Speciation

How are species defined?

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Reuniting

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An ancestral population

Population splits onto different islands and characteristics diverge

Large ground finch

Medium ground finch

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Meadowlarks

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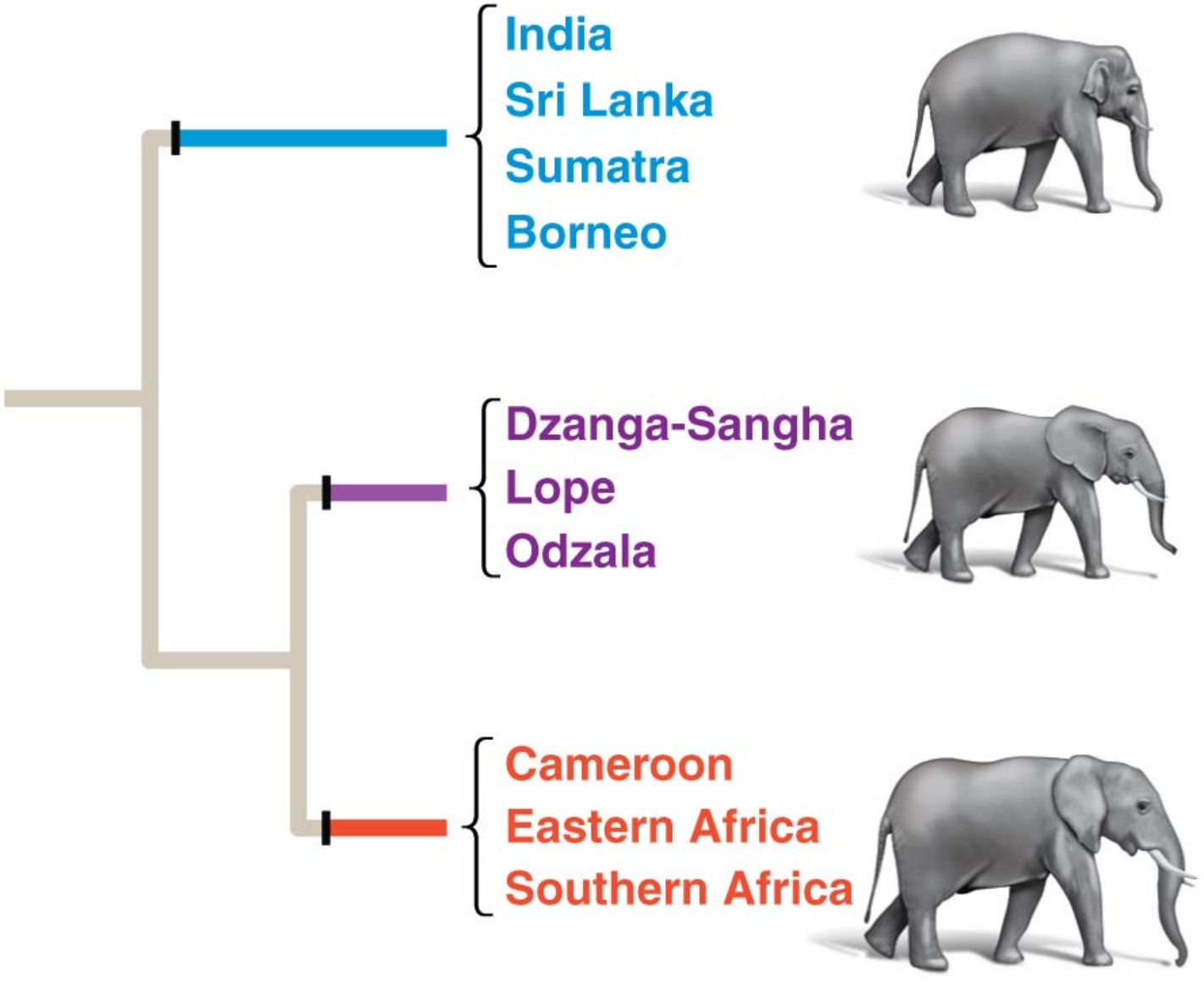
