

Bushmeat Hunting : Extent and Consequences

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Lauren Coad, OUCE, Oxford

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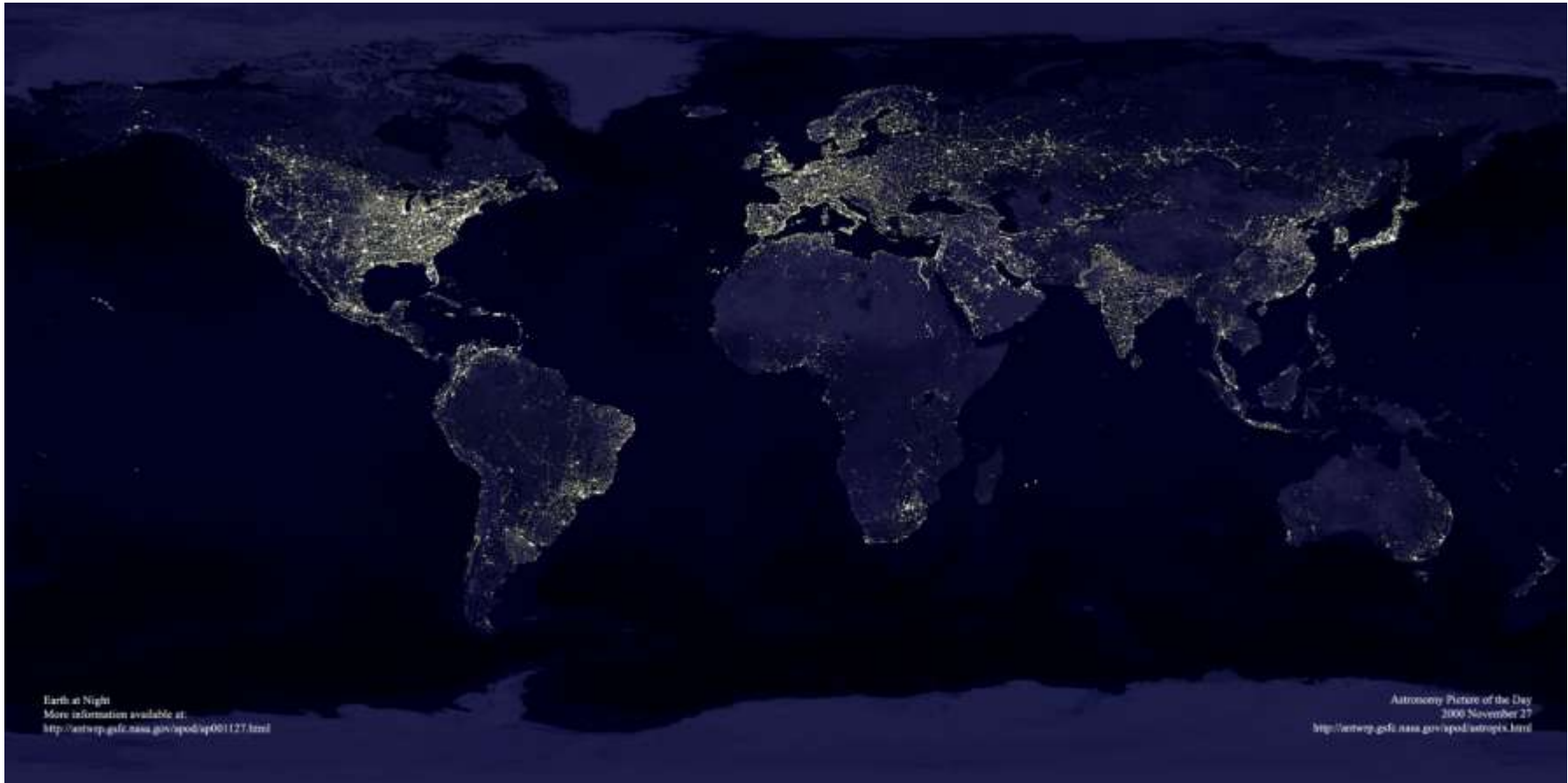
Lee White, Anne-Marie Ndong Obiang & Kevin Ndong, National Parks Agency, Gabon

