

A PRIORI VALUATION OF LAND UTILISATION FOR THE CONSERVATION OF BLACK RHINO

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Species re-introduction or supplementation



$$CC = + 'CI - Model - AdjCC' !Y33 * 1.054$$

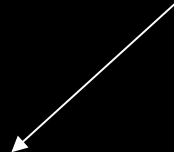
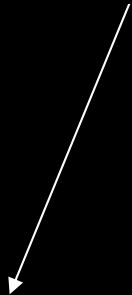
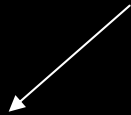
Re-introduction numbers
and release sites

Understand
habitat utilisation

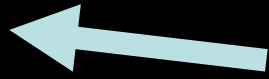
Future harvesting
strategies

Post release monitoring
efforts

Habitat
management



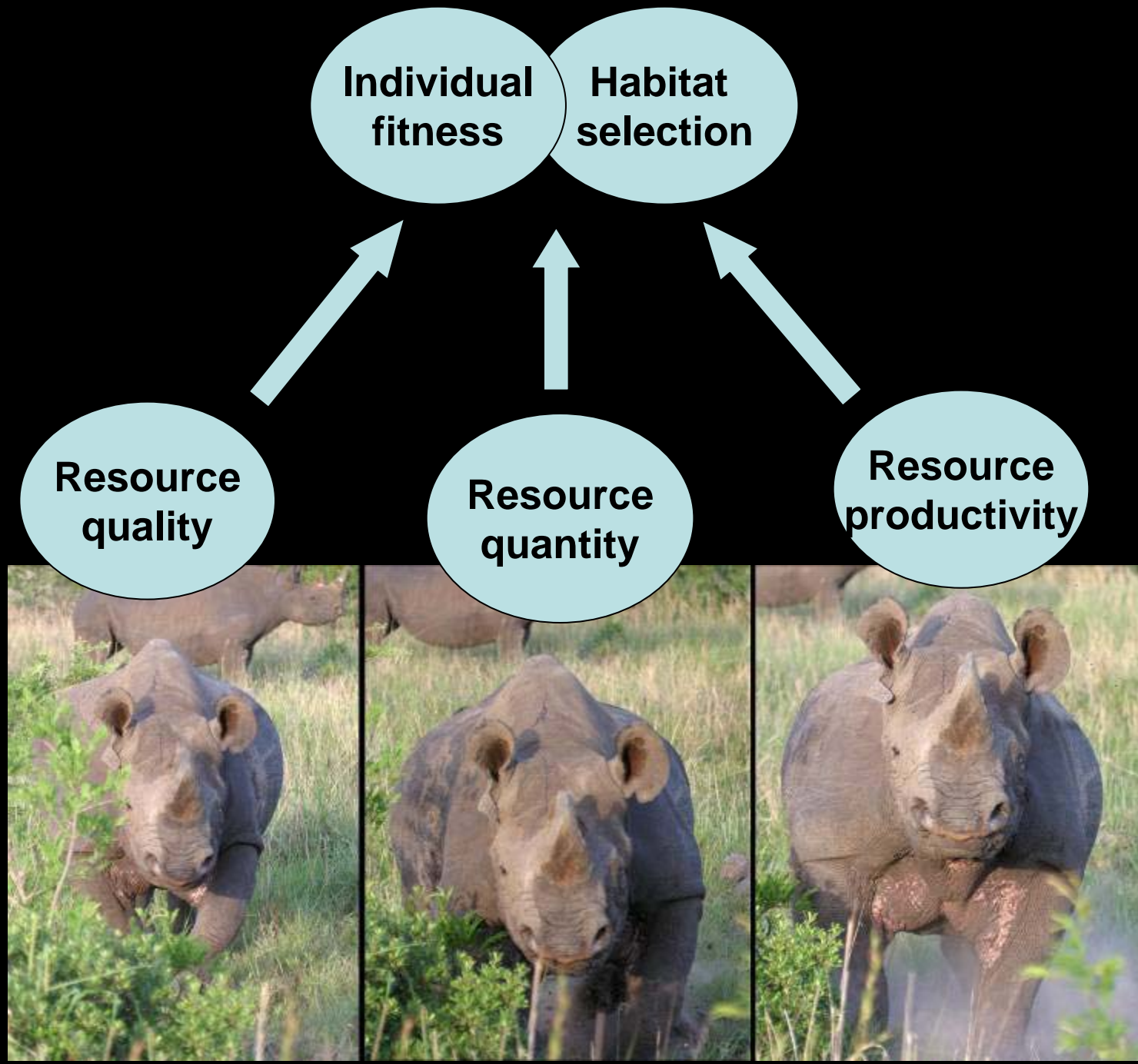
**Population
growth**



**Individual
fitness**

