

Carbon balance of farm-land at Willow Creek Ranch. (Negative) values indicate CO2 sink; positive values indicate CO2 source to the atmosphere, cells shaded green are estimates from literature per notes column, cells shaded yellow are input by farm)

land	g C/m2/yr	kg C/ac/yr	Mg CO2eq/ac/yr	acres	Mg CO2eq/yr
southern hardwood forest (soil C)	(150)	(607)	(2.43)	229	(556)
grazed pasture (soil C)	(32)	(130)	(0.52)	234	(121)
hayed grass pasture (soil C)	41	166	0.66	98	65
total soil C fluxes	(182)	(737)	(2.95)	561	(612)

	kg N2O/ac/yr	kg N2O/yr	acres	Mg CO2eq/yr
grazed pasture (soil N2O)	1.62	378.95	234	113
hayed grass pasture (soil N2O)	0.81	79.35	98	24
total soil N2O fluxes	2.43	458.30	332	137

livestock	kg CH4/head	kg CO2eq/head	Mg CO2eq/head	cows	Mg CO2eq/yr
cows	76.7		1.92	115	220.5
hogs	1.5		0.038	24	0.9
chickens	-	45	0.045	20	0.9
total livestock fluxes			2.00		222

energy	kWh/yr	Mg CO2eq/kWh	Mg CO2eq/yr
electricity	(53,985)	0.0007	(38)

farm C balance (291) Mg CO2eq/yr removed from atmosphere
 (32,924) gallons gasoline consumed
 (63) passenger vehicles driven 12k mi/yr @ 22.5 mi/gal