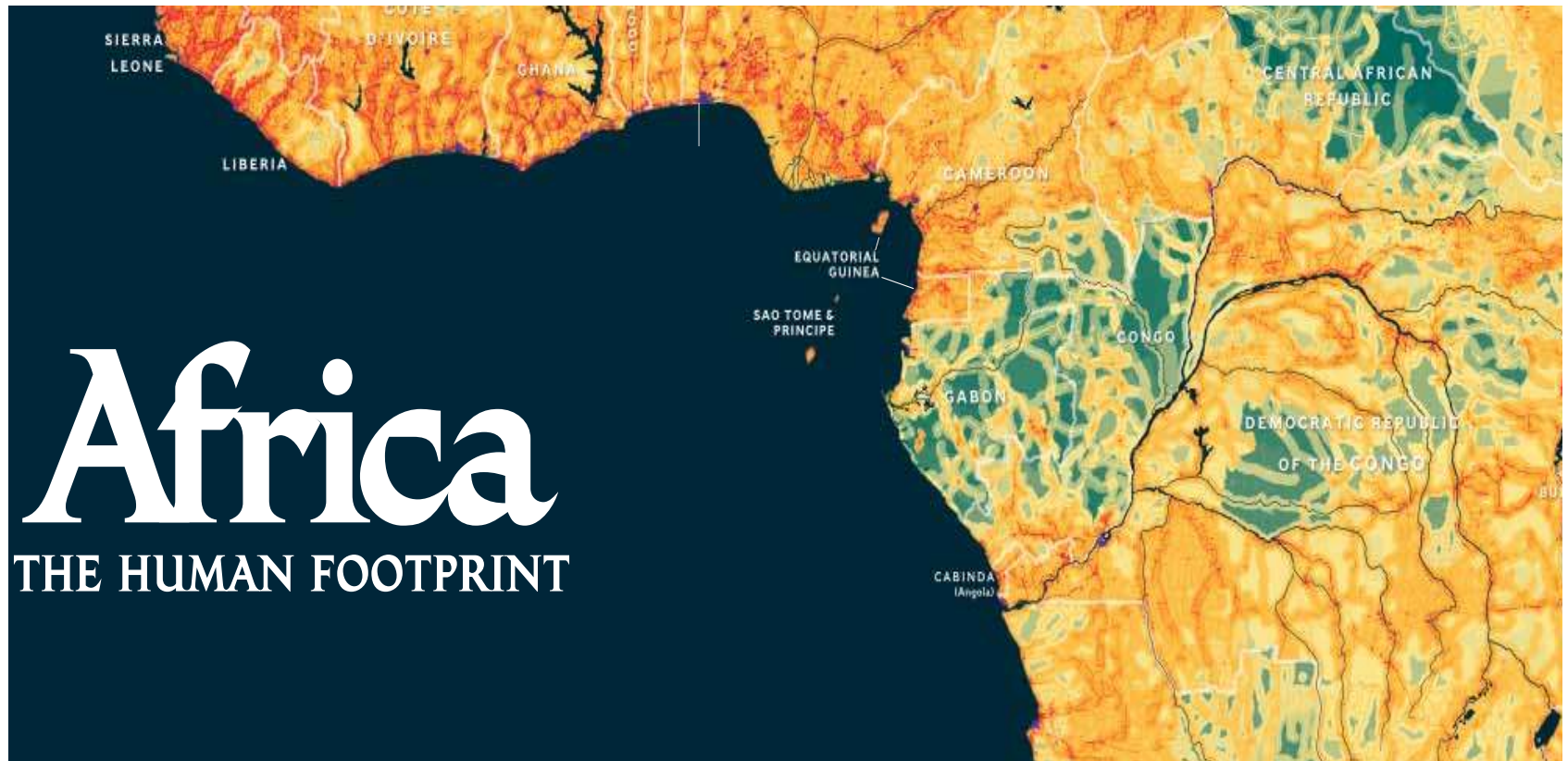
Ernestine Ntsame Effa, Adrien Nounou, Wildlife and Hunting Service, Gabon

Michel Mbazonga, Nathalie van Vliet, EJ Milner Gulland, Noelle Kumpel, Sally Lahm, Omari Ilambu,

