

Appendix 1. Idiosyncratic species PCA results. Results of principal component analysis of plant species presence/absence data from lakes in the Yukon Flats National Wildlife Refuge. Separate analyses were conducted for aboveground biomass (AGB) and organic layer thickness (OLT) in three plant communities: Grass/Sedge (GS), Deciduous Shrub (SH) and Upland Forest (F), as indicated by the header for each figure. Species used in the analysis were identified as strong individual predictors of AGB or OLT in random forest regression tree analysis for each community. These species are referred to as idiosyncratic species in the text. Axes indicate the strength of correlation between measured variables and the first (horizontal) and second (vertical) principal component scores. The horizontal and vertical locations of arrow tips indicate correlation scores for each variable. Closely-grouped arrows indicate sets of functional traits that co-vary across lakes.