Supplement.

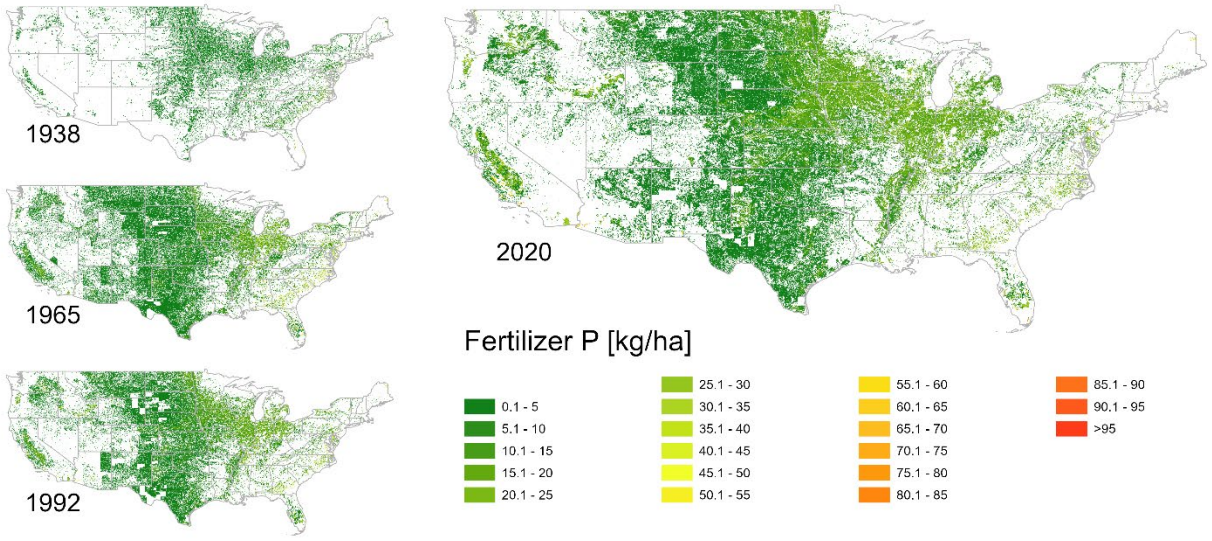

Figure S1: Fertilizer P mass at 48 arc-seconds resolution for 1938, 1965, 1992, and 2020 estimated by this study (HLNID).

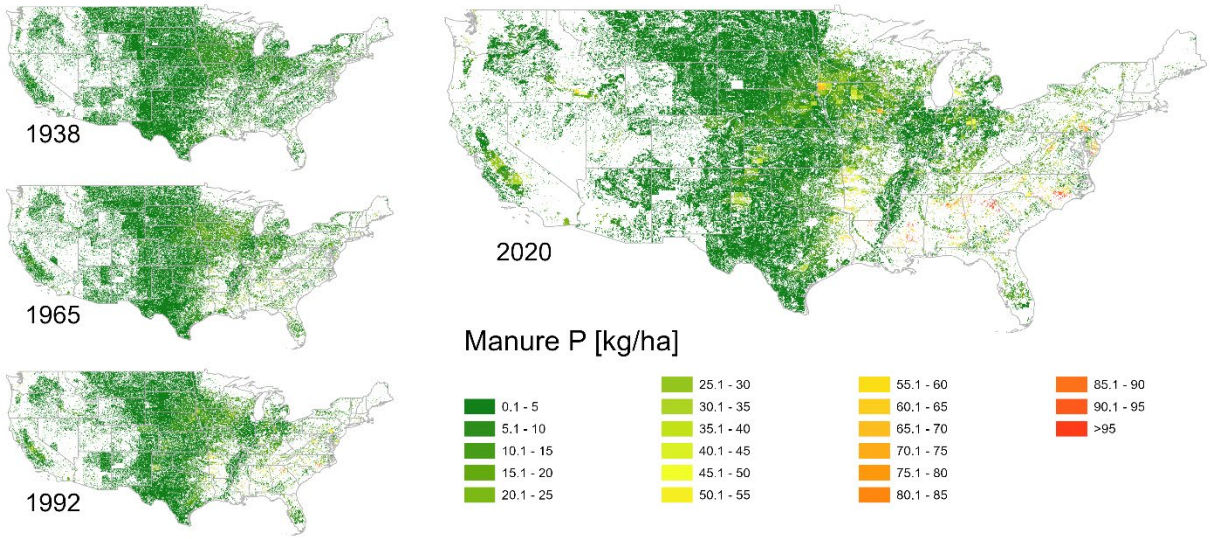

Figure S2: Manure P mass at 48 arc-seconds resolution for 1938, 1965, 1992, and 2020 estimated by this study (HLNID).