**Habitat
selection**





**Individual
fitness**

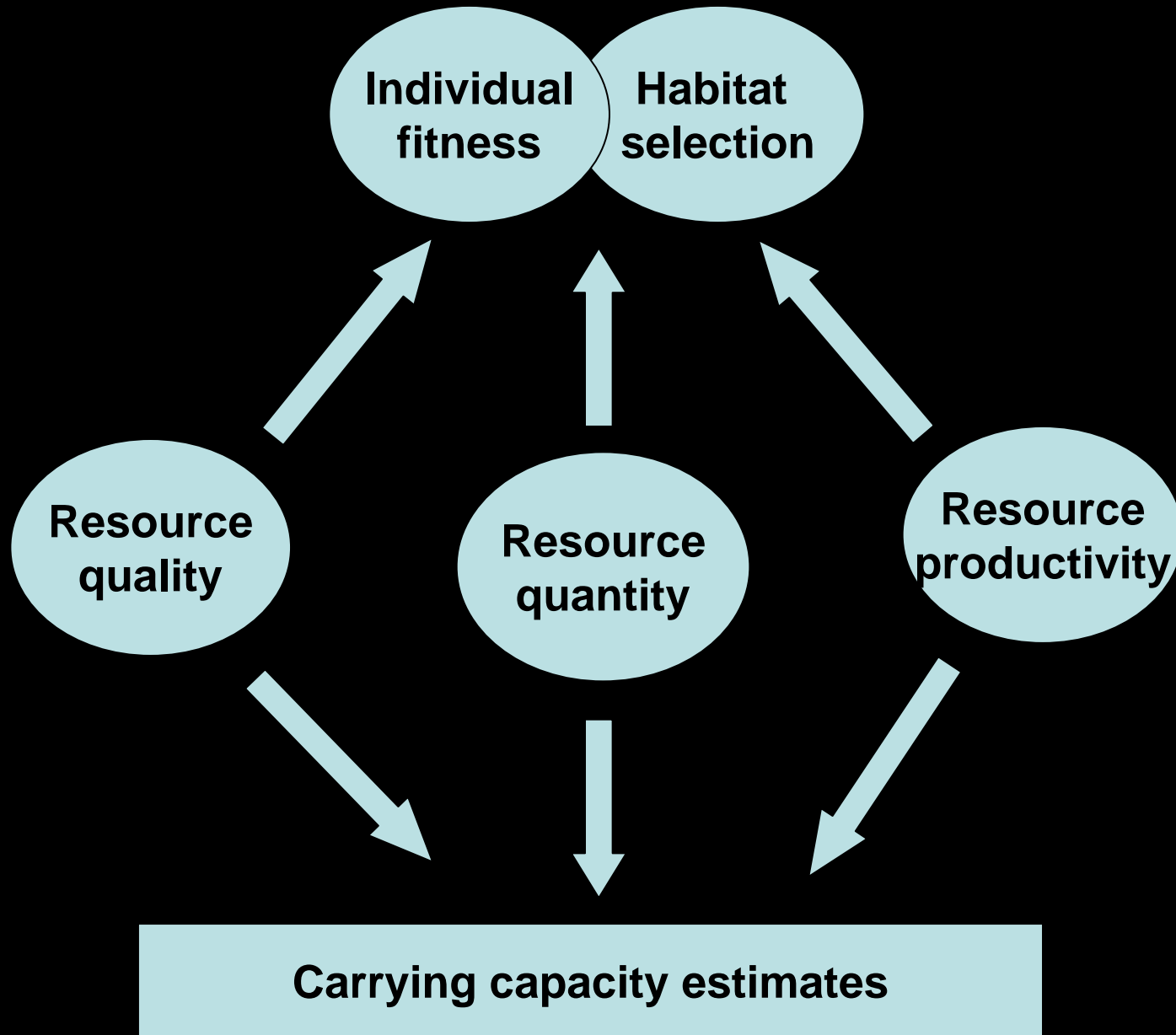
**Habitat
selection**

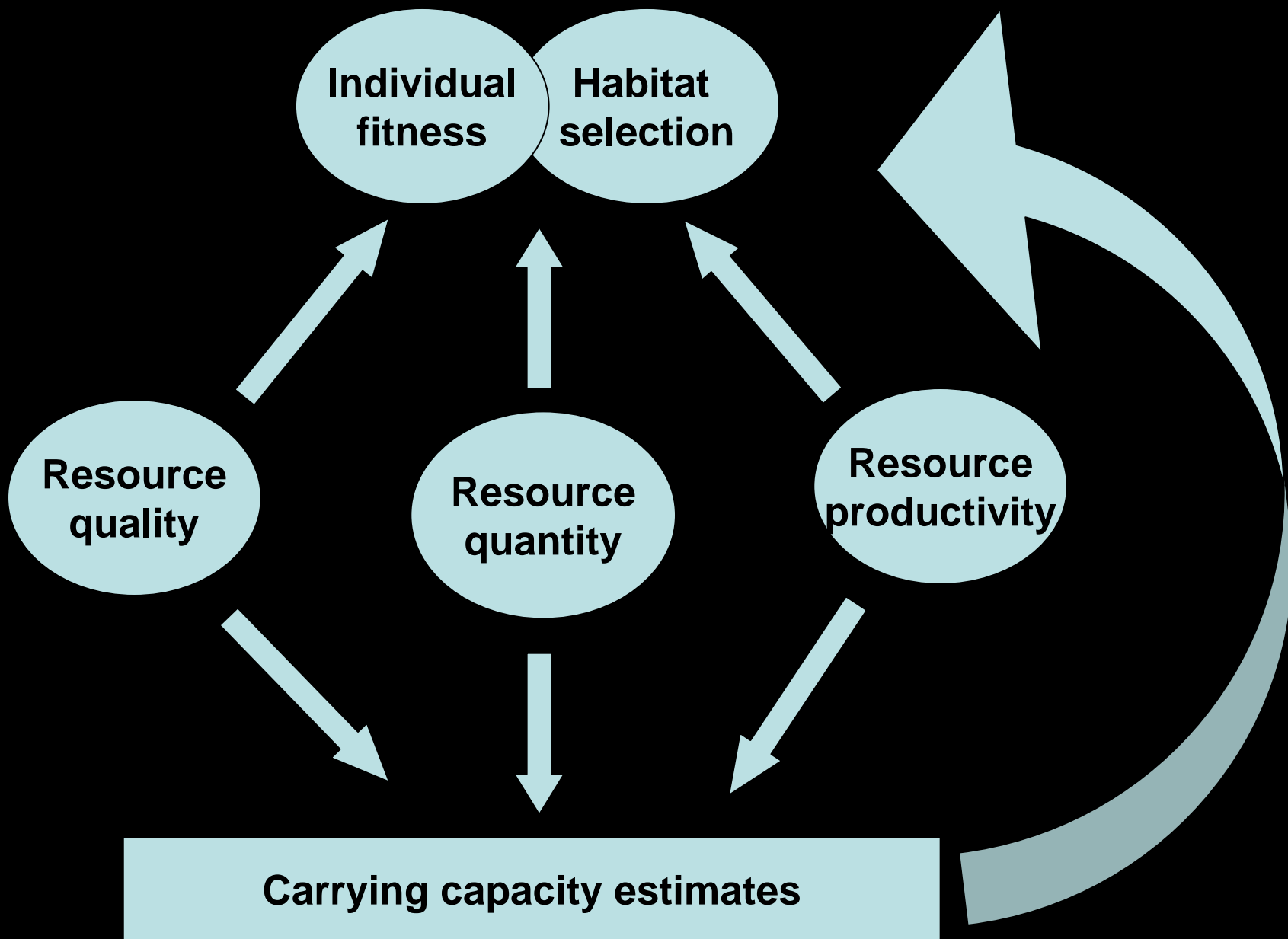
**Resource
quality**

**Resource
quantity**

**Resource
productivity**







Can we relate carrying capacity estimates of habitats to habitat utilisation by species?