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Borneo
Dzanga-Sangha
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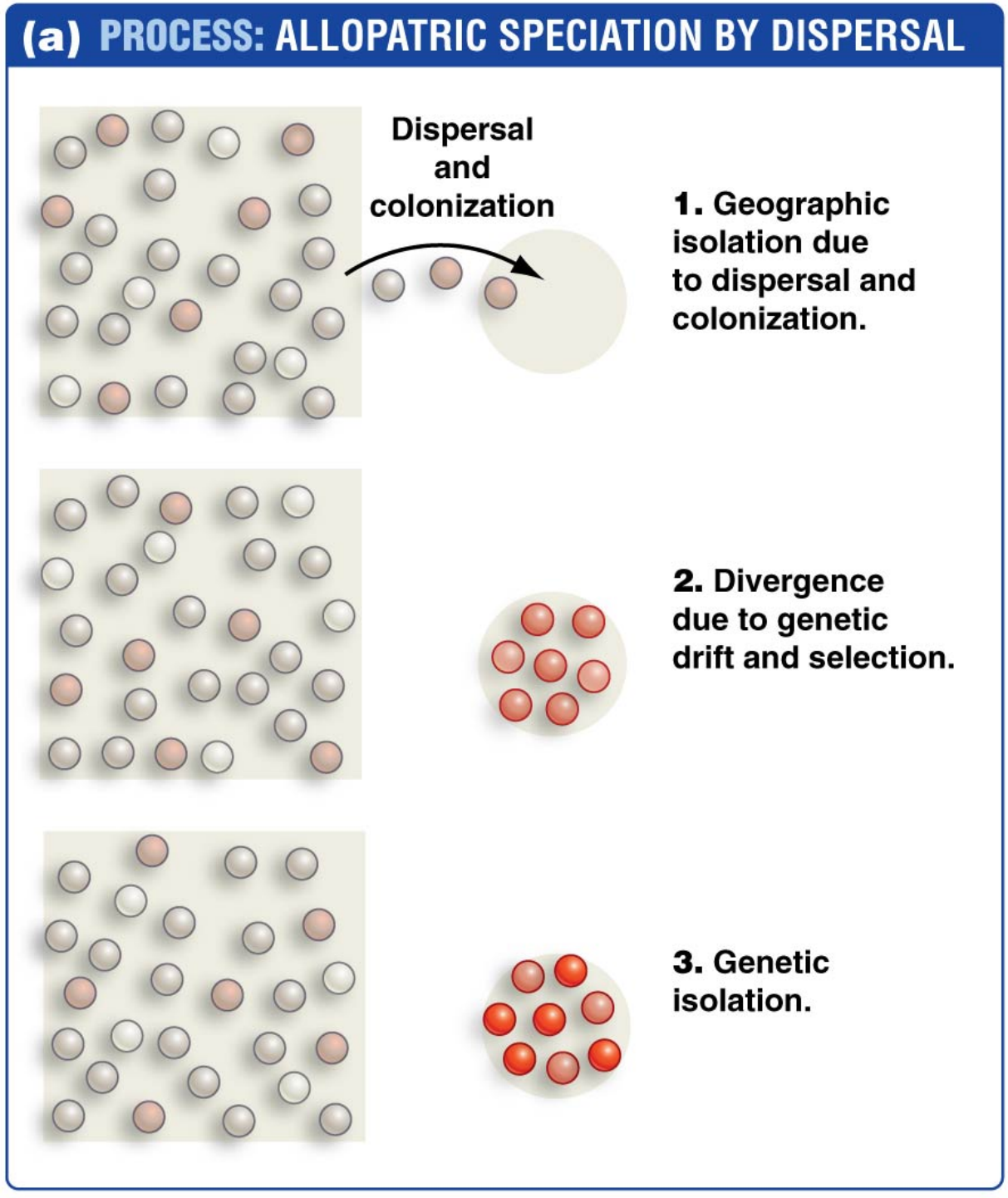
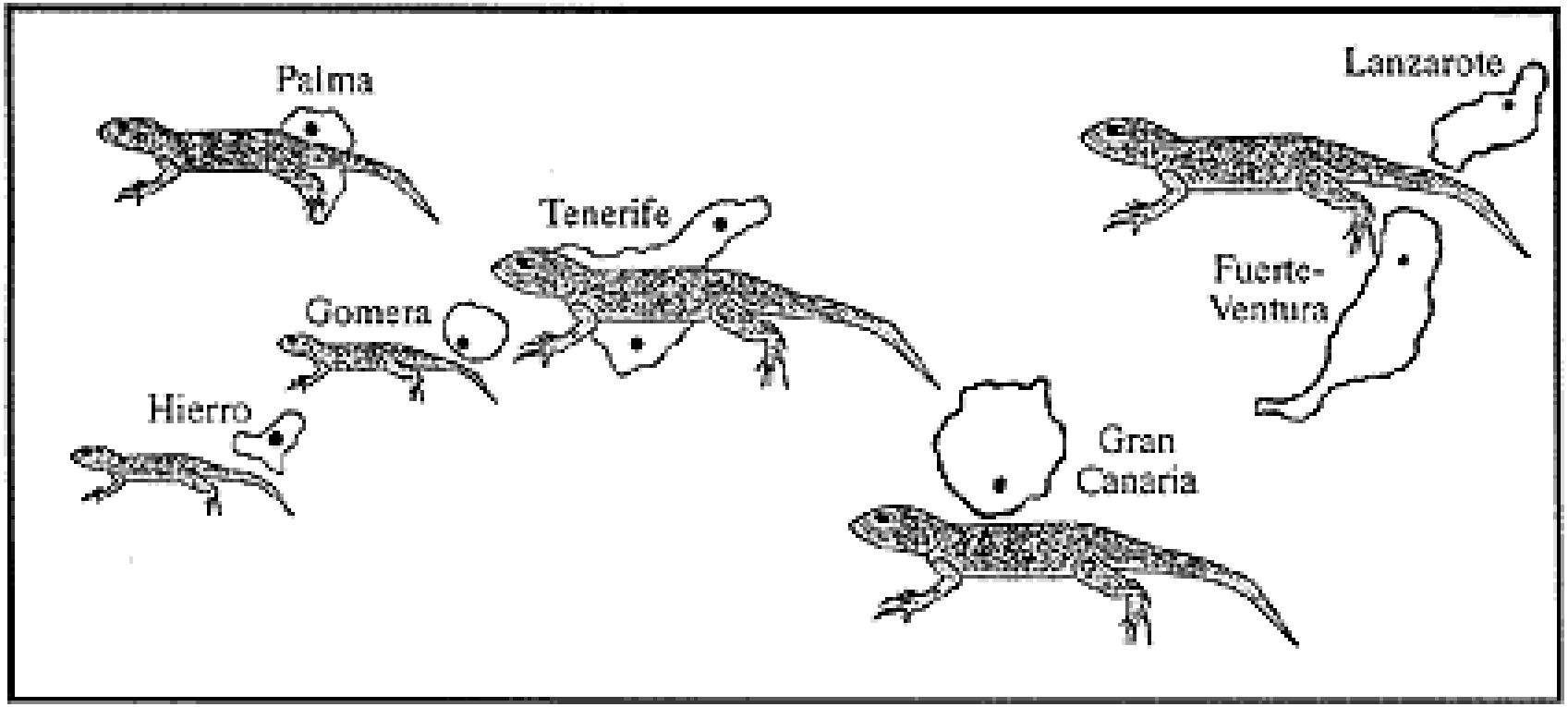


