is consequently assumed to hold no animals. Model selection: U = uniform key; HN = half normal

Total number of animals seen each year

| Species | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | |
|--------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| Baboon | 45 | 44 | 55 | 73 | 253 | 61 | 234 | 105 | 105 | 125 | 17 | 136 | 272 | 123 | 235 | 331 | 132 | 114 | |
| Cheetah | 2 | 1 | 7 | 2 | 10 | 1 | 1 | 4 | 3 | 1 | 3 | 2 | 1 | 1 | 3 | 3 | 1 | 1 | |
| Duiker | 4 | 1 | 2 | 1 | | | 6 | | | 5 | 4 | 1 | 3 | 6 | 3 | 3 | 2 | 2 | |
| Eland | 11 | | | | | 36 | 5 | 30 | | 13 | 2 | | 2 | 16 | 5 | 9 | | | |
| Elephant | 16 | 10 | 24 | 5 | 31 | 1 | 4 | 8 | 20 | 10 | 1 | 9 | 8 | 4 | 12 | 14 | 18 | 11 | |
| Gemsbok | 809 | 975 | 2,152 | 1,348 | 1,845 | 1,508 | 2,649 | 1,337 | 1,580 | 1,493 | 1,257 | 1,911 | 1,401 | 1,101 | 575 | 524 | 586 | 626 | |
| Giraffe | 64 | 89 | 75 | 111 | 59 | 140 | 99 | 85 | 86 | 163 | 182 | 252 | 186 | 152 | 178 | 256 | 209 | 219 | |
| Hyaena | 1 | | | | | 2 | | | | | | 6 | 1 | | 1 | | 1 | | 1 |
| Jackal | 11 | 26 | 25 | 45 | 28 | 42 | 50 | 19 | 35 | 31 | 28 | 26 | 41 | 35 | 24 | 21 | 35 | 18 | |
| Klipspringer | 3 | 5 | 6 | 9 | | 3 | 5 | | 15 | 3 | 2 | 8 | 4 | 11 | | 5 | | 2 | |
| Kudu | 20 | 30 | 18 | 46 | 61 | 43 | 54 | 10 | 88 | 71 | 23 | 56 | 84 | 86 | 63 | 100 | 35 | 18 | |
| Ostrich | 298 | 394 | 454 | 427 | 458 | 469 | 534 | 339 | 702 | 454 | 451 | 439 | 555 | 502 | 422 | 496 | 435 | 398 | |
| Springbok | 5,078 | 5,823 | 4,692 | 3,748 | 6,865 | 4,527 | 6,939 | 13,999 | 4,342 | 6,569 | 6,136 | 4,463 | 4,640 | 3,662 | 3,210 | 6,015 | 5,028 | 4,816 | |
| Steenbok | 20 | 32 | 41 | 115 | 64 | 53 | 80 | 34 | 54 | 60 | 44 | 90 | 113 | 93 | 97 | 96 | 61 | 35 | |
| Warthog | | | | 5 | 2 | 1 | 2 | 6 | 2 | | 3 | 2 | 5 | 10 | 1 | 3 | 2 | 3 | |
| H. Zebra | 283 | 189 | 302 | 367 | 568 | 576 | 558 | 585 | 950 | 1,271 | 970 | 748 | 619 | 1,028 | 256 | 993 | 1,177 | 1,529 | |

Trends - Number of animals per 100km



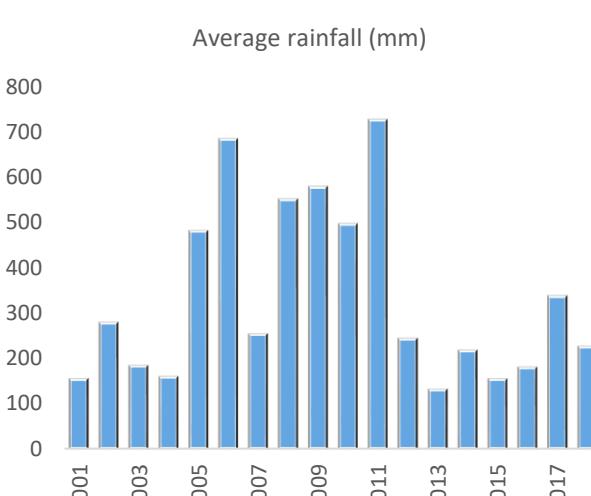
Animals seen during this count and minimum estimates

