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| **What will we be learning?**  **Year 12 Biodiversity** | **Why this? Why now?**  Previous Learning  Year 11 ecology  Future Learning  Year 13 ecology  Enquiry Processes  Analyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:**  **Abiotic factors**  **Bias**  **Biodiversity**  **Biomass**  **Biotic factors**  **Climax community**  **Community**  **Community**  **Conservation**  **Habitat**  **Habitat**  **Herbicide**  **Index of diversity**  **Interspecific competition**  **Intraspecific competition**  **Monoculture**  **Niche**  **Niche**  **Pesticide**  **Pioneer species**  **Population**  **Population growth curve**  **Population size**  **Predator**  **Prey**  **Primary succession**  **Sample size**  **Secondary succession**  **Species richness**  **Succession**  **Tolerance range** |
| **What will we learn?**   * how biodiversity may be considered at different levels * how sampling is used in measuring the biodiversity of a habitat and the importance of sampling * practical investigations collecting random and non-random samples in the field * how to measure species richness and species evenness in a habitat * the use and interpretation of Simpson’s Index of Diversity (D) to calculate the biodiversity of a habitat * how genetic biodiversity may be assessed, including calculations * the factors affecting biodiversity * the ecological, economic and aesthetic reasons for maintaining biodiversity * in situ and ex situ methods of maintaining biodiversity * international and local conservation agreements made to protect species and habitats   **Misconceptions in this topic** | |
| **What opportunities are there for wider study?**  Careers  Ecology Forensics Horticulture Biochemistry Fisheries Work AgricultureFood Science Marine Biology Laboratory Work Environmental Health Teaching Pharmacology Biotechnology Veterinary work Environmental science Zoology  STE(A)M  https://highcliffe.sharepoint.com/sites/LearnSTEM | |
| **How will I be assessed?**  End of topic assessment  PAG 3.1 PAG 3.2 PAG 3.3 | |