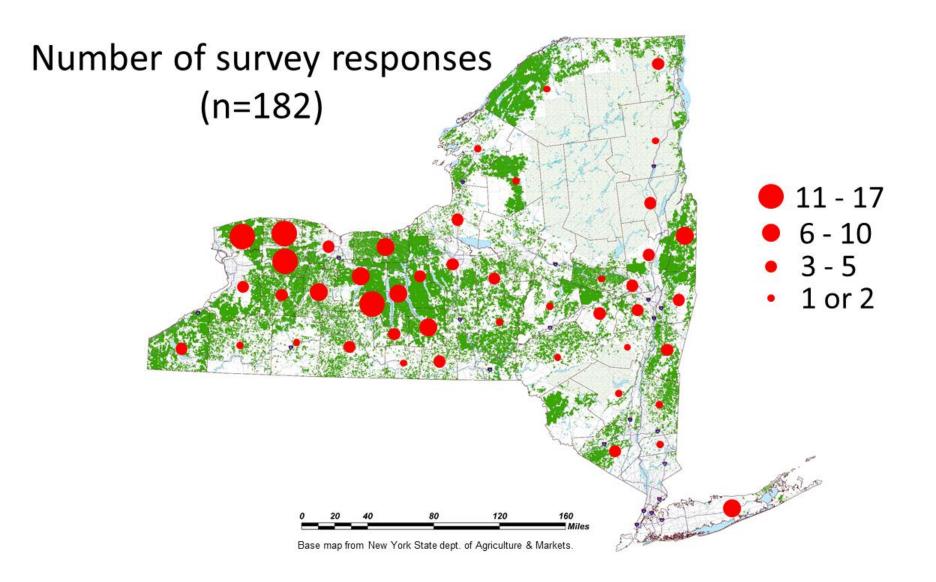
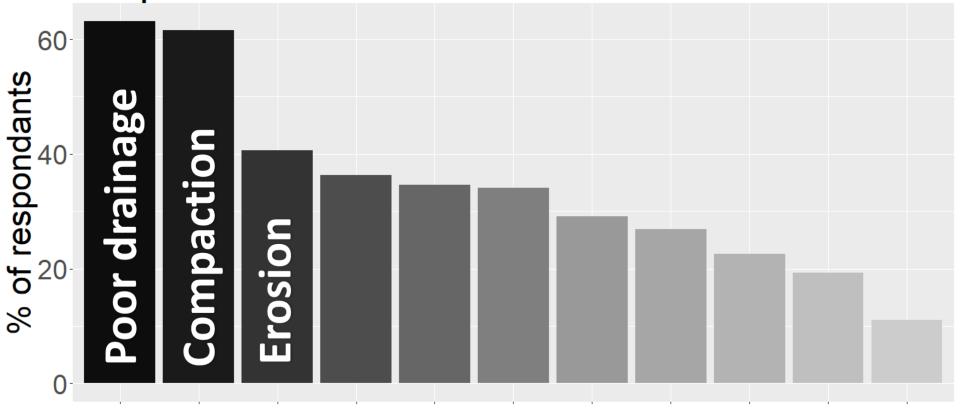
New York Soil Health Survey of Costs, Constraints, and Benefits

Cedric W Mason, Ph.D cwm77@cornell.edu





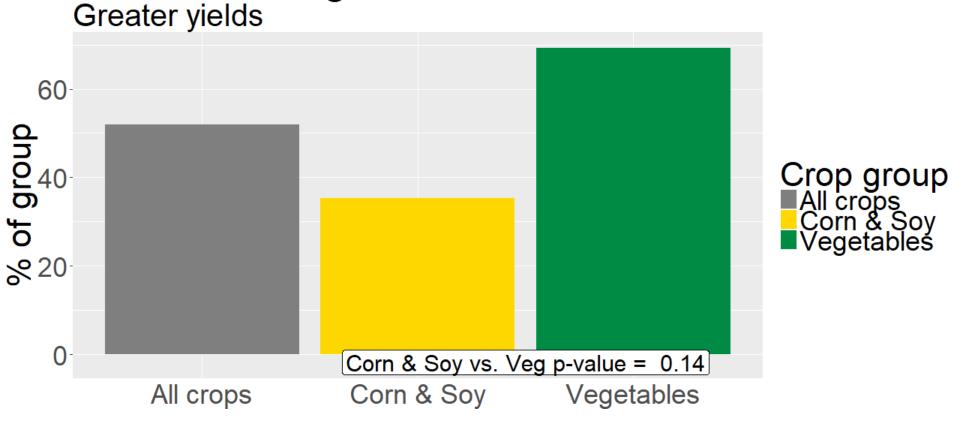
Crop Production Constraints in New York



Major Benefits of Reduced Tillage

		Corn & Soy (n=17)	Vegetables (n=13)
	1	Less labor, fuel, or equipment (88.2%)	Less erosion repair (69.2%)
	2	Less erosion repair (76.5%)	Greater yields (69.2%)
	3	Greater yields (35.3%)	Less labor, fuel, or equipment (53.8%)