Yes

- individual level
- population level, under ideal free distribution

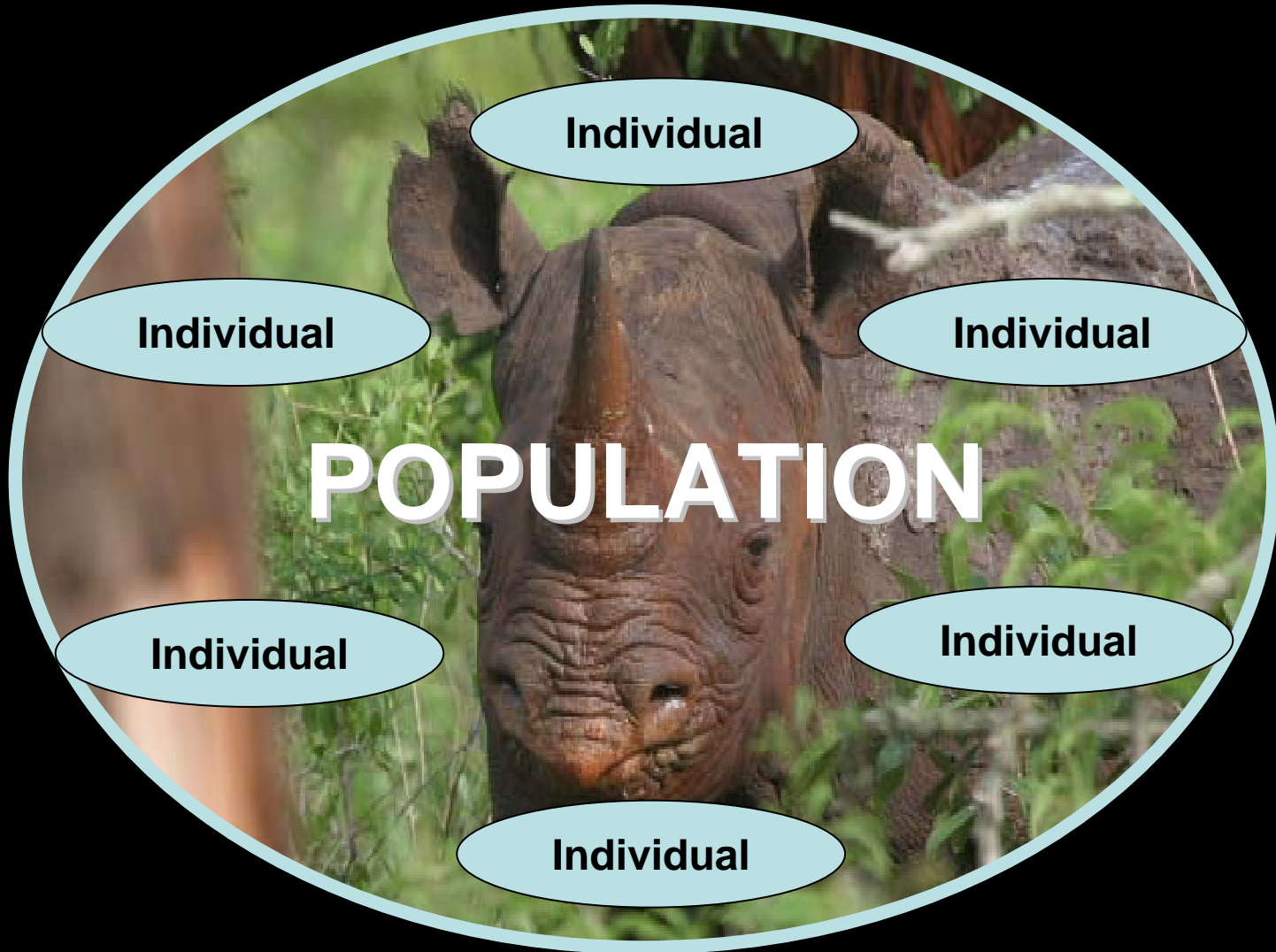


No

- population level use/availability indices not related to the CC

