## **Community Ecology**

- 1. What is community ecology
- 2. Patterns of Diversity
- 3. Niches and Life History
- 4. Simple population growth
- 5. Age depended populations
- 6. Fisheries and Forestry
- 7. Genetics
- 8. Predation 1
- 9. Predation 2
- 10. Competition 1
- 11. Competition 2
- 12. Mutualism
- 13. Networks 1
- 14. Networks 2
- 15. Disturbance and Succession
- 16. Movement, Migration Meta-populations
- 17. Metacommunities and Assembly
- 18. Coexistiance in Variable environments
- 19. Coexistance 2
- 20. Complexity and function
- 21. Eco-Evo feedbacks
- 22. Biogeography
- 23. Invasion
- 24. Re-wilding and Restoration

- 1. CO2/ Climate Change: State of Affairs ,IPCC
- 2. CO2/Climate Change: How do we know? Temp records, Ice cores, modeling
- 3. CO2/Climate Change: Paleoclimate
- 4. CO2/Climate change: Carbon cycle
- 5. C02/Climate change: Extreme Weather, sea level rise
- 6. Climate change-Fire
- 7. Land use/intensification: Nitrogen and Phosphorus cycle
- 8. Land use/intensification: Urbanization
- 9. Land use: Protected Areas
- 10. Interacting Drivers
  - ----- Biological Effects-----
- 11. C02- Plant physiology
- 12. C02- Thermal Tolerance, Migration & dispersal
- 13. C02- Ocean Acidification
- 14. C02- Phenology –Shifts and Mismatches
- 15. C02- Drought and fire
- 16. Land Use- Nitrogen effects, Eutrophication
- 17. Land Use-Habitat Fragmentation
- 18. Land use- Urban Ecology
- 19. Invasive species, Biotic Homogenization
- 20. The 6<sup>th</sup> Extinction
  - -----Prospects-----
- 21. Global Change and Evolution
- 22. Conservation and Policy
- 23. Ecological Restoration and Carbon Farming
- 24. Assisted Migration and Geno-banking