Fiona Maisels, Nathalie Nyare, Daniel Idiata & Elizabeth Bennett

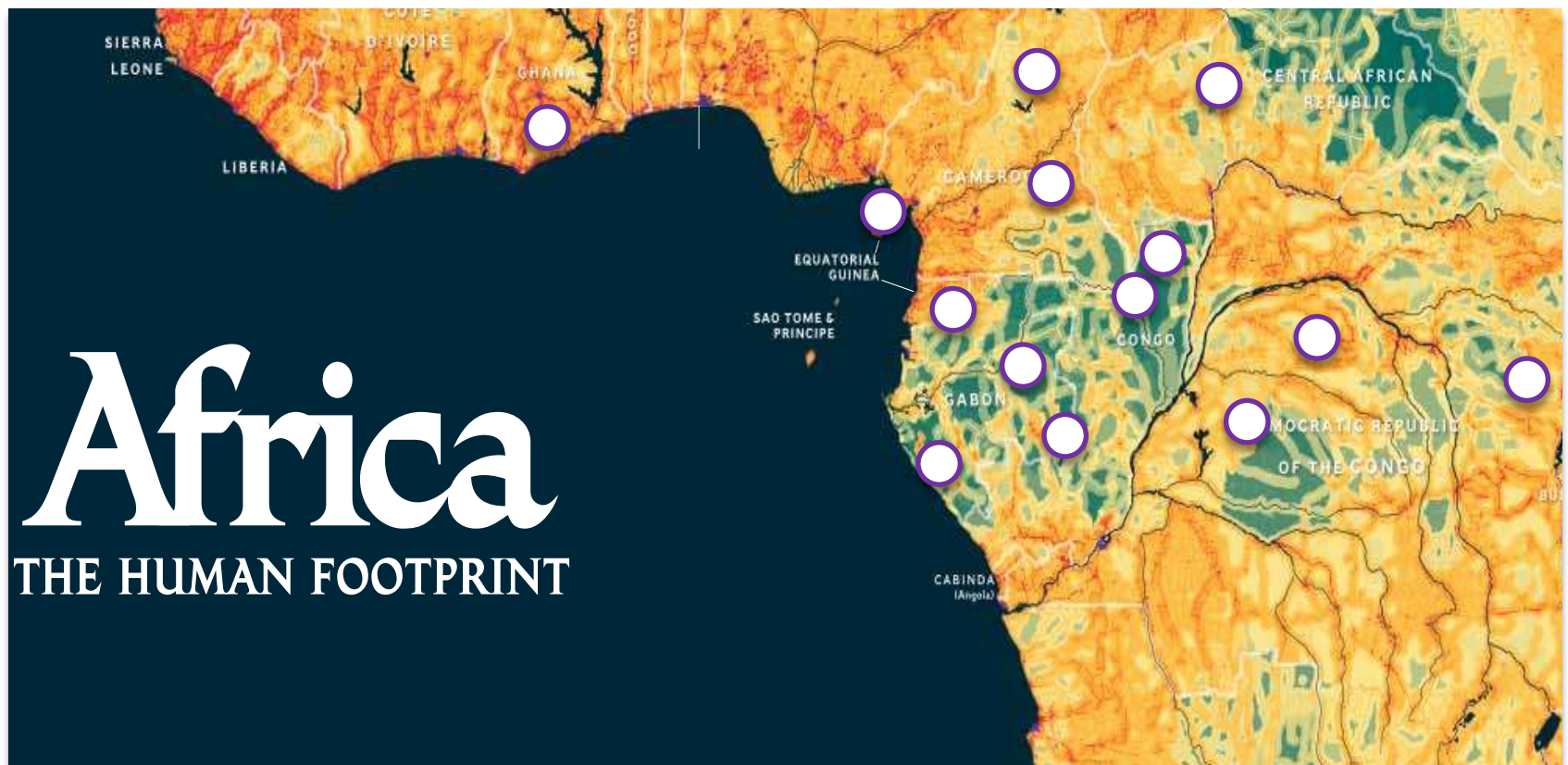
Extent





Almost all African forest is currently under hunting pressure

something
to
remember



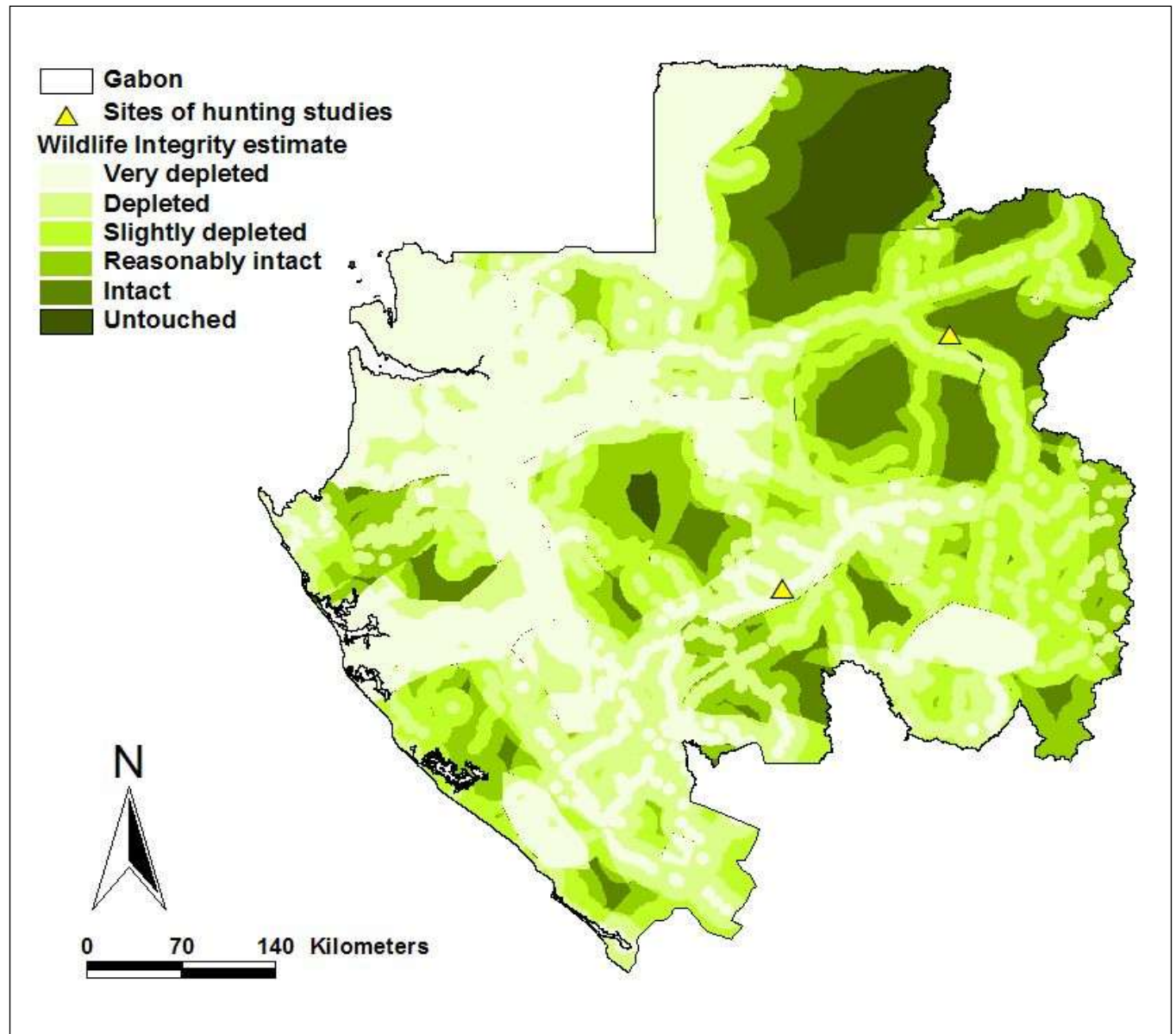
Thing to
remember

Central African human