PHINDA PRIVATE GAME RESERVE





Individual

Individual

Individual

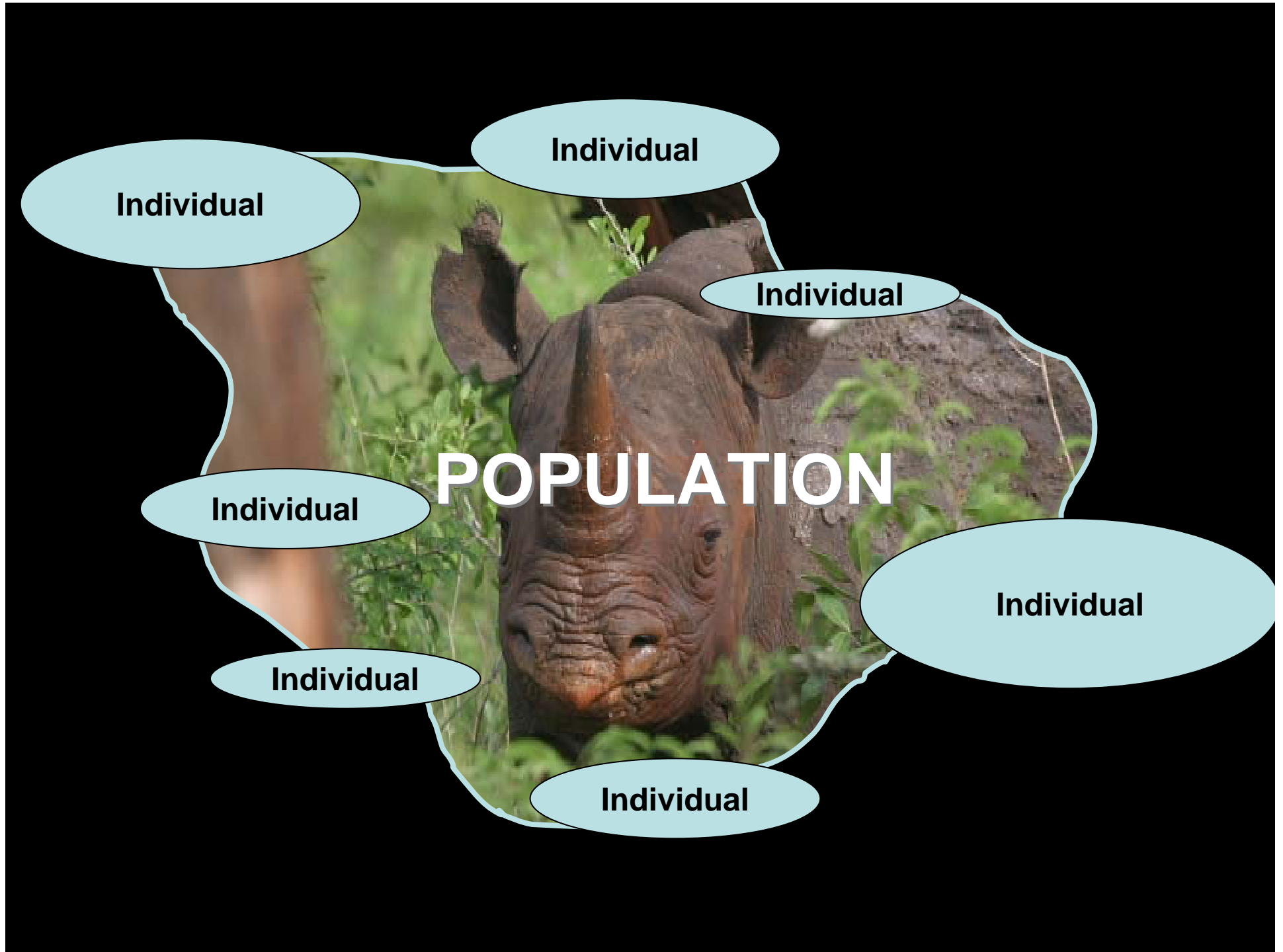
Individual

POPULATION

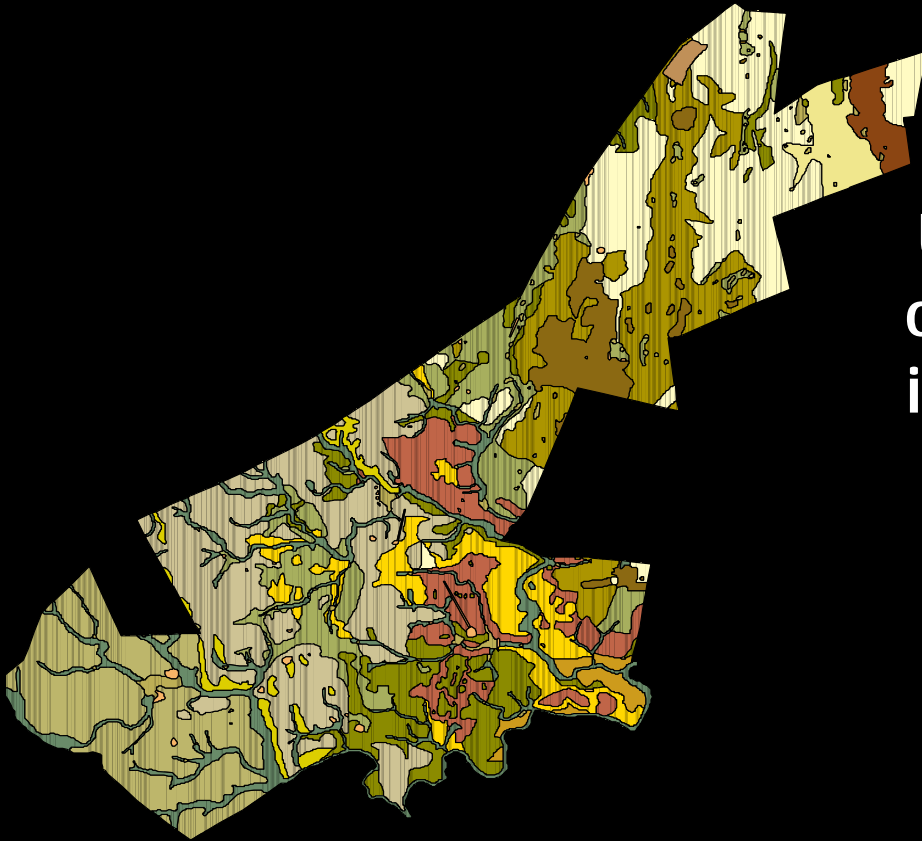
Individual

Individual