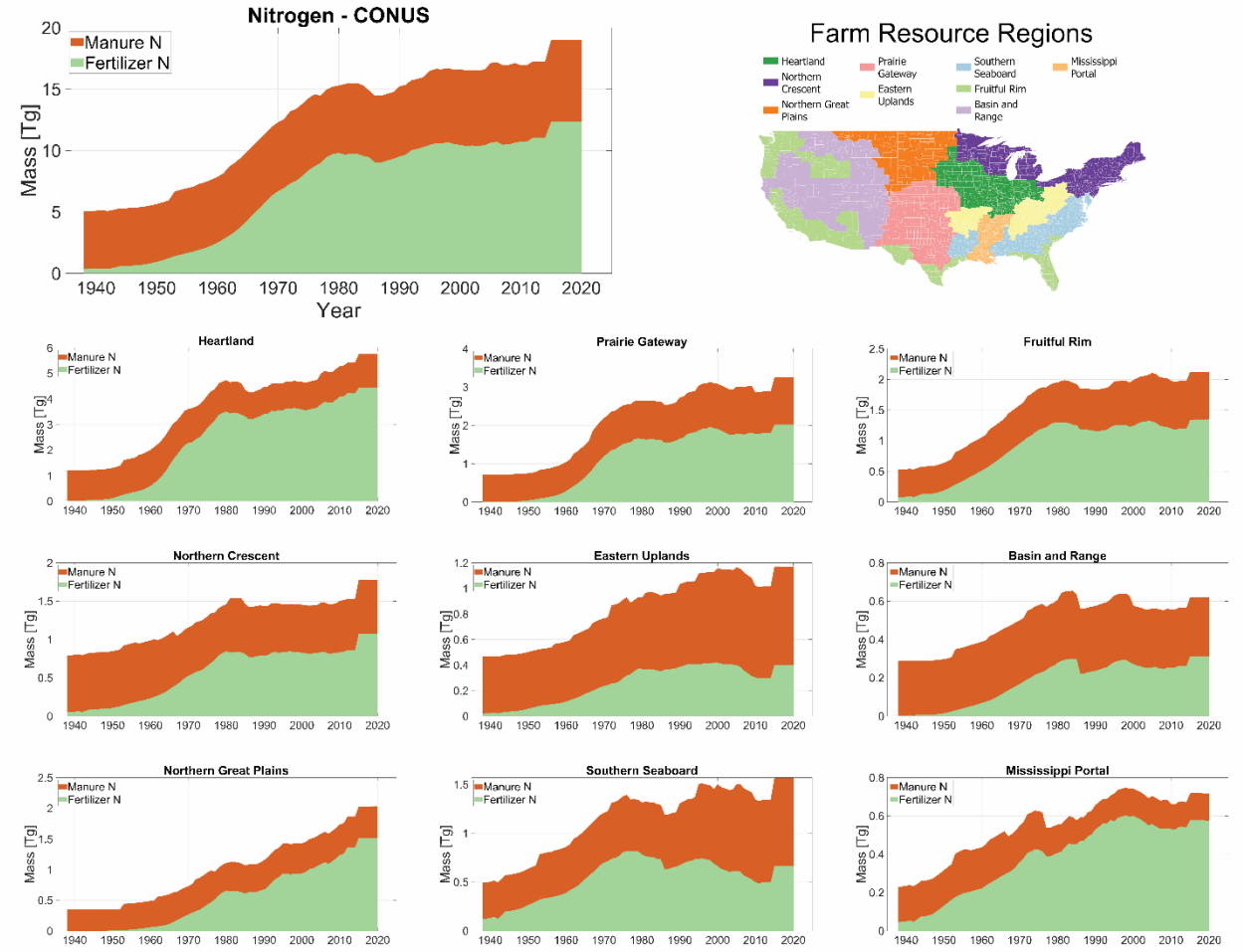

Figure S3: Change in CONUS nitrogen masses (manure and fertilizer) from 1938-2020 and for the 9 Farm Resource Regions.

