## Supplementary Online Material for

## Modeling the hydrology and physiology of *Sphagnum* moss in a northern temperate bog

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This file contains Figure S1, S2 and S3.

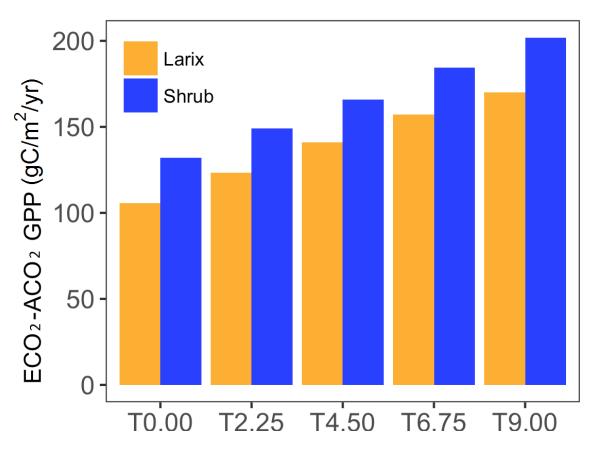


Figure S1. The differences between the elevated and ambient  $CO_2$  with warming conditions ( $ECO_2$ -ACO<sub>2</sub>) for modeled potential GPP for *Larix* and shrub species.

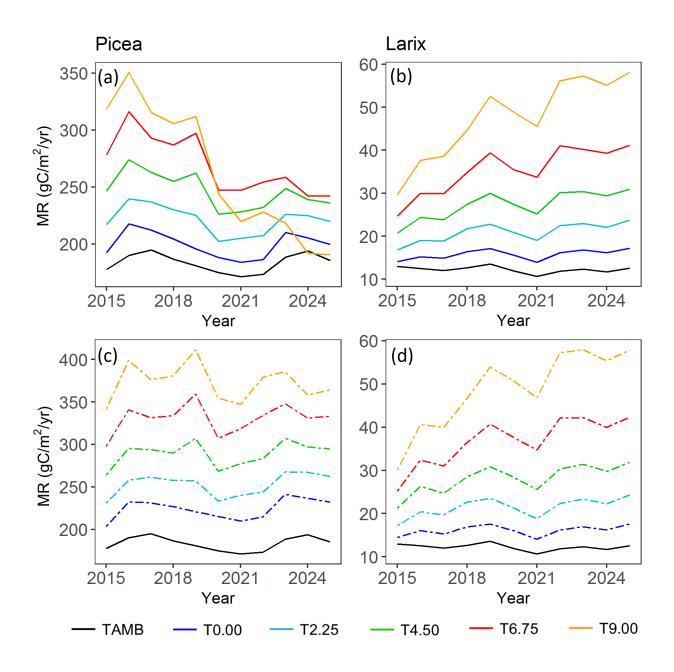


Figure S2 predicted MR response to warming with ambient atmospheric CO2 (a-b, solid lines) and warming with elevated atmospheric  $CO_2$  concentration (c-d, dash lines), the black solid line TAMB is the ambient temperature and  $CO_2$  case, T0.00 to T9.00 means increasing temperature from 0°C to 9°C.

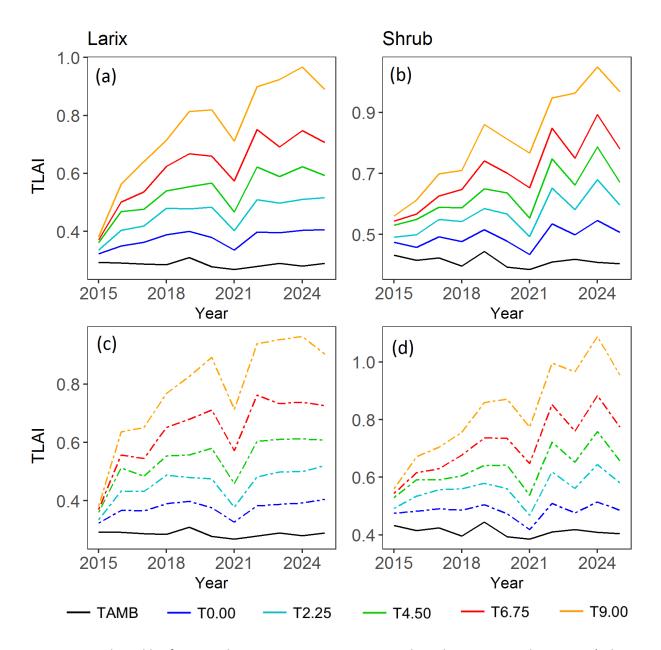


Figure S3 predicted leaf area index response to warming with ambient atmospheric  $CO_2$  (a-b, solid lines) and warming with elevated atmospheric  $CO_2$  concentration (c-d, dash lines), the black solid line TAMB is the ambient temperature and  $CO_2$  case, T0.00 to T9.00 means increasing temperature from 0°C to 9°C.