| Species | Total | Anabeb | Ehi-Rovipuka | Marienfluss | Okangunduma | Okondjombo | Omatendeka | Ombujokangundi | Ongongo | Orupembe | Orupupa | Otjambangu | Otjikondavirongo | Otjiu-west | Otuzembra | Ozondundu | Puros | Sanitas | Sesfontein |
|------------------|-------------|----------|--------------|-------------|-------------|------------|------------|----------------|-------------|----------|-----------|------------|------------------|------------|-----------|-------------|--------------|-----------|------------|
| Gemsbok | 9 (38) | | | 151 (840) | | | | | 220 (1,817) | | | | | | | | 6 (45) | 81 (602) | 74 (541) |
| Giraffe | 35 (70) | 54 (180) | 4 (8) | | 6 (12) | 63 (126) | | | 9 (18) | 1 (6) | | 14 (28) | | 6 (12) | | | 8 (16) | 11 (22) | 7 (12) |
| Kudu | | 4 (28) | | | | | | | | | | 4 | | 3 (8) | | | | 7 (37) | |
| Ostrich | 10 (33) | 5 (46) | 27 (211) | 17 (96) | 33 (219) | 20 (80) | 9 (33) | 14 (50) | 73 (579) | 14 (81) | 19 (29) | 9 (25) | 13 (56) | 2 (10) | 6 (22) | 12 (81) | 32 (238) | 32 (160) | |
| Springbok | 420 (1,136) | 68 (251) | 82 (561) | 78 (445) | 380 (571) | 583 (719) | 60 (167) | 22 (80) | 785 (3,089) | 16 (108) | 250 (287) | 58 (168) | 39 (181) | | 25 (72) | 221 (522) | 1418 (2,428) | 156 (487) | |
| Steenbok | | 2 (18) | | 8 (47) | 1 (8) | 1 (4) | 9 (24) | 4 (15) | | 5 (31) | 1 (2) | | | 2 (8) | 2 (8) | | | | |
| Hartmann's Zebra | 320 (1,180) | 9 (23) | 129 (776) | | 123 (1,210) | 123 (513) | | | 74 (439) | | | 14 (29) | | | 16 (46) | 167 (1,347) | 487 (2,693) | 67 (272) | |

Values without brackets are numbers of animals seen along transects. Values inside brackets are minimum estimates assuming all animals within 500m on each side of the transect line are detected i.e. there is no adjustment for drop off in detection with distance from the transect line. In addition, for springbok, gemsbok and giraffe, large groups were excluded from extrapolations and added afterwards.

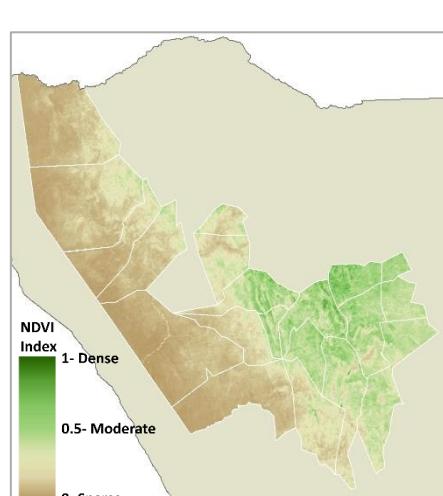
The sum of these values will be significantly lower than the totals indicated in the top left table as the total estimates take account of species detection curves.

Rainfall

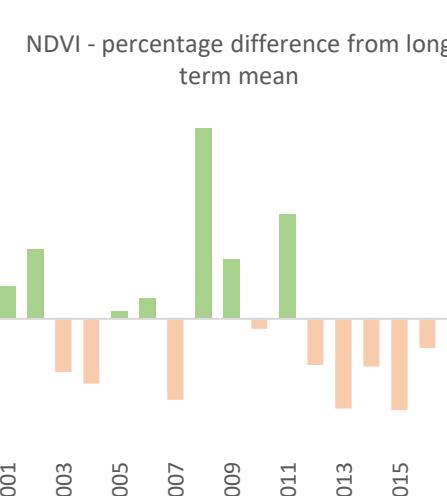


The rainfall season is from July to June and values are an average for the whole area. The year represents the season immediately prior to the count.

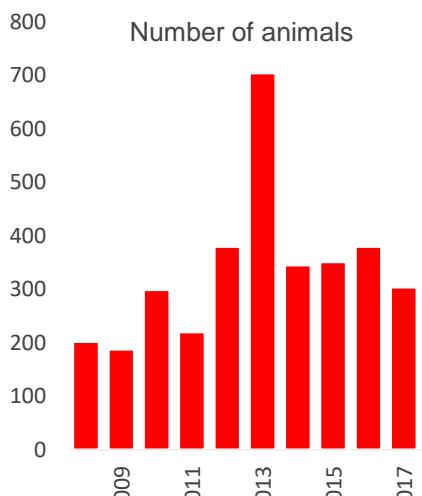
Vegetation



NDVI is a measure of the density of chlorophyll in vegetation cover. It can be used as an indicator of the amount of biomass available to wildlife. The map shows the NDVI status in the current year (Mar-May) and the trend indicates the average deviation from the long-term mean (2001-2018).



Mortalities



Total number of carcasses from all species recorded in the Event Book