

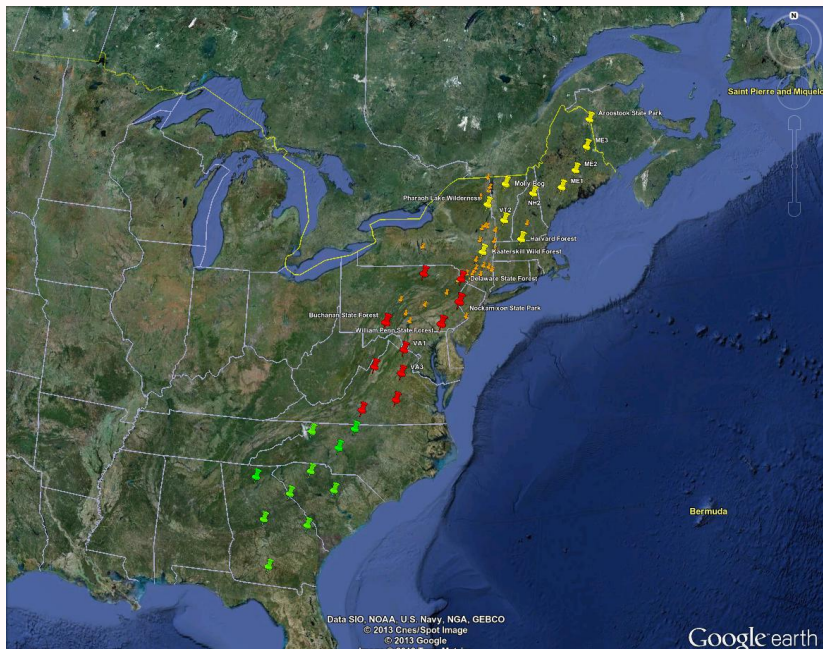
Aphaenogaster sampling

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Latitudinal variation in gene expression

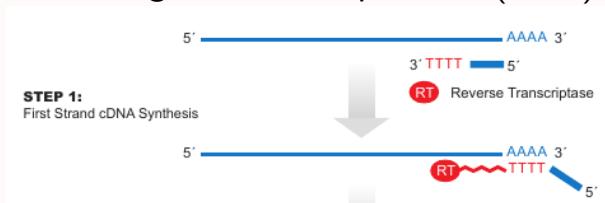


Latitudinal variation in gene expression

Goals

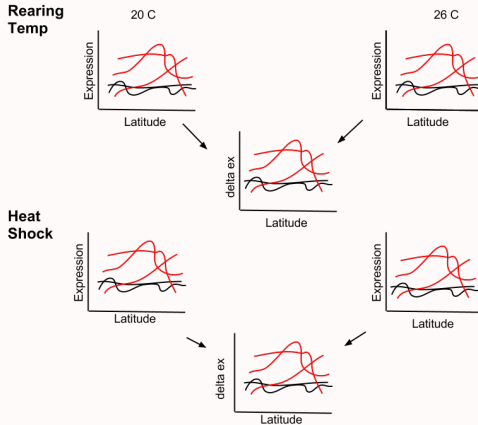
- ① Identify genes underlying differences among populations in thermal tolerance
- ② Evaluate the extent to which selection has acted on climate-related genes

Ovation 3' Digital Gene Expression (DGE) Tags



Latitudinal variation in gene expression

Common gardens for gene expression



Latitudinal variation in gene expression

Challenges

① *A. picea* and *A. rudis*

②

Population genomics of *Aphaenogaster*

SNPs in 3' tail of gene
expression tags



- Do genes with significant changes in expression among sites have reduced molecular diversity?
different haplotypes?
- How are populations structured?
- What is the extent of gene flow? Male vs female dispersal?