

REQUEST TO AZA : GENETIC MATERIAL



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Chair: South African SGH Action Group

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GLOBALLY:



?

REGIONALLY:



-3  / YEAR = ↓

PHVA: Morrison et al. 2005

Some of our key questions are:

- a) Does the South African population of the SGH still act as a single genetic unit, so that individual birds can be moved around at will during harvesting and reintroduction?
- b) To what extent do immigration and emigration of SGH individuals contribute to the genetic health of the South African SGH population, so that if necessary regional exchanges of individuals can be facilitated?
- c) Is the southern African SGH population genetically compatible with the rest of its African range south of the Equator, so that zoo-held birds of different origins or their offspring can be involved as donors to augment the South African population?

What do we have?

What should we have?

How best to use it? reintro & captive

Results from Fst

----- = significant differentiation

----- = no significant diff.



Results from Fst

----- = significant differentiation

----- = no significant diff.



Results from Fst

----- = significant differentiation

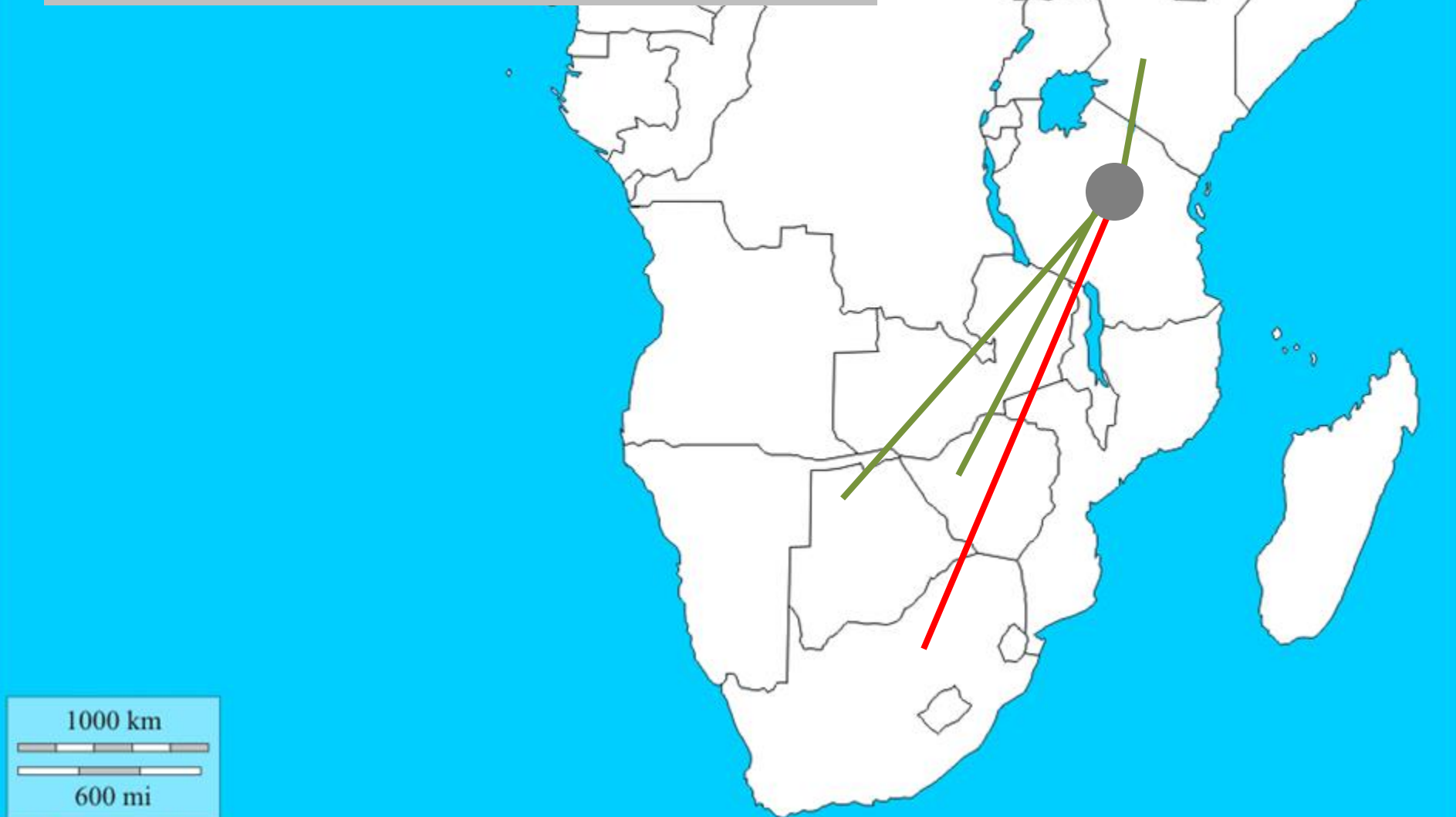
----- = no significant diff.