Figure 2. The relative sizes of typical lizards from each population are shown. (Redrawn from Thorpe et al., 1994.)



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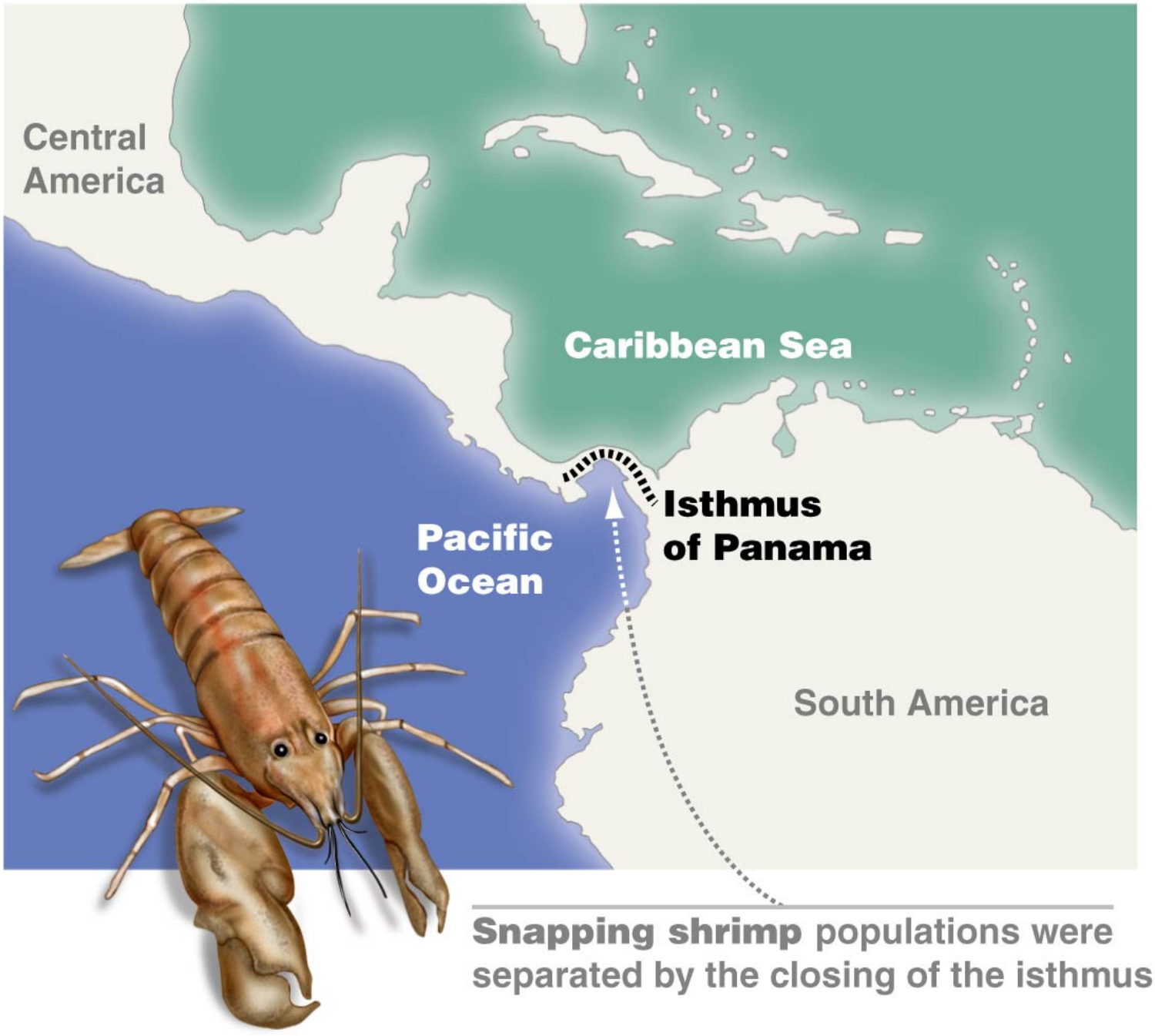
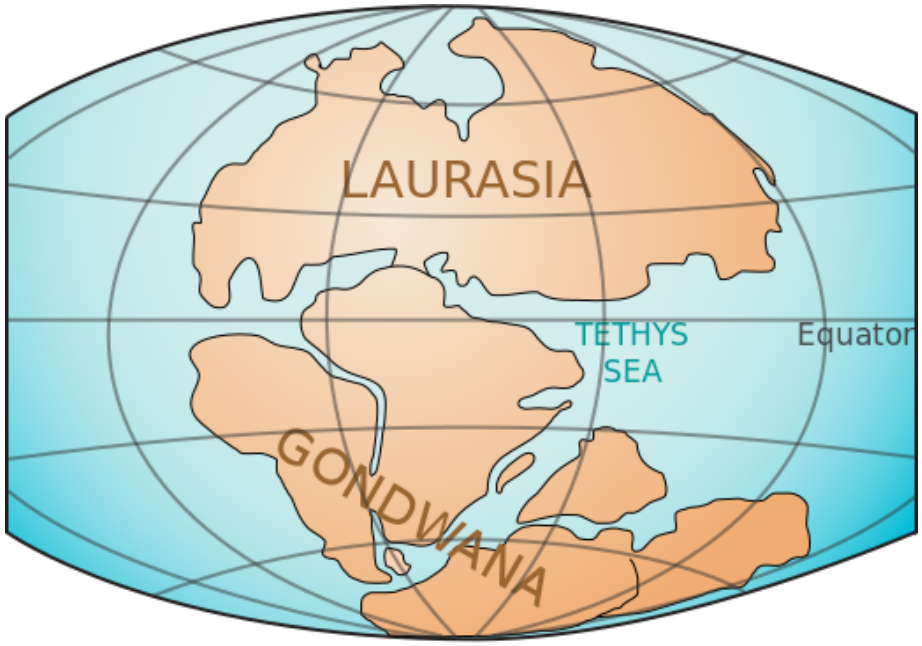
(a) Vicariance event: The closing of the Isthmus of Panama



