



**UAA Environment and
Natural Resources Institute**
UNIVERSITY of ALASKA ANCHORAGE

**UAA Environment and Natural Resources Institute (ENRI)
Invited, Oral, and Poster Presentations and Posters
AGU Fall Meeting 2011**

Cable, J.M.,[‡] Ogle, K., and **Welker, J.M.** “Transpiration response of boreal forest plants to permafrost thaw.” AGU Fall Meeting 2011, San Francisco, CA. Poster (C41B-0407), December 8, 2011.

Cahoon, S.M.,* **Sullivan, P.**, Post, E., and **Welker, J.M.** “Large herbivores limit CO₂ uptake and suppress carbon cycle responses to warming in West Greenland.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (B43C-0307), December 8, 2011.

Causey, D., Bargmann, N.A.,* Burnham, K.K., Burnham, J.L., Padula, V.M.,* Johnson, J.A., and **Welker, J.M.** “Biogeochemical indicators in High- and Low-Arctic marine and terrestrial avian community changes: Comparative isotopic ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, and $\delta^{34}\text{S}$) studies in Alaska and Greenland.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (GC51F-1079), December 9, 2011.

Cherry, J.E., Cable, J.M.,[‡] Cable, W., Worden, J., Crosson, E., Van Pelt, A., and **Welker, J.M.** “Water vapor isotope measurements over the Alaskan Boreal Forest with aircraft and satellite remote sensing.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (B31E-0358), December 7, 2011.

Csank, A.Z.,[‡] Czimczik, C.I., Xu, X., and **Welker, J.M.** “Seasonal shifts in the source and age of riverine DOC and POC in NW Greenland.” AGU Fall Meeting 2011, San Francisco, CA. Oral Presentation (B31J-02), December 7, 2011.

Darrouzet-Nardi, A., Wallenstein, M.D., Steltzer, H., **Sullivan, P.**, Melle, C., Segal, A.D.,* and Weintraub, M.N. “Early season nitrogen limitation of microbial respiration in the organic horizon of tussock tundra soils.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (GC51F-1070), December 9, 2011.

Liu, L., Sletten, R.S., **Hagedorn, B.**, Stone, J.O., Hallet, B., and McKay, C.P. “An enhanced vapor transport and sublimation model using 10+ years of field measurements of Earth’s oldest ground ice in Beacon Valley, Antarctica.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (C33B-0641), December 7, 2011.

Liu, Z., Bowen, G.J., and **Welker, J.M.** “Winter precipitation isotope gradients ($\delta^{18}\text{O}$) of the contiguous USA and their relationship to the Pacific/North American (PNA) Pattern.” AGU Fall Meeting 2011, San Francisco, CA. Oral Presentation (PP24B-08), December 6, 2011.

Lupascu, M., Xu, X., Lett, C., Maseyk, K.S., Lindsey, D.S., Thomas, J.S., **Welker, J.M.**, and Czimczik, C.I. “Timing, magnitude and sources of ecosystem respiration in High Arctic tundra of NW Greenland.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (GC43C-0950), December 8, 2011.

McNown, R.W.,* and **Sullivan, P.** “Seasonality of needle gas exchange and growth in all major organs of white spruce in contrasting habitats near the Arctic treeline.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (B13D-0598), December 5, 2011.

Post, E., Boving, P., Cahoon, S.M.,* Kerby, J., Hoyer, T., Forchhammer, M., **Sullivan, P.**, and **Welker, J.M.** “Phenology as an integrator of ecological dynamics in a rapidly warming Arctic.” AGU Fall Meeting 2011, San Francisco, CA. Invited Presentation (B51P-01), December 9, 2011.

Rennermalm, A.K., Smith, L.C., Chu, V.W., Forster, R.R., **Hagedorn, B.**, Box, J.E., van den Broeke, M.R. “Controls on Greenland Ice Sheet runoff from a land terminating glacier.” AGU Fall Meeting 2011, San Francisco, CA. Oral Presentation (C32A-04), December 7, 2011.

Rogers, M.,* **Welker, J.M.**, and Toohey, R. “The Alaska Water Isotope Network (AKWIN): Precipitation, lake, river and stream dynamics.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (B21H-0363), December 6, 2011.

Segal, A.D.,* **Sullivan, P.**, Weintraub, M.N., Darrouzet-Nardi, A., and Steltzer, H. “Relative contributions of rhizosphere and microbial respiration to belowground and total ecosystem respiration in arctic tussock tundra: Results of a ^{13}C pulse-chase experiment.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (GC51F-1077), December 7, 2011.

Steltzer, H., Weintraub, M.N., **Sullivan, P.**, Wallenstein, M.D., Schimel, J., Darrouzet-Nardi, A., Shory, R., Livenessperger, C., Melle, C., Segal, A.D.,* Daly, K., and Tsosie, T. “Seasonal greening of an Arctic ecosystem in response to early snowmelt and climate warming: Do plant community responses differ from species responses?” AGU Fall Meeting 2011, San Francisco, CA. Invited Presentation (B52B-01), December 7, 2011.

Sullivan, P., McNown, R.W.,* and **Sveinbjörnsson, B.** “Canopy gas exchange of white spruce in contrasting habitats near the Arctic treeline in northwest Alaska.” AGU Fall Meeting 2011, San Francisco, CA. Oral Presentation (B12B-05), December 5, 2011.

Sveinbjörnsson, B., Traustason, T.,* **Sullivan, P.**, and Ruess, R. “Environment and performance of white spruce below and above the forest limit across the boreal forest in Alaska.” AGU Fall Meeting 2011, San Francisco, CA. Oral Presentation (B12B-08), December 5, 2011.

Thomas, J.S., Lupascu, M., Xu, X., Maseyk, K.S., **Welker, J.M.** and Czimczik, C.I. “Response of rates and sources of ecosystem CO₂ efflux to increasing levels of winter snow depth in the High Arctic of Northwest Greenland.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (GC43C-0940), December 8, 2011.

Tomco, P.L.,[‡] Zulueta, R.C.,[‡] and **Welker, J.M.** “Surface water nutrient budget controlled by vegetation succession in the deglaciating Copper River Basin, Southcentral Alaska.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (B13E-0622), December 5, 2011.

Weintraub, M.N., Steltzer, H., **Sullivan, P.**, Schimel, J., Wallenstein, M.D., Darrouzet-Nardi, A., and Segal, A.D.* “The changing seasonality of tundra nutrient cycling: Implications for Arctic ecosystem function.” AGU Fall Meeting 2011, San Francisco, CA. Oral Presentation (GC32A-03), December 7, 2011.

Winnick, M.J., **Welker, J.M.**, and Chamberlain, C.P. “Characterizing atmospheric teleconnections in the Pliocene epoch using stable isotopes.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (PP13B-1826), December 5, 2011.

Zulueta, R.C.,[‡] **Welker, J.M.**, and Tomco, P.L.[‡] “Carbon fluxes between the atmosphere, terrestrial, and river systems across a glacier-dominated landscape in Southcentral Alaska.” AGU Fall Meeting 2011, San Francisco, CA. Poster Presentation (B41C-0228), December 8, 2011.