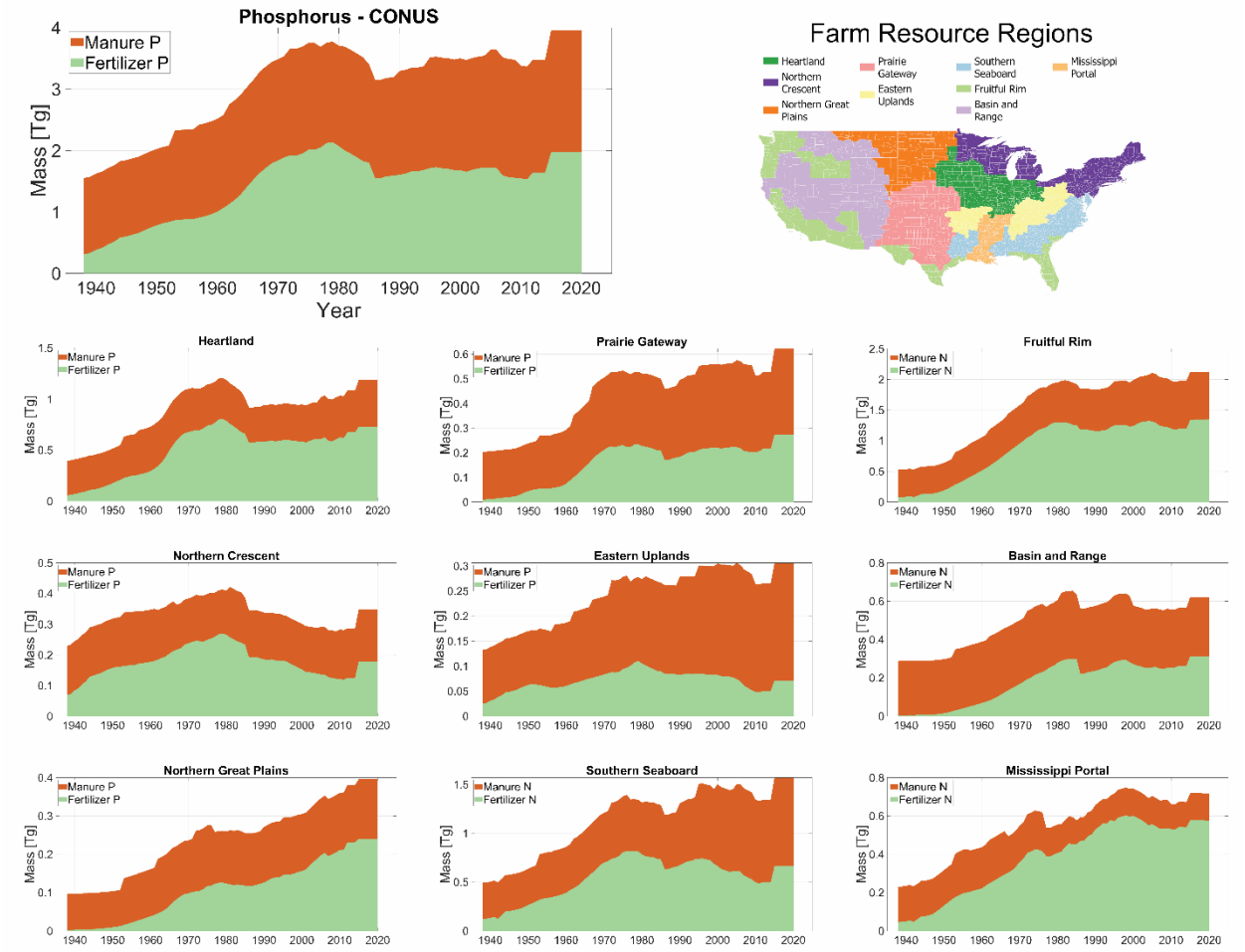

Figure S4: Change in CONUS phosphorus masses (manure and fertilizer) from 1938-2020 and for the 9 Farm Resource Regions.