hunting behaviour is very
similar across the whole
region

**Where do
hunters go?**

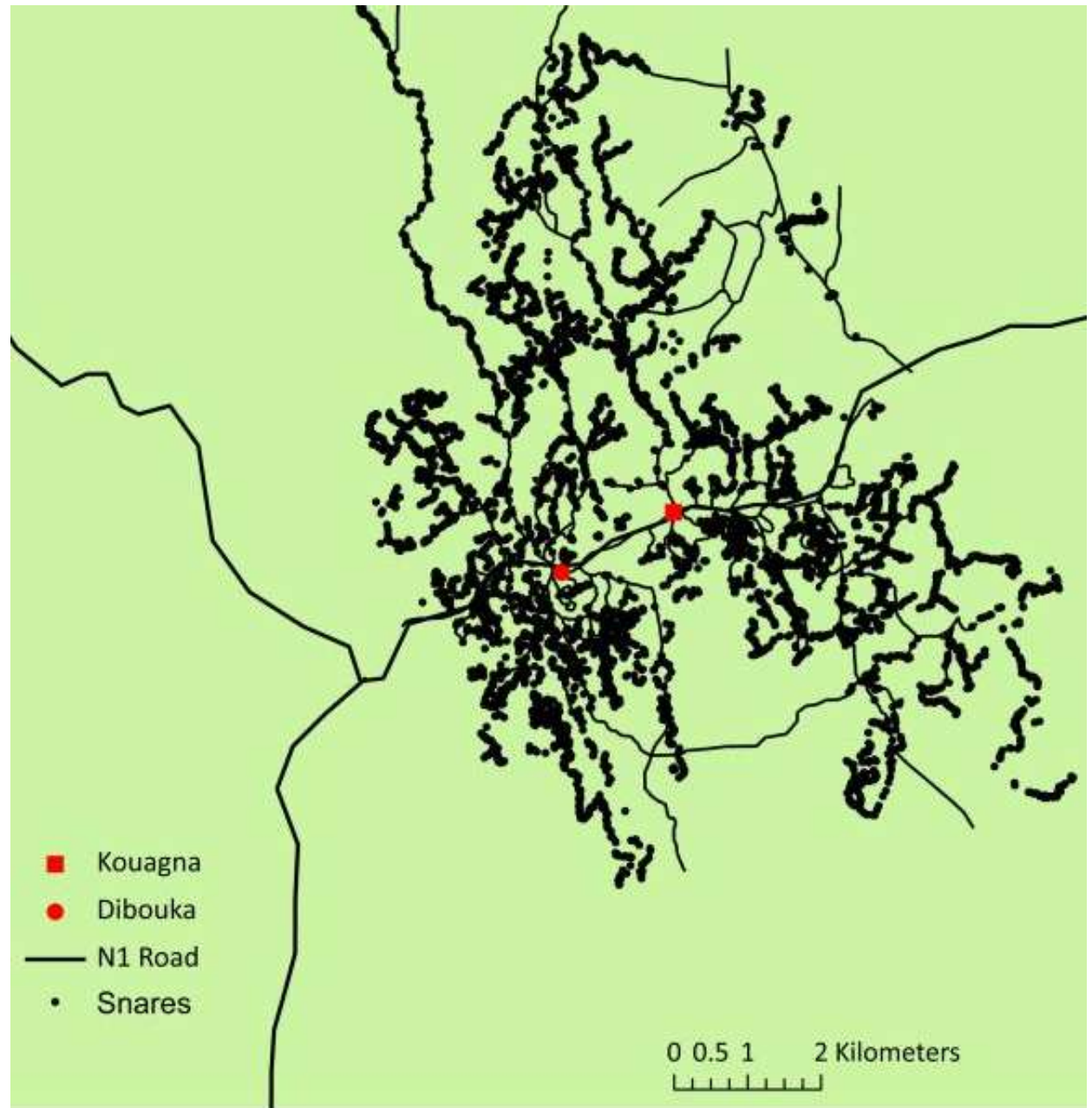
**Only land >
45km from
vehicle access
is likely to be
unhunted in
Gabon.**

**Elsewhere
hunters may
go even
further.**



How intensely
do hunters use
land?

