



Types of Biodiversity

Habitat Biodiversity

e.g.



Species Biodiversity

① Species richness

①

②

② Species evenness

e.g.

e.g.

e.g.

Genetic Biodiversity

e.g.

e.g.



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Intraspecific

Investigating Diversity

1 2 3 4 5

Comparing Genetic Diversity

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Diversity/Variation

Can be caused by

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Standard Deviation

Interspecific

Sampling a Population

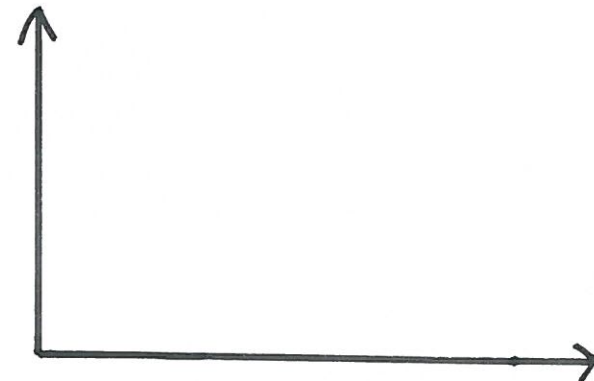
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Large Sample Size

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Selected at Random

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Investigating Populations : Sampling

Sampling

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- ↳
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General Rules

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Random Sampling

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Non-Random Sampling

Systematic Sampling

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e.g.

Opportunistic Sampling

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- ↳
-

Stratified Sampling

-
-
- ↳
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Species Richness

Species Evenness

Species Richness Vs. Species Evenness

Species Richness

Species Evenness



Species	Habitat 1	Habitat 2
Total		

Habitat 1 =
Habitat 2 =

Habitat 1 =
Habitat 2 =





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Species Richness

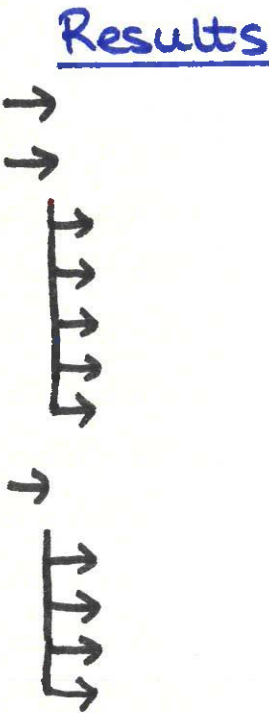
Simpson's Index of Diversity

1 2 3 4 5



$$= - \left(\quad \right)$$

Species Evenness



Species			
Blue Tit			
Great Tit			
Sparrow			
Starling			
Gold Tit			
Nut Hatch			
Total			



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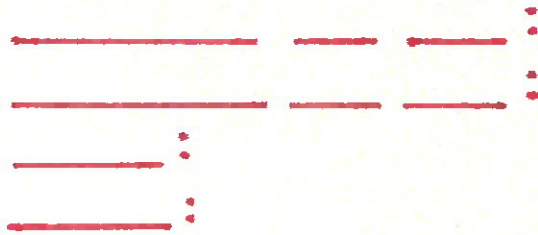
Polymorphic Gene Loci

Monomorphic Gene Loci

Allele

Locus

Calculating Genetic Biodiversity



= _____

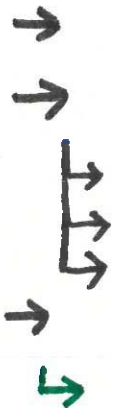
Species	Monomorphic Gene Loci	Polymorphic Gene Loci	Total Number of Gene Loci
Humans			
Sparrow			
Toad			
Crab			

Results

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→

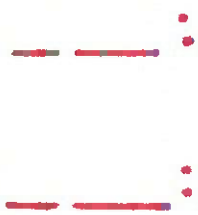
uses





In situ

In Situ & Ex Situ Conservation



In Situ Conservation

e.g.



Limitations



Ex situ

Ex Situ Conservation

e.g.



Limitations





Conservation Agreements

Convention on International Trade in Endangered Species ()

Rio Convention on Biological Diversity ()

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Countryside Stewardship Scheme () (:)

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e.g.

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