

Notes from conversation with Julian:

1. Low-hanging fruit: Effect of connectivity on (a) species and functional group diversity and abundance
2. Next level: Movement & Dispersal. There are large areas of forest where it is possible to capture beetles for Mark-Release-Recapture (MRR) experiments.
3. Higher-risk, Higher reward (even if they don't go in MS, can be set-up for potential PHD projects): Experiments on Ecosystem Services
 - dung burial, decomposition, soil properties based on results of 1 & 2 (buckets with dung and beetle assemblages)
 - gas (e.g., methane) emissions
 - seed dispersal/burial/germination

Example studies

1. Diversity and Abundance
 - Estrada and Coates-Estrada (2002): "56% of individuals were captured in the continuous forest, 29% in the mosaic habitat and 15% in the forest fragments"
2. Movement & Dispersal
3. Ecosystem Services

Other stuff to work on:

1. Species List & Keys for Dung Beetles of the Southeastern US
2. Any previous work done on dung beetles in Southeastern US
3. List of Equipment and Tools needed
 - Dung beetle traps
 - alcohol
 - bait

References

Estrada, A, and R Coates-Estrada. 2002. "Dung Beetles in Continuous Forest, Forest Fragments and in an Agricultural Mosaic Habitat Island at Los Tuxtlas, Mexico." *BIODIVERSITY AND CONSERVATION* 11 (11): 1903–18. <https://doi.org/10.1023/A:1020896928578>.