

## Phylogenetics Z620 Homework 6

For the study of Adenylate Kinase Intron 5 in various birds, the data were made available at:

<http://mypage.iu.edu/~ehouswor/Fall2005/BioZ620/BirdData.txt>

- (1) Find the maximum likelihood tree for these introns. How does the tree vary from the tree obtained using parsimony?
- (2) Find the ancestral states given by parsimony and by maximum likelihood. How much do they vary?
- (3) What assumptions are made in the use of maximum likelihood and do you think those assumptions are approximately met for these data?