Individual



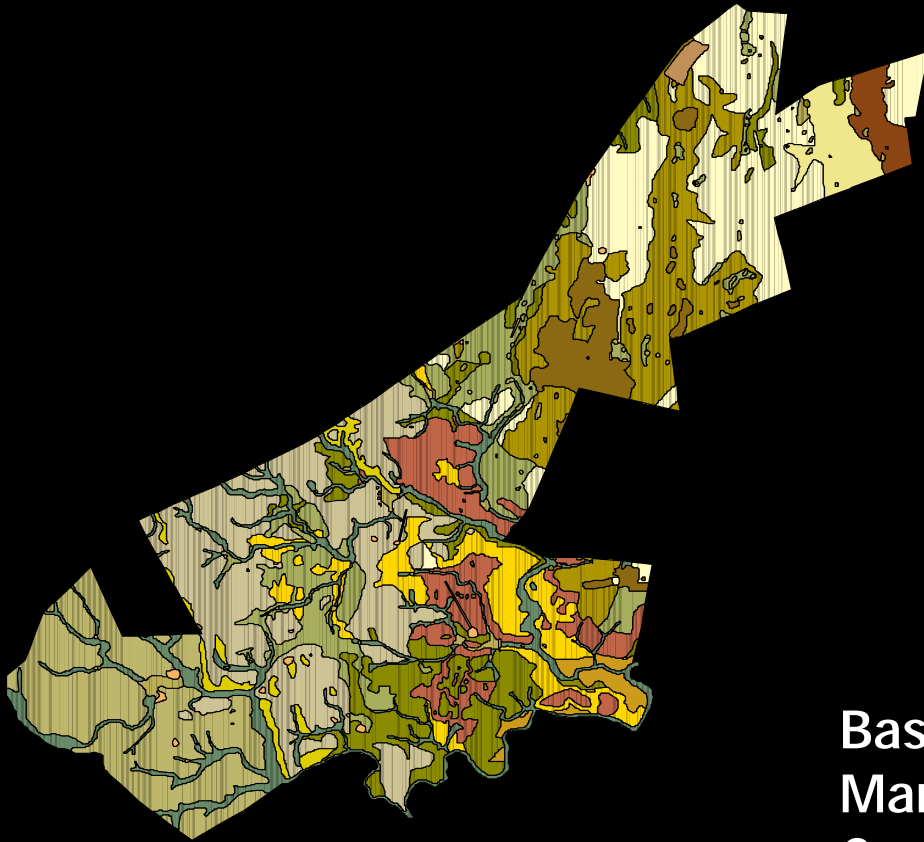
Rhino ranked habitats



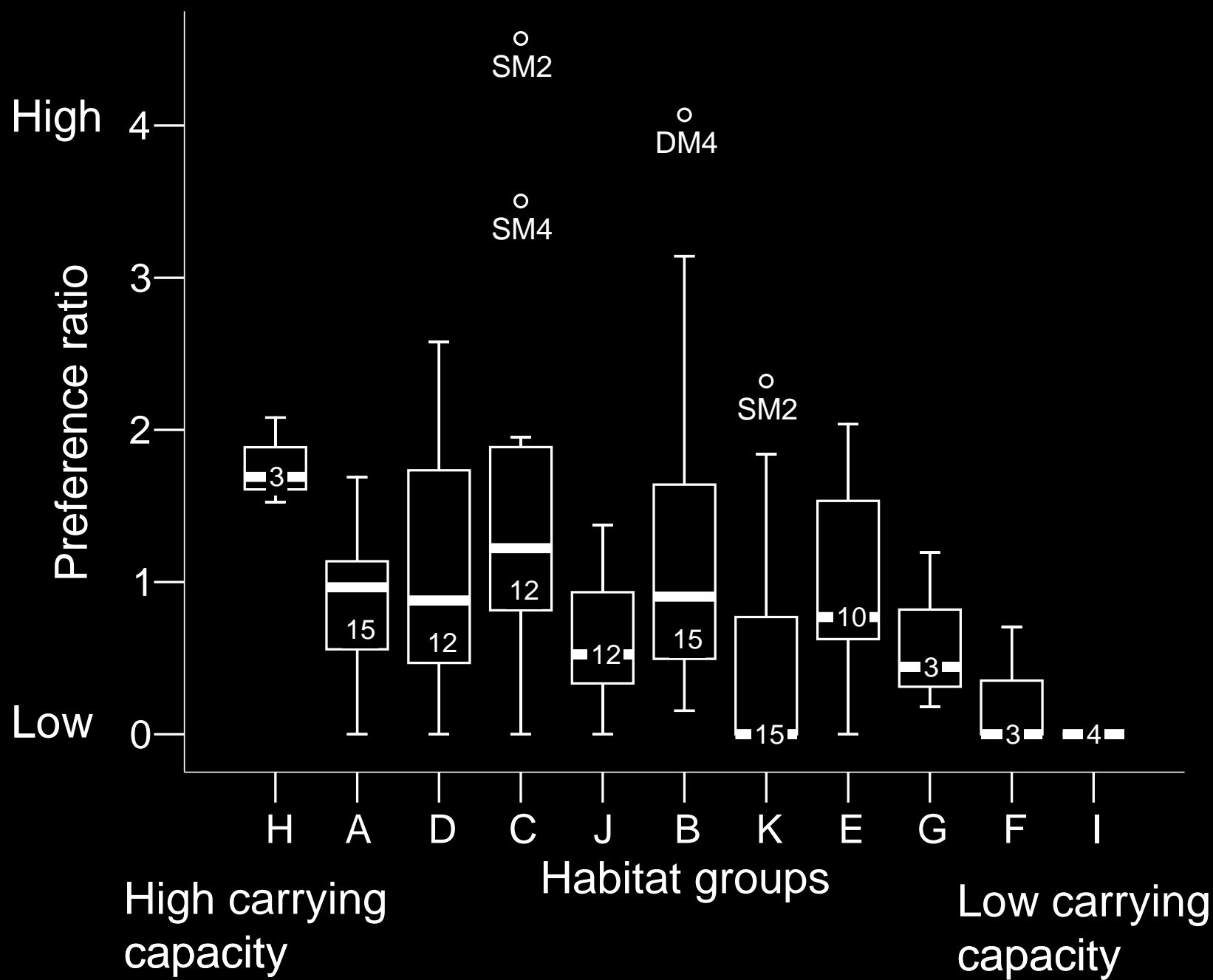
Use/availability estimates
on three levels for
individual rhino:

