Supplementary Materials

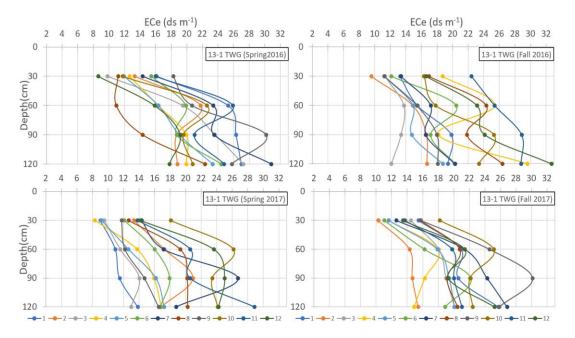


Figure 1. Salinity distribution in the soil profile at the 12 sampling locations in tall wheatgrass field 13-1 for spring (left) and fall (right) surveys conducted in 2016 (upper) and 2017 (lower). Each line with data points represents one of the locations identified by the ESAP program based on the range and variability of the ECa data measured by the EM38. Sample number on the bottom legend corresponds to the location on the map for the respective season/year.

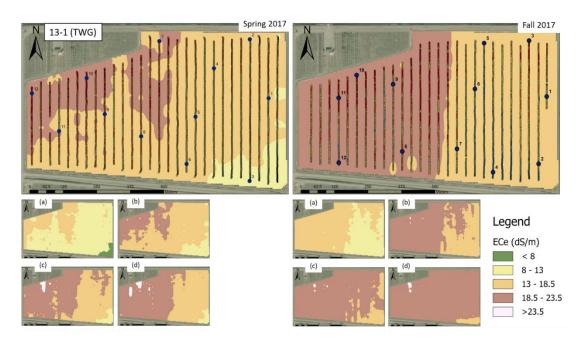


Figure 2. Spatial distribution of average soil salinity for tall wheatgrass field 13-1 for the 0-120 cm depth (top two maps) and for each depth (bottom 8 maps) with (a) 0-30 cm, (b) 30-60 cm, (c) 60-90 cm and (d) 90-120 cm. Data are for spring (left) and fall (right) 2017. Transects/rows where the EC_a measurements were taken during the EM38-MK2 survey and the twelve ESAP-guided, sampling locations are shown in the upper maps.

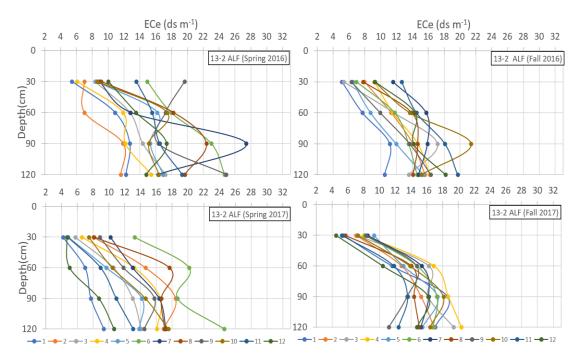


Figure 3. Salinity distribution in the soil profile at the 12 sampling locations in alfalfa field 13-2 for spring (left) and fall (right) surveys conducted in 2016 (upper) and 2017 (lower). Each line with data points represents one of the locations identified by the ESAP program based on the range and variability of the EC_a data measured by the EM38. Sample number on the bottom legend corresponds to the location on the map for the respective season/year.

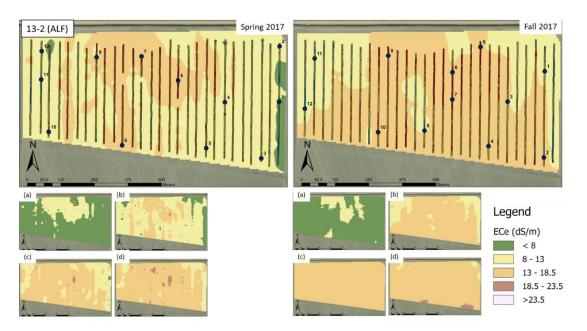


Figure 4. Spatial distribution of average soil salinity for alfalfa field 13-2 for the 0-120 cm depth (top two maps) and for each depth (bottom 8 maps) with (a) 0-30 cm, (b) 30-60 cm, (c) 60-90 cm and (d) 90-120 cm. Data are for spring (left) and fall (right) 2017. Transects/rows where the EC_a measurements were taken during the EM38-MK2 survey and the twelve ESAP-guided, sampling locations are shown in the upper maps.