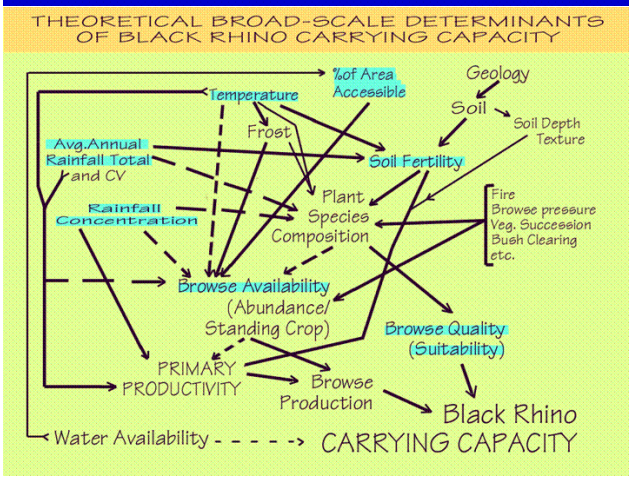
3.3 Presentation: Use of software tools for rhino conservation (Richard Emslie)

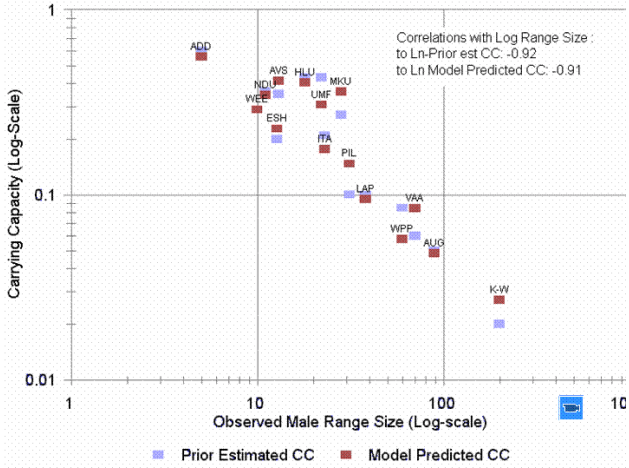
Software tools

- Database systems for capturing, storing, querying and summarising rhino sighting data and producing reports (WILDb, KZN, Kunene,KWS)
- Tools to assist with analysis of population peformance – adds capacity and helps standardise results facilitating comparisons between reserves + saves time (WILDxl)
- Population estimation software to produce population estimates with confidence levels from sighting data (RHINO)

Software tools

- Law Database application to store information on cases and incidents and to query this information and produce reports
- Micro-Track transponder database system to keep track of transponders implanted and to be able to quickly trace where transponder used if recovered.
- Photo ID assessment tool
- RMG Black Rhino Carrying Capacity Estimation Model





Software tools

- Spreadsheet tools
  - E.g block count analyses
- Training
  - AVI Videos with sound - software help and tutorials (eg RHINO 2.0), AfRSG ID course training videos – eg ageing, black rhino condition assessment (ease of use/capacity building)
- Horn Fingerprinting
  - Final aim – be able to import standardised format file with horn chemistry data from labs into software package which then classifies horn sample in terms of both species, and source of origin with probabilities

Software

- Applied research – Statistical software
  - For example, to tease out the influence of physical environmental factors (slope, altitude, geology, aspect etc.) compared to fire data (fire frequencies for different time periods) on black rhino habitat quality (woody species and size class composition).
- GIS/Plotting
  - Patrol effort, Incident mapping, habitat maps, home ranges, post-release movement

Integration of Software

- Rhino database systems (WILDb, KZN,Kenyan) being adapted to produce RHINO 2.0 compatible input files (Saves staff time)
- Rhino, Law and Transponder database systems have a local (reserve, game capture, permits office) version, and consolidated national/agency version. Transfer of data from local databases to national database.

BUT....

- These tools are/will be very useful (save time; provide more standardised and useful information on which to base management decisions; as well as building capacity) BUT...
- They are NOT a substitute for field work (e.g. law enforcement patrolling, browse assessments, rhino monitoring etc.)
- In addition to data quantity, data quality remains critical Garbage IN .. Garbage OUT