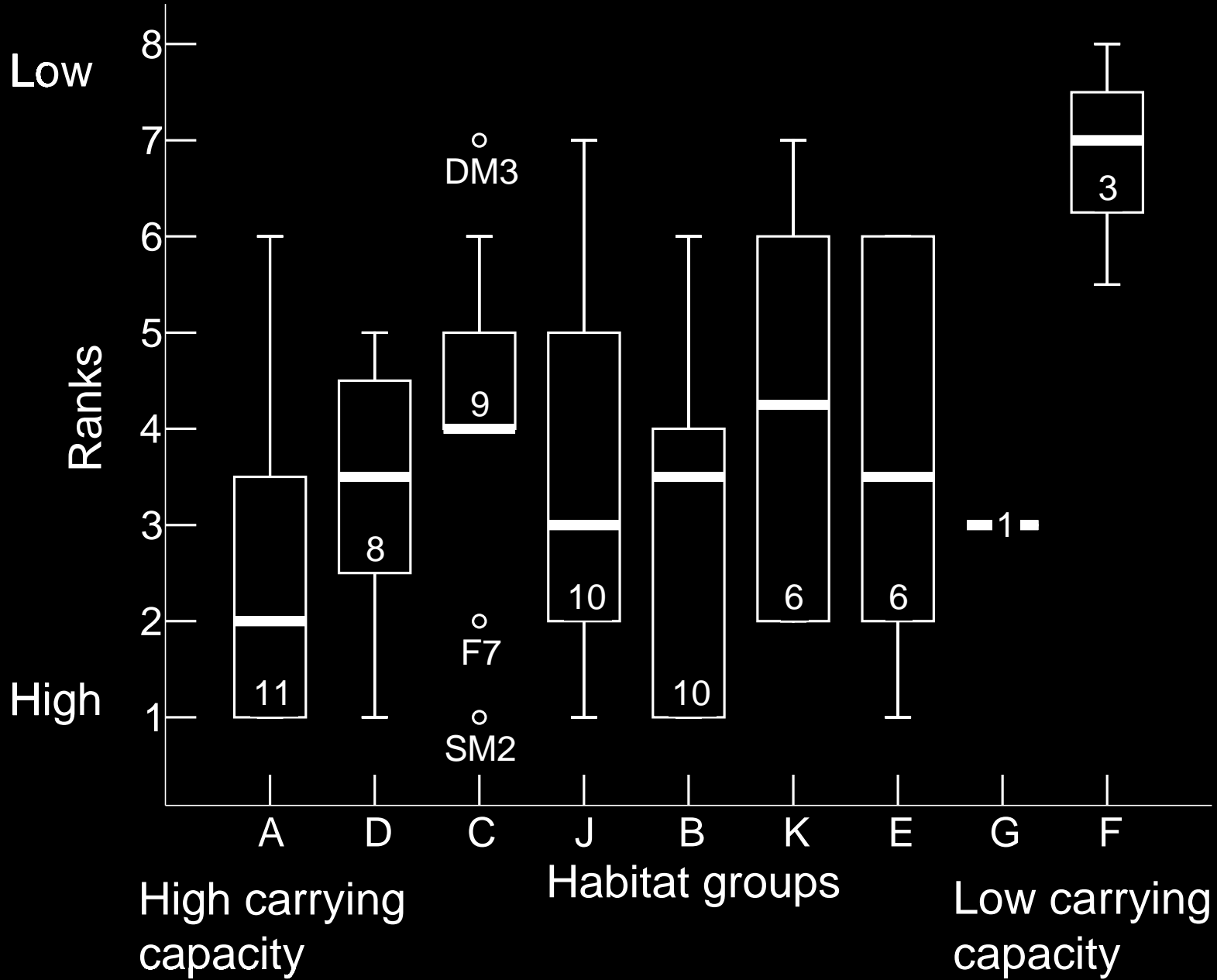
1. Habitat selection
2. Habitat preference
3. Plant-level selection