Results from Fst

----- = significant differentiation

----- = no significant diff.



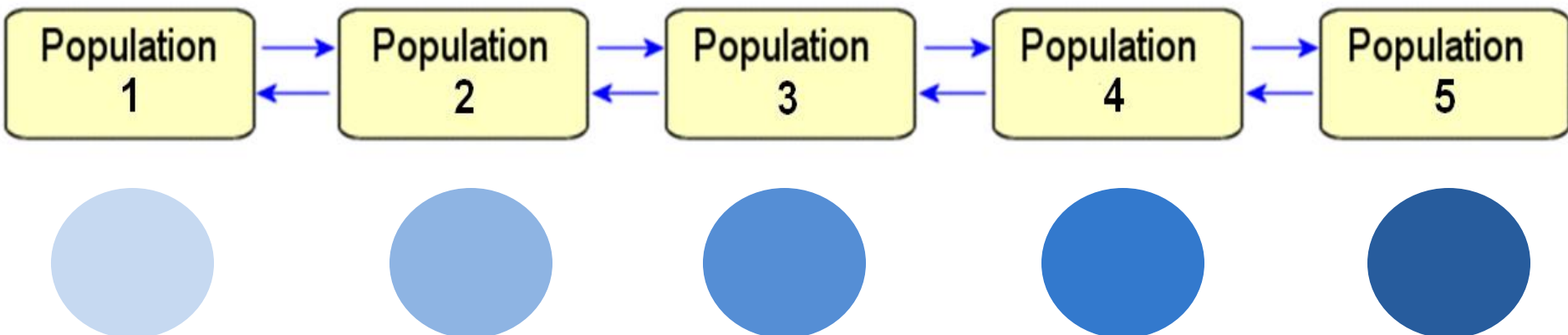
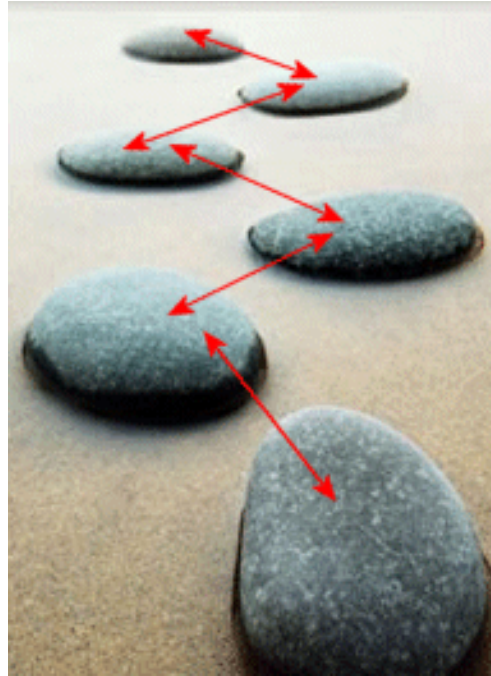
Results from Fst

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The stepping-stone model of migration