Example: ratites



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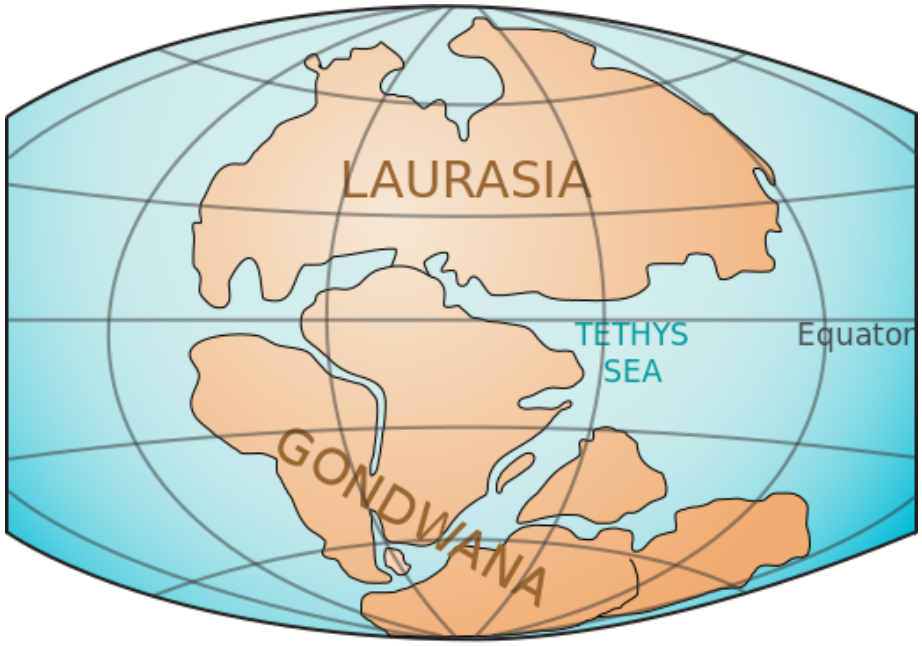

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Species divergence in sympatry

- **Sympatry** refers to organisms living in the same geographic area
- In general, it should be hard for populations of the same species living in sympatry to diverge.
  - * Gene flow
  - * Competition
- Are there exceptions to this expectation?
  - * Seed crackers?
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Whitney Cranshaw, Colorado State University, Bugwood.org

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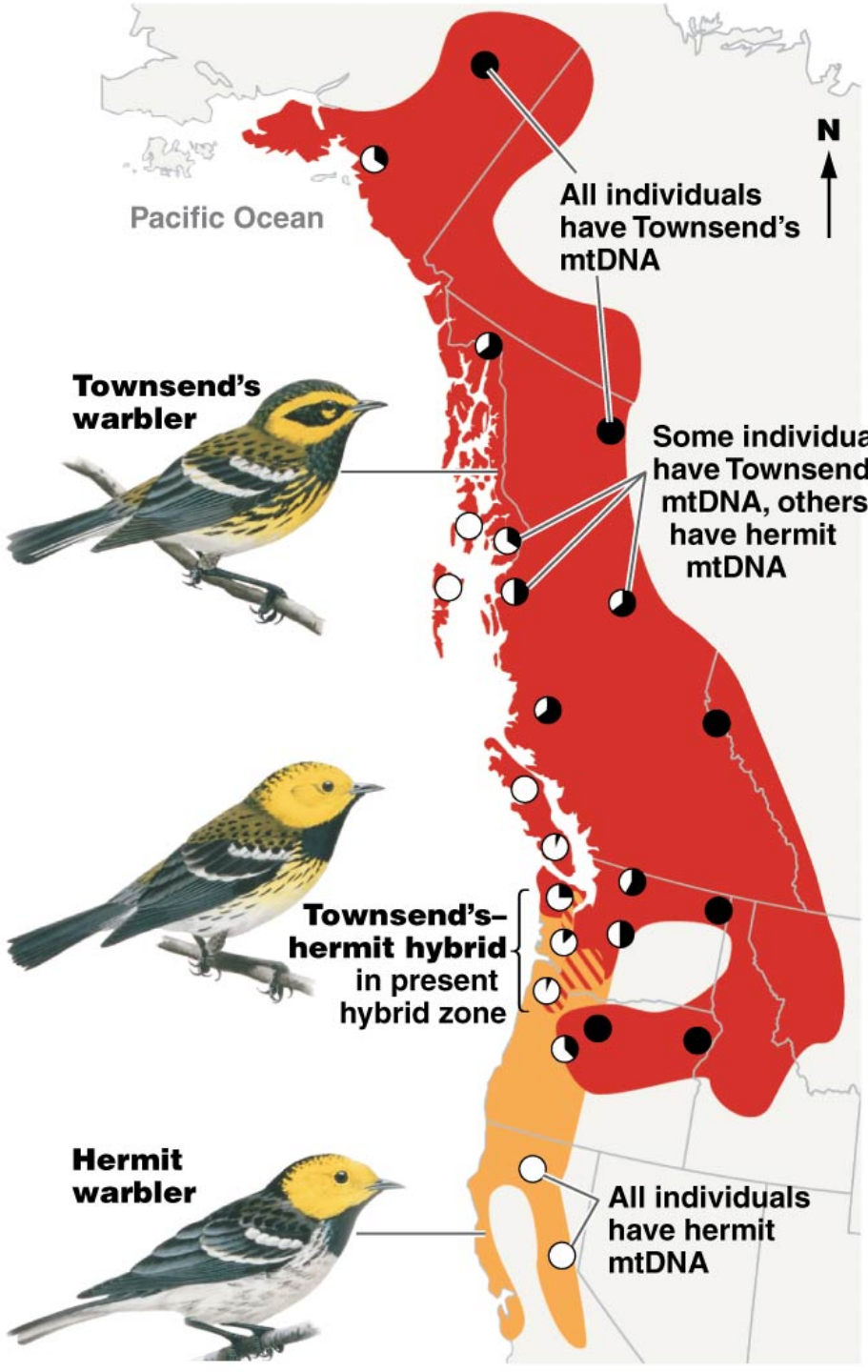