Carrying capacity ranked habitats



Based on Adcock, K., 2006. Rhino Management Group Black Rhino Carrying Capacity Model V2.1. Darwin Initiative & SADC Regional Programme for Rhino Conservation





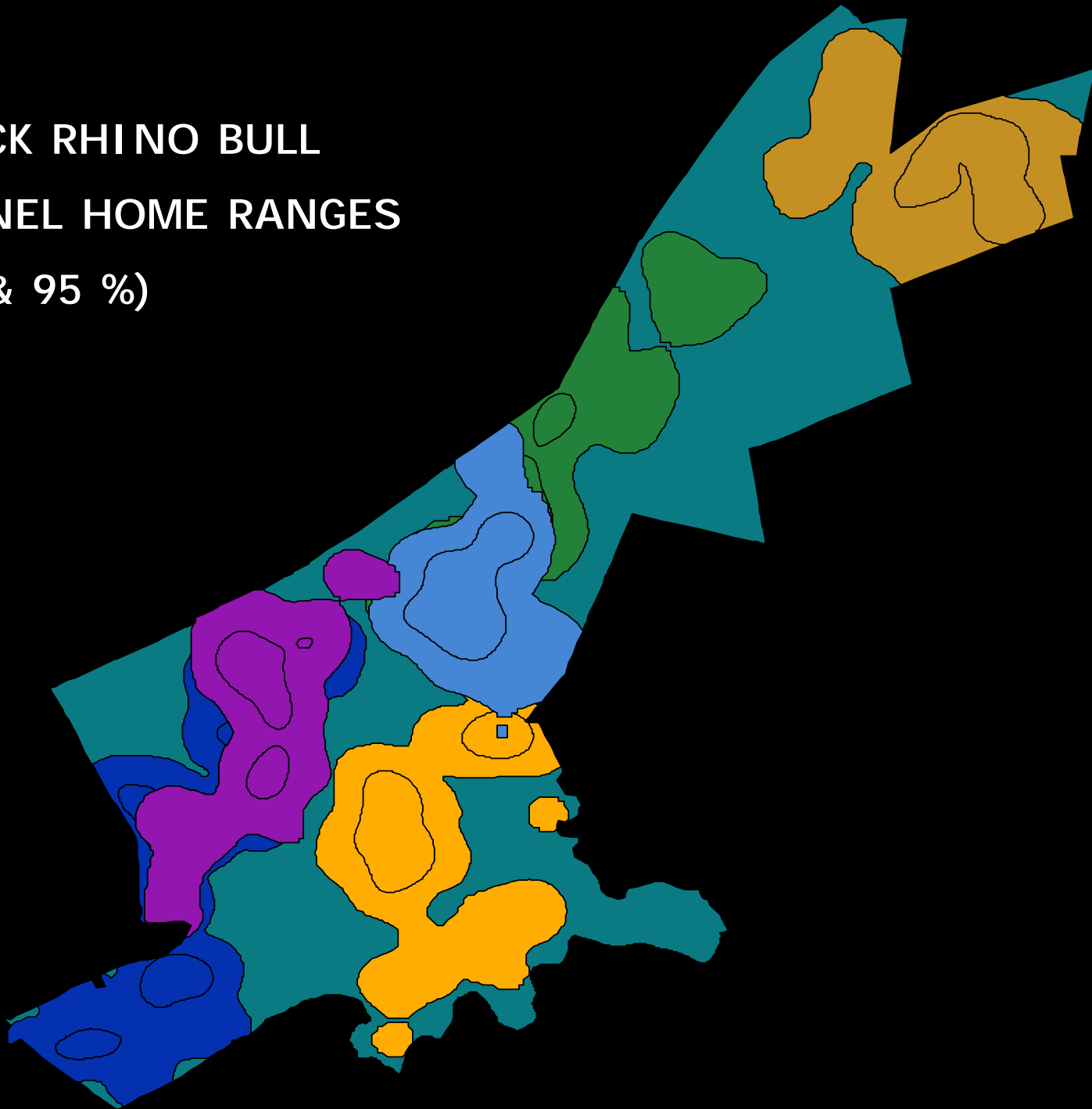
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- Are CC estimates of the most valued habitats available to all individuals?

**BLACK RHINO BULL
KERNEL HOME RANGES
(50 & 95 %)**



THANKS

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- Lochran Traill for his valuable review.