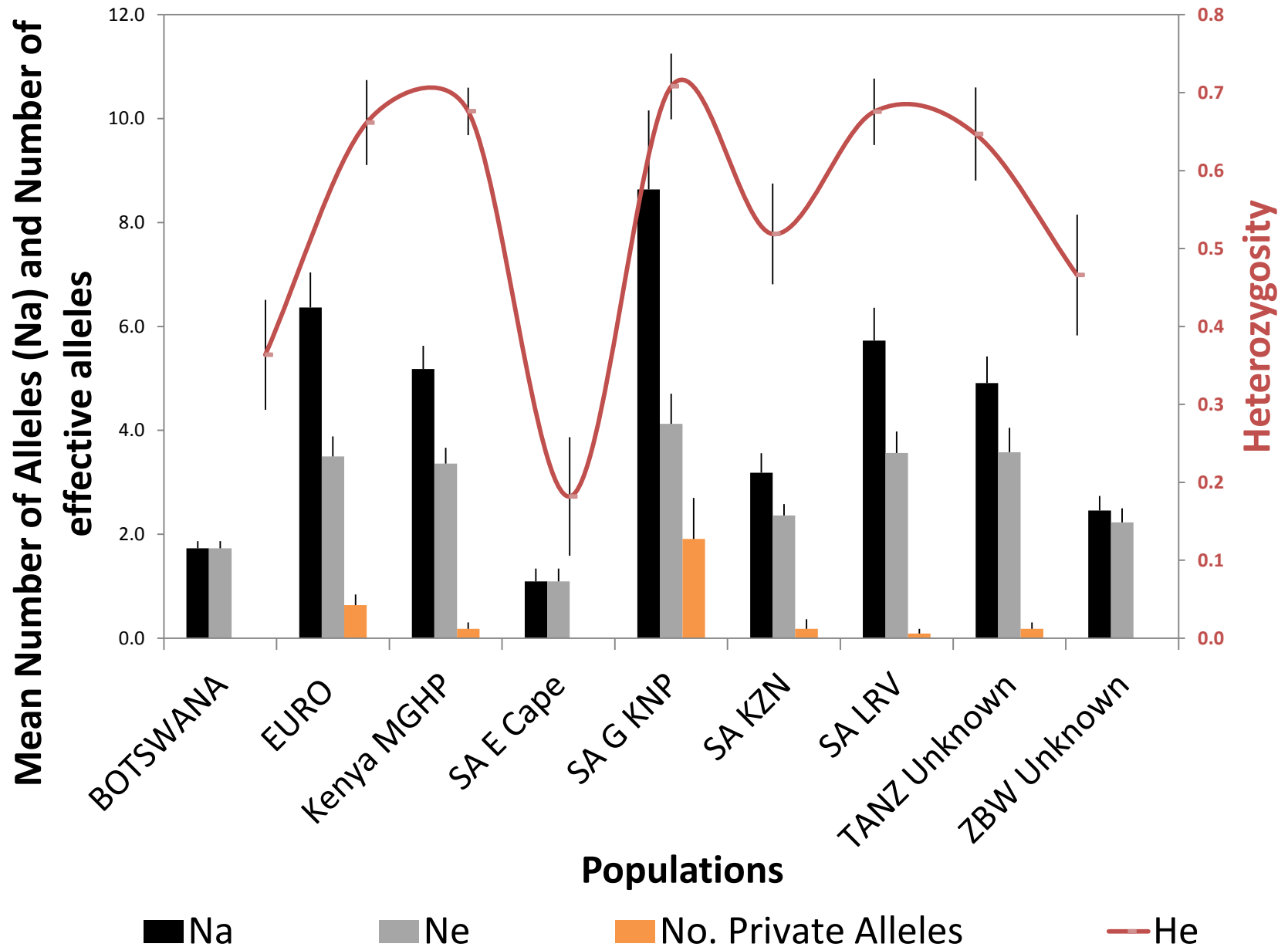


MSU

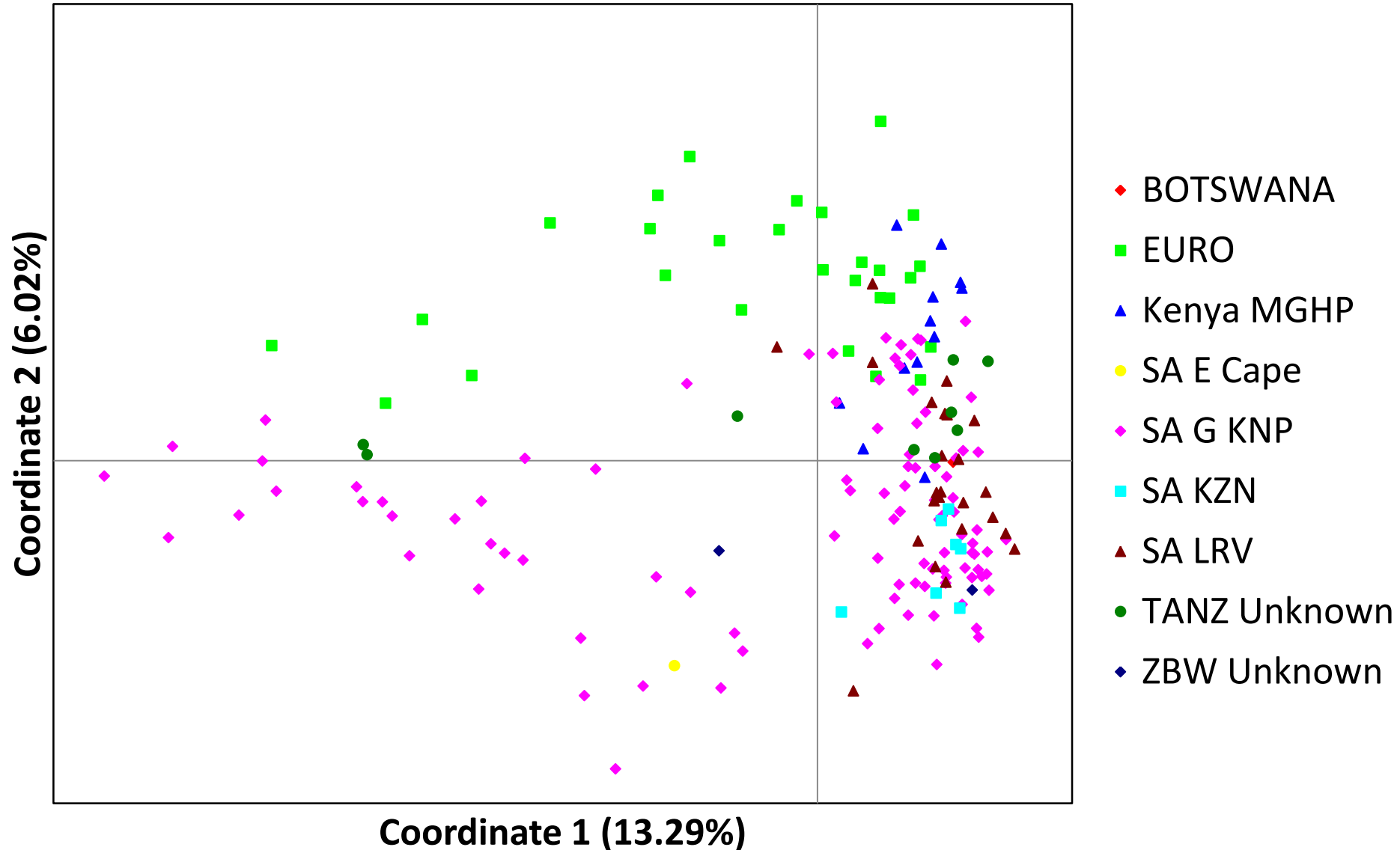
1000 km

600 mi

Allelic patterns among 9 populations of Southern Ground-Hornbills



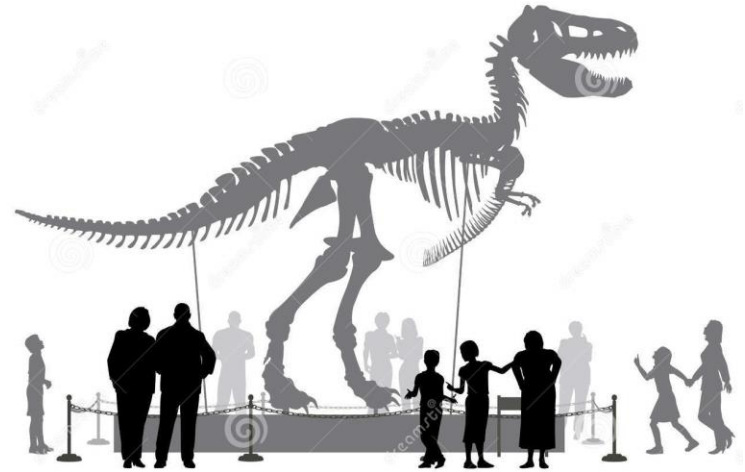
Principal coordinates analysis based on an individual genetic distance matrix



\$\$: time & money







prioritize gaps where wild capture needed

can you help?

**wild-caught founders: known origin
n = as many as possible 😊**

blood sample with bird studbook #

- **Female saliva – digestive enzyme?**
- **Blue males? (scope!)**