Small
sanctuaries
can persist

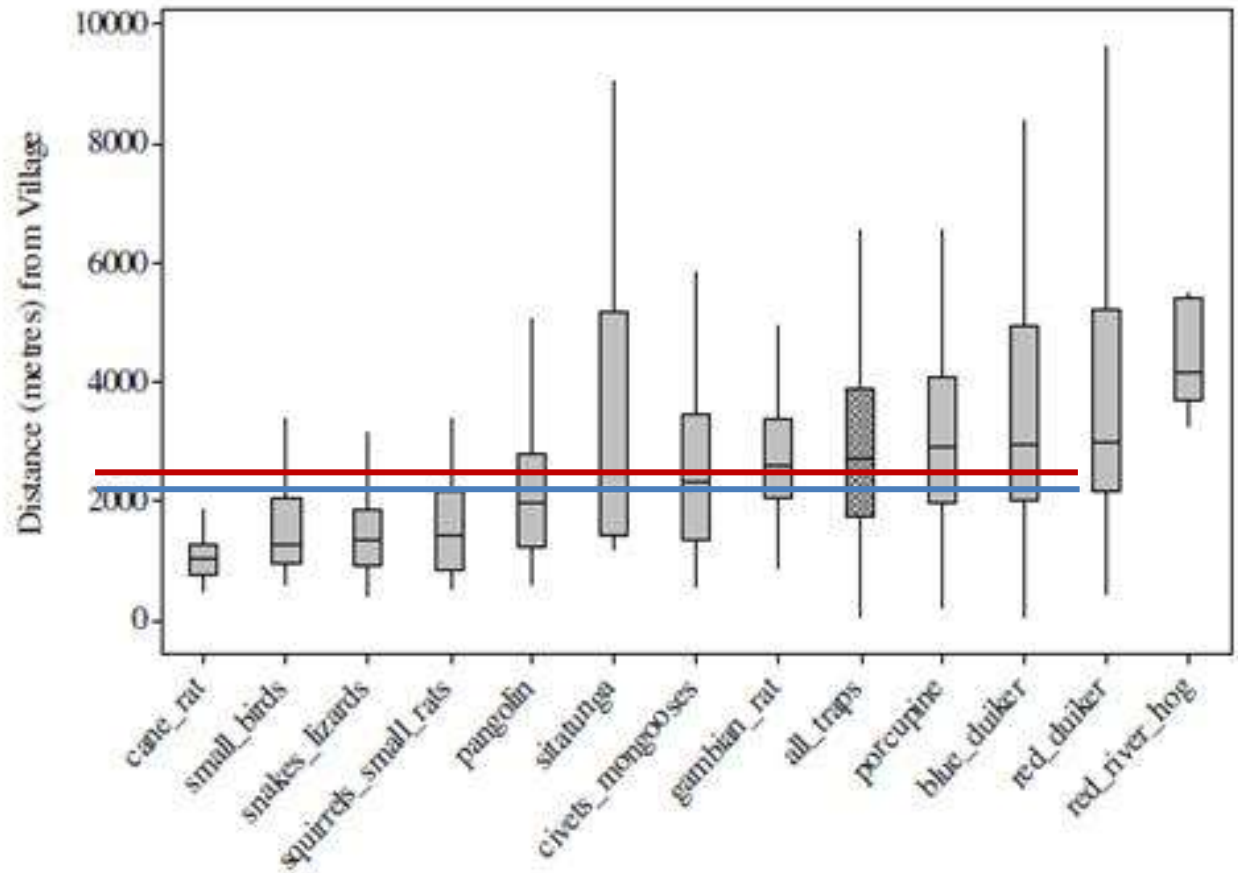


Consequences

NOW

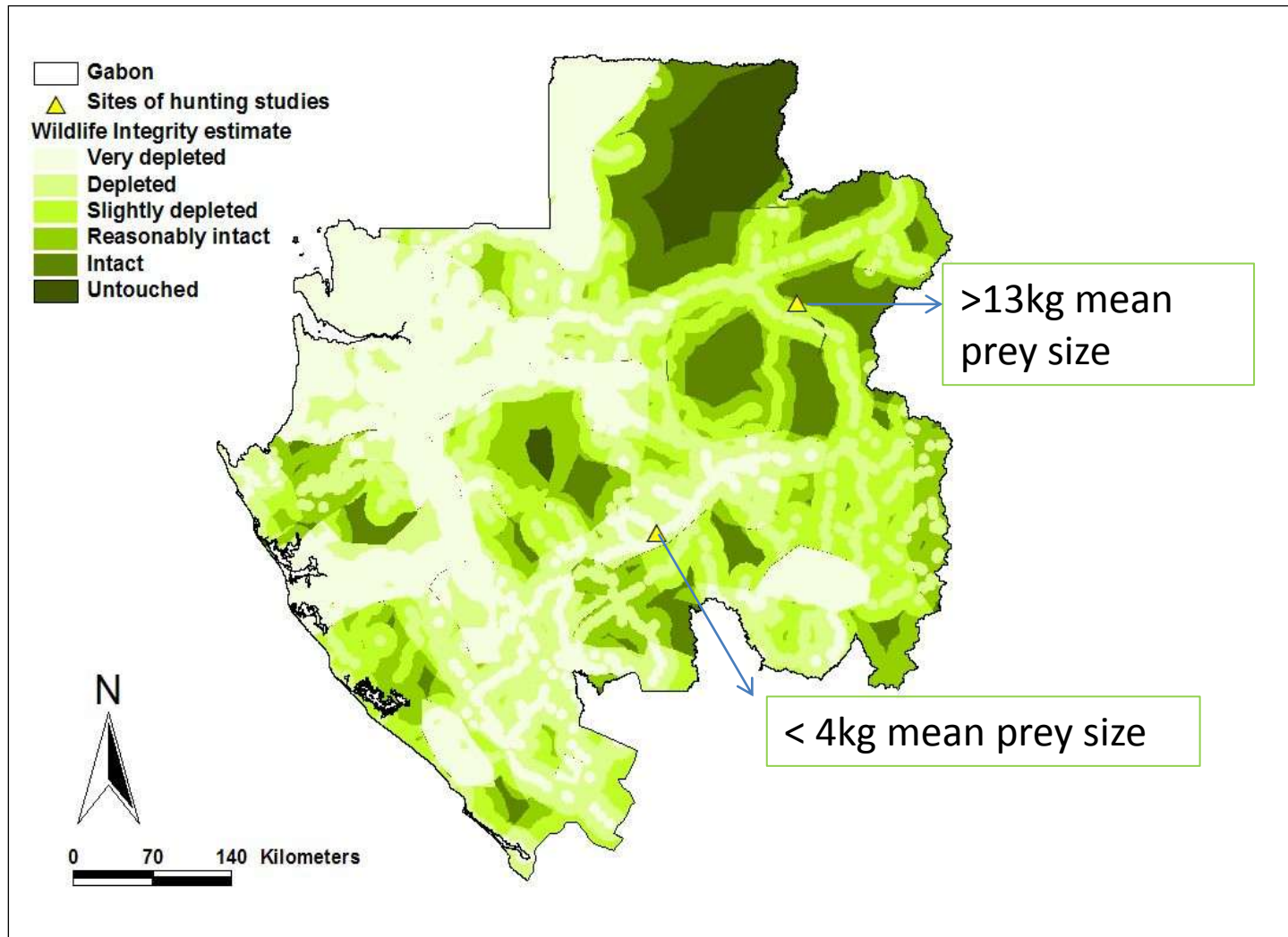
Impacts on
individual
species vary

Small, fast-
breeding
things survive
better than
large, slow-
breeding
things



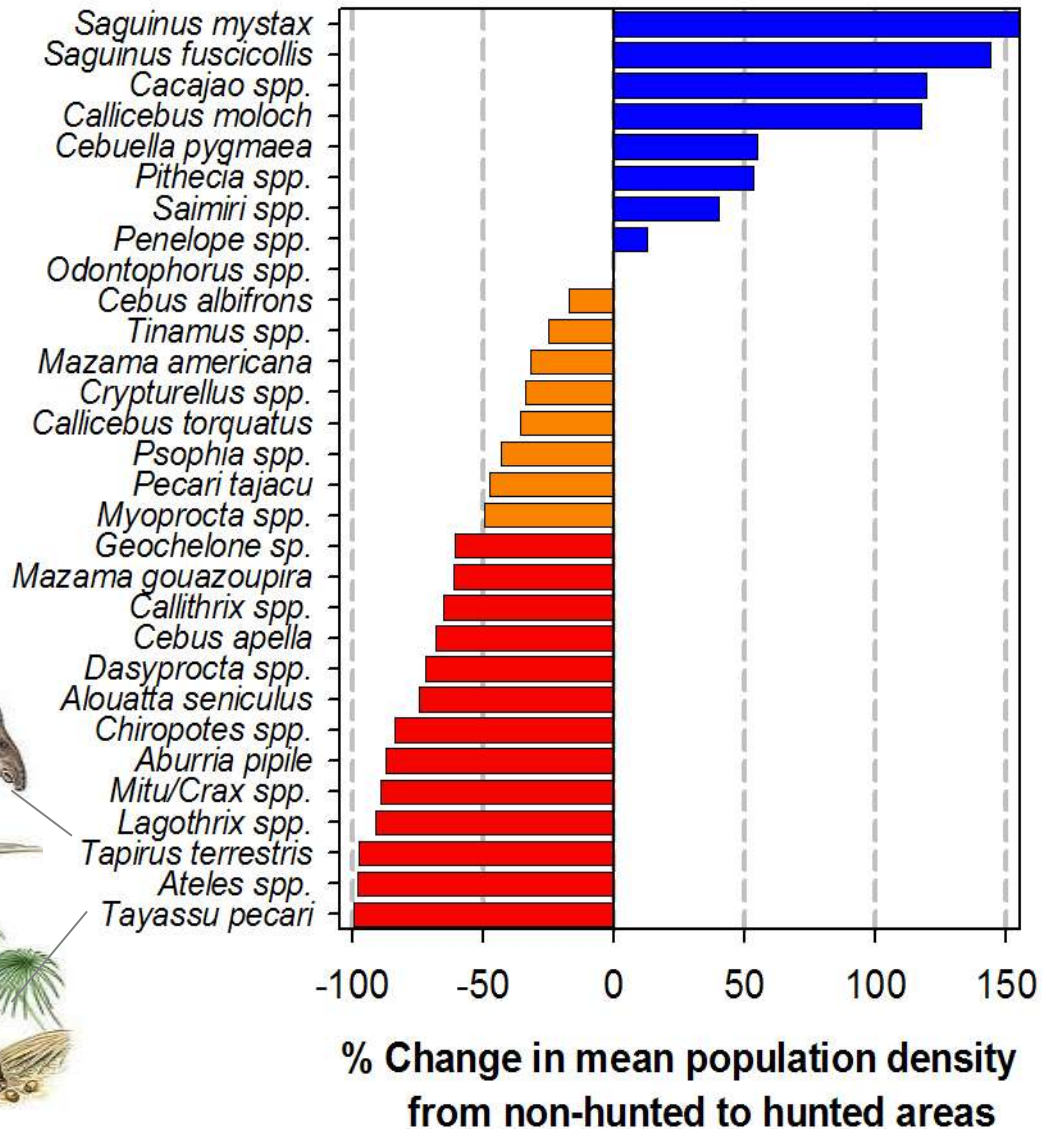
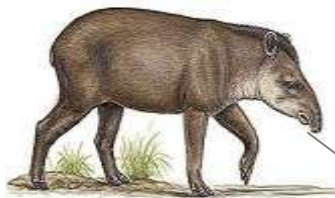
**Catchments
expand, offtakes
drop, species
profiles change**

**Poor hunters
'step up', but
eventually,
they
'step out'**



Thing to
remember

Hunting
changes
species
assemblages,
and thus
ecosystem
function, in
an insidious
way.

