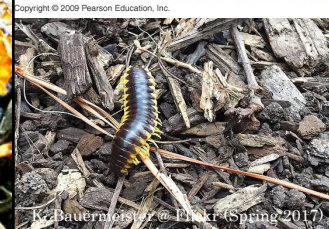


DECOMPOSITION & NUTRIENT CYCLING



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Learning Objectives

At the end of today's meeting, you should be able to:

1. Explain the relationship between **decomposition** and **nutrient cycling** processes
2. Identify **factors that influence** decomposition rates
3. Sketch and explain the **idealized dynamics of nitrogen content change** during litter decomposition
4. Compare and contrast decomposition and nutrient cycling in **terrestrial** and **aquatic** habitats
5. Sketch and explain the **feedback** between nutrient availability, NPP, and decomposition rates

Vocabulary: nutrient cycling, resorption, leaf packs, litter bags, mineralization, immobilization, net mineralization rate, soil organic matter, rhizosphere, soil microbial loop, particulate organic matter (POM), dissolved organic matter (DOM), thermocline, pycnocline, nutrient spiraling, tidal subsidy

Reading: Smith & Smith, Chapter 2015, Chapter 21