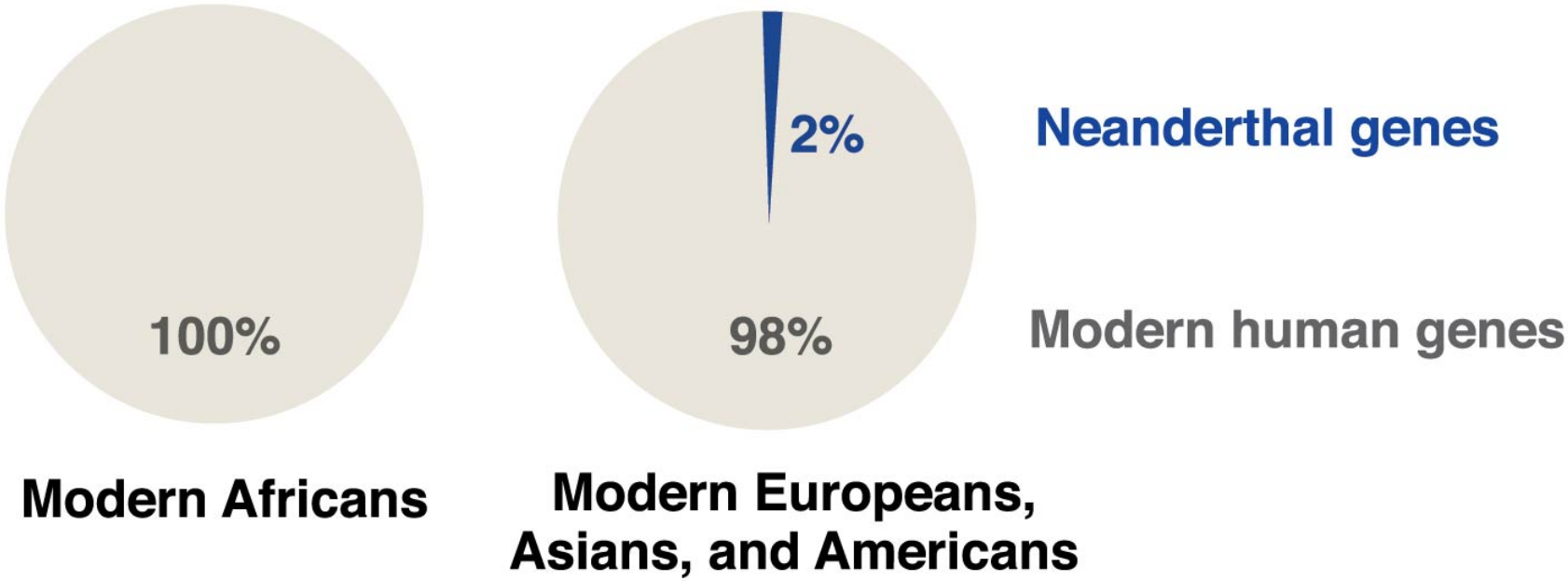

***Source*: Prüfer, K., et al. 2014. *Nature* 505: 43–49.**

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