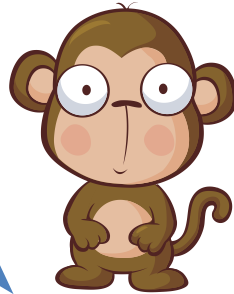


From Peres & Palacios, 2007

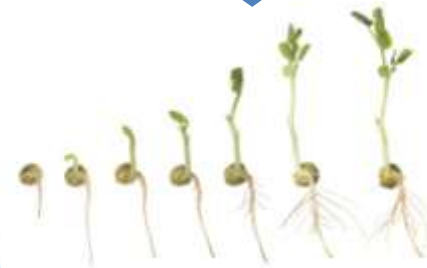
Consequences 2

**FUTURE – or
maybe already**

**Altered animal
communities**



**Altered seed
dispersal and
plant
predation**



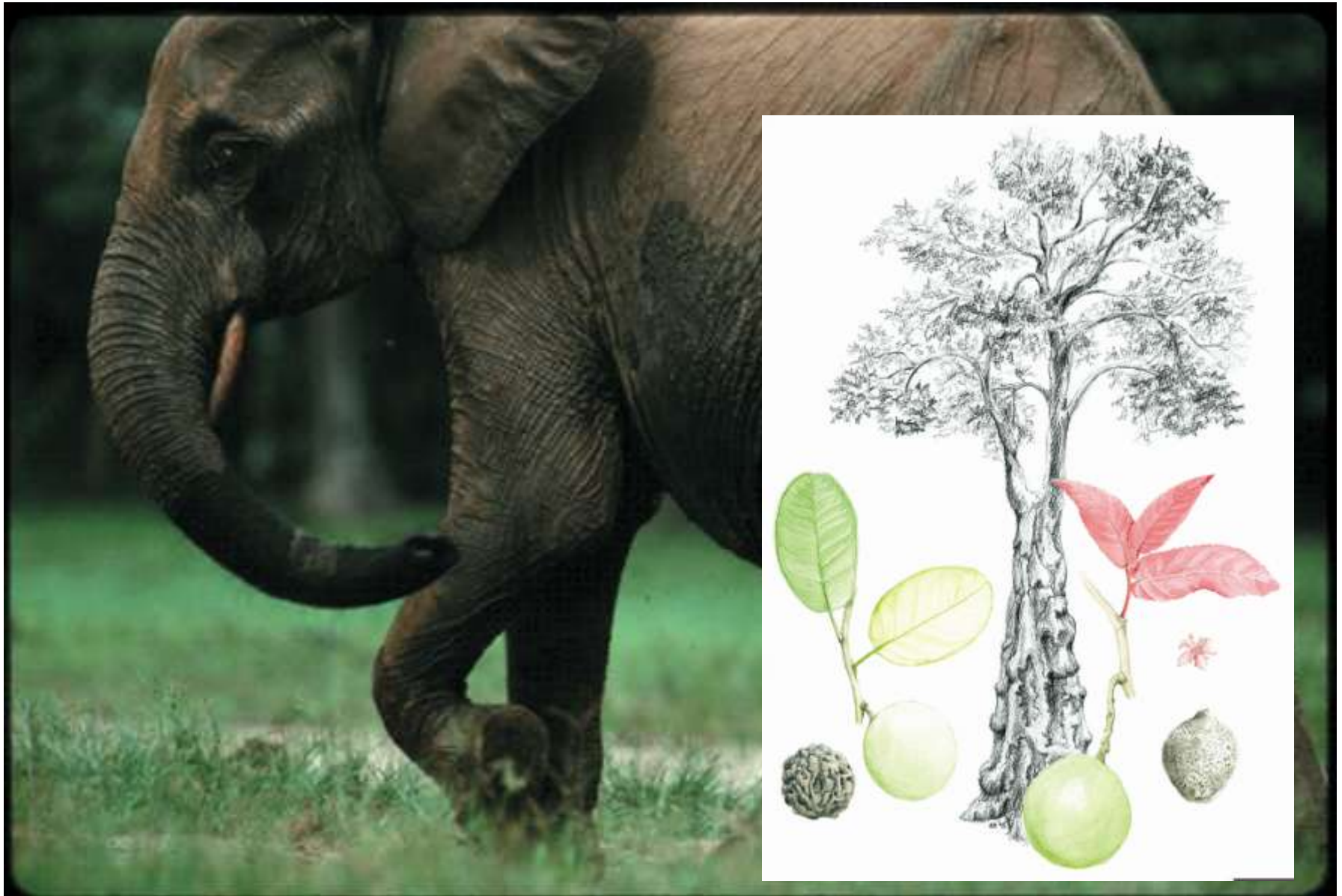
**Altered
seedling
establishment
and survival**

**Altered food
availability**



**Altered forest
structure**





Thing to
remember

**El Nino signal causes
changes in fruiting in
Central African.**



**Relationships between Minimum Temperature and Fruit Production in some
Tropical Forest Trees in Gabon**

Caroline E. G. Tutin; Michel Fernandez

Journal of Tropical Ecology, Vol. 9, No. 2. (May, 1993), pp. 241-248.