Reduced Tillage

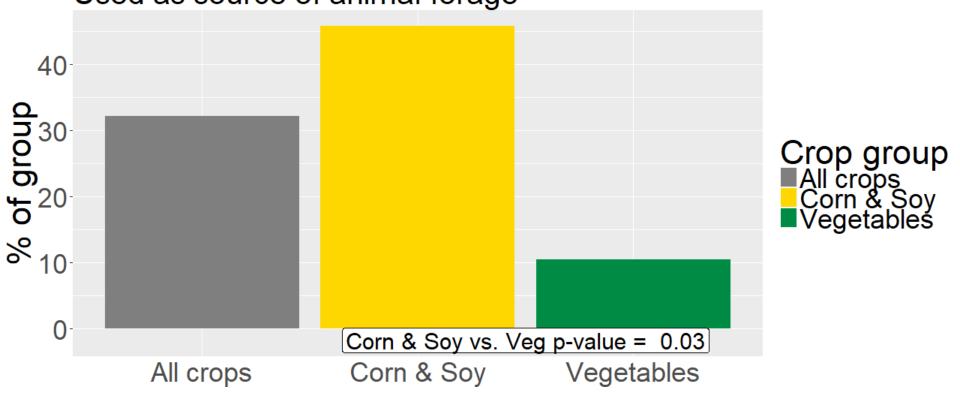


Major Benefits of Cover Crops

		Corn & Soy (n=24)	Vegetables (n=19)
2	1	Less erosion repair (95.8%)	Less erosion repair (78.9%)
7	2	Source of animal forage (45.8%)	Greater yields of cash crops (78.9%)
	3	Greater yields of cash crops (33.3%)	Less fertilizer (57.9%)

Cover Crops Greater cash crop yields 80 dnoab 40 Crop group
All crops
Corn & Soy
Vegetables ×20-0-Corn & Soy vs. Veg p-value = 0.0076 All crops Corn & Soy Vegetables

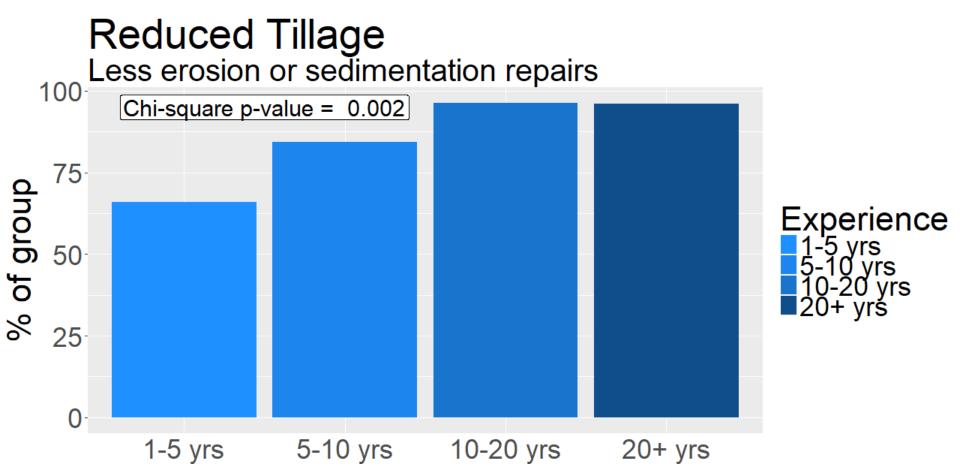
Cover Crops
Used as source of animal forage



Changes in costs and benefits over the long term

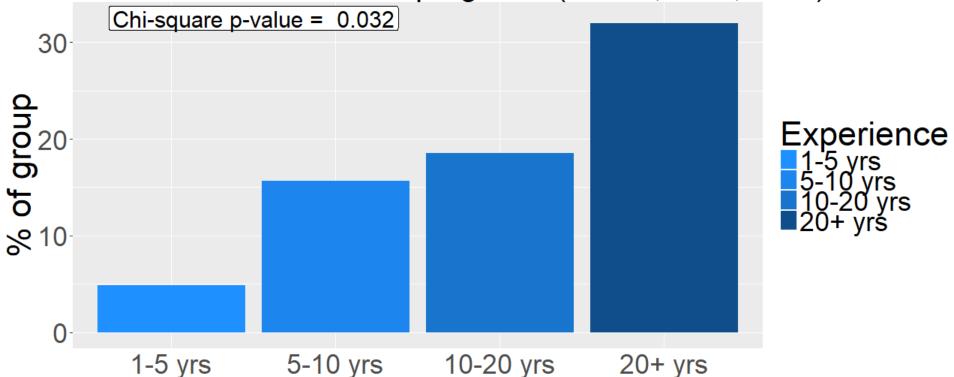
Different levels of experience:

- 1 5 years
- 5 10 years
- 10 20 years
- 20+ years



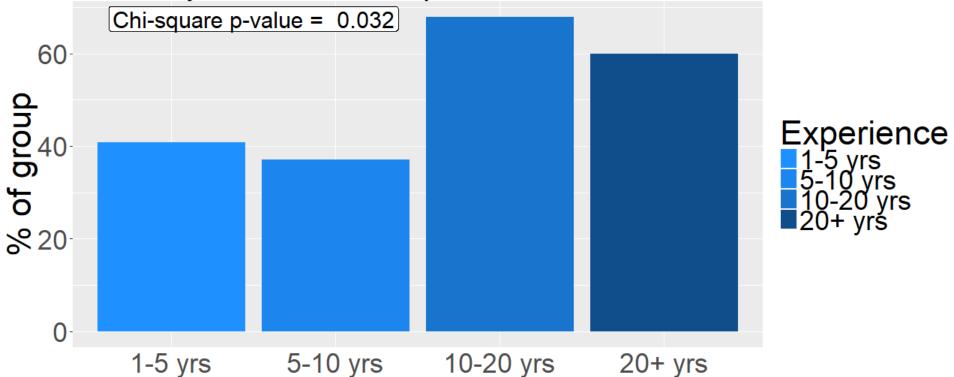
Reduced Tillage

Benefits from cost-share programs (NRCS, CSP, CRP)



Cover Crops
Greater violes of cash

Greater yields of cash crops



Weather Resilience