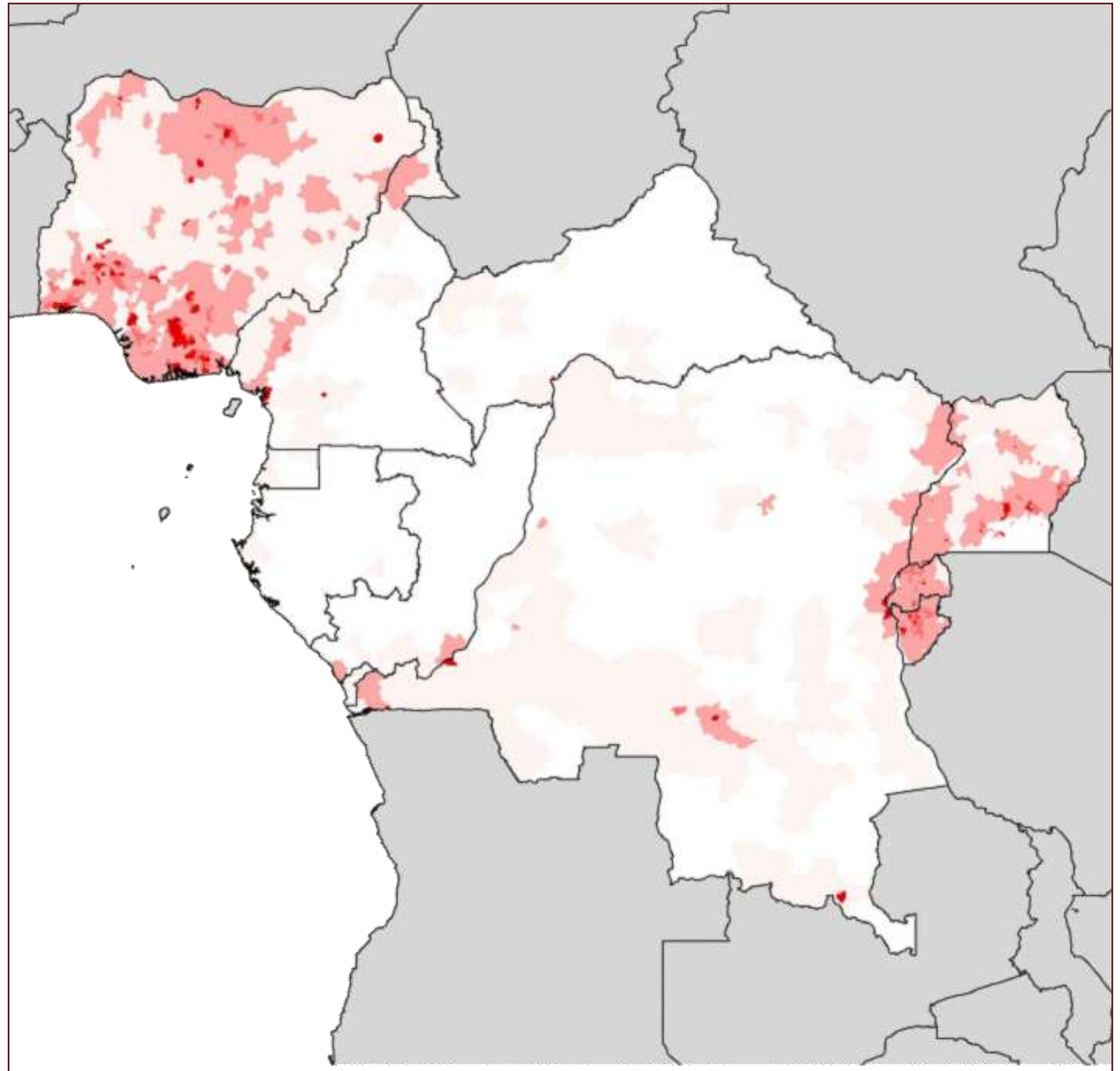
Stable URL:

<http://links.jstor.org/sici?sici=0266-4674%28199305%299%3A2%3C241%3ARBMTAF%3E2.0.CO%3B2-0>

Journal of Tropical Ecology is currently published by Cambridge University Press.

Thing to
remember

**Human
migration may
have the most
dramatic
impacts on
wildlife in
Central Africa**



How will African Forests look and function in the
21st century as a consequence of climate change
and
how can management and planning influence
such a future?



TEST !

1. Almost all African forest is hunted
2. Hunting practices and impacts are similar everywhere
3. Hunting is changing wildlife assemblages and therefore entire ecosystem integrity
4. Wildlife can move and adapt faster than vegetation. Climate change impacts on wildlife will not all be direct physiological stresses.

Why do we do it?

FOOD
MONEY

But their relative
importance varies



Climate change?

Likely results of climate change for wildlife

1. More people in forests
2. Sparser, drier forests
3. More small generalist animals
4. Shift in structure and species composition of vegetation
5. Changes in surface water availability

Possible responses for wildlife and human hunting

1. Less prey available, less revenue or food
2. More seasonality in hunting
3. Less biomass per catch, less species
4. ?
5. ? Perhaps changes in prey availability, seasonality or predictability



