

2010 Wheat Update

Soil Fertility

Brian Arnall

8-5-2010

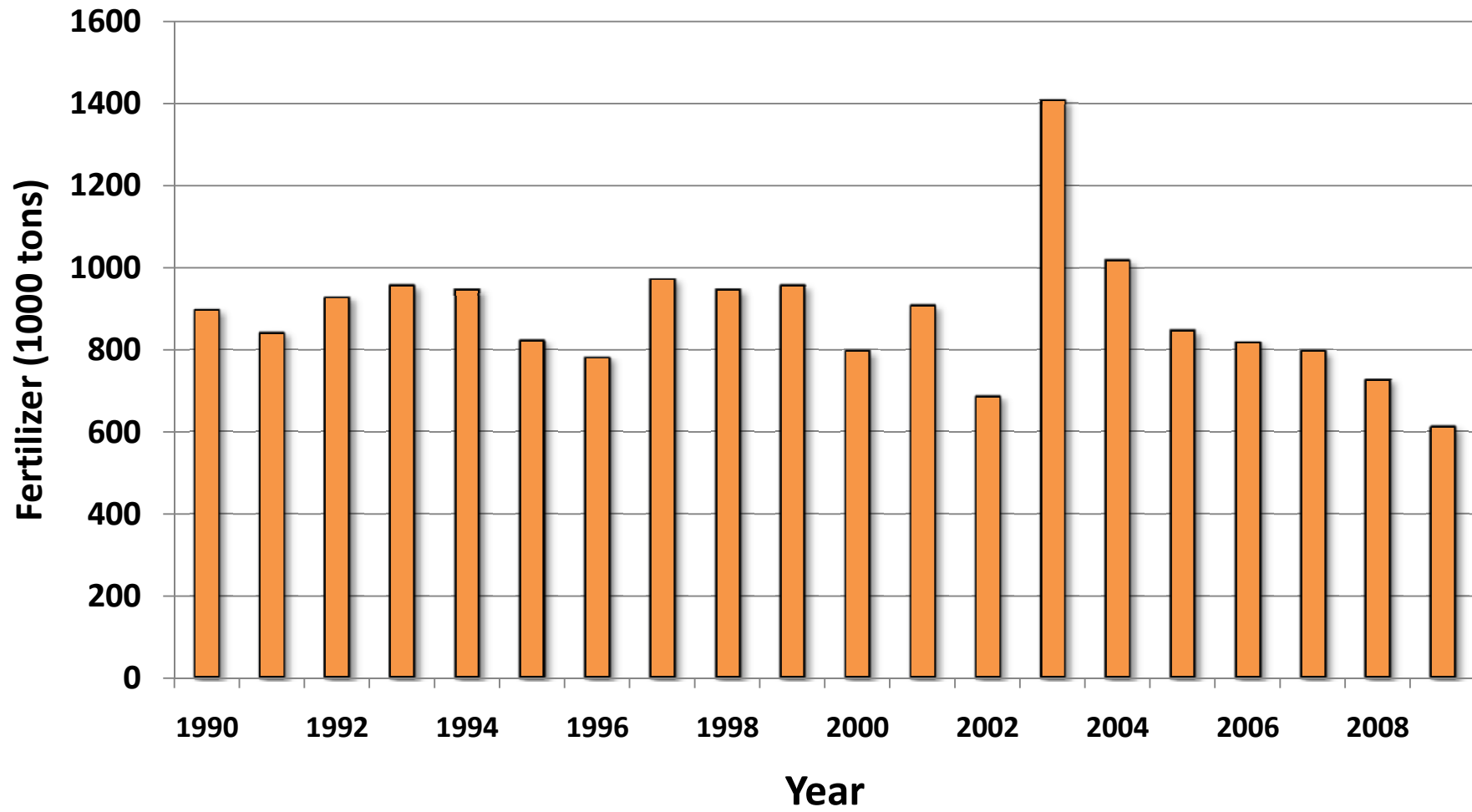
Topics

- 2010 Protein
- Fertilizer Sales
- Large Scale SBNRC
- N-Rich Strips
- Up and coming research
- pH

Protein

- Fertilization and Yields
 - Inefficient N fertilization
 - High yield and/or high test weights dilute N.
 - Low yield and/or low test weight concentrates N.
- Record Yields in SW
 - Accounted for high test, yield and low N fert.
- Poor rooting depth and leaching
 - Field with high preplant N rates, deficient

Sales



2009	<i>Farmer Practice</i>				<i>SBNRC</i>			
Location	Nrate	Yield	Protein	NUE	Nrate	Yield	Protein	NUE
Site 1	39	23	11.91	0.18	48	26	12.08	0.22
Site 2	36	53	13.51	0.65	49	54	13.68	0.54
Site 3	84	39		0.00	39	33		0.00
Site 4	60	52	11.69	0.28	24	44	10.66	0.12
Site 5	60	59	14.42	0.02	7	61	14.54	0.72
Site 6	60	66	11.69	0.35	38	62	10.83	0.25
Site 7	33	29	10.15	0.20	59	37	10.20	0.26
Site 8	28	42	10.26	0.48	59	48	11.12	0.41
Averages	50	45	11.95	0.27	41	46	11.87	0.31
2010								
Location	Nrate	Yield	Protein	NUE	Nrate	Yield	Protein	NUE
Site 1	160	63	15.16	0.10	23	62	13.05	0.06
Site 2	60	39	12.48	0.19	49	40	12.60	0.27
Site 3	60	40	12.20	0.41	72	42	11.86	0.35
Site 4	50	91	13.57	0.12	34	91	14.25	0.39
Site 5	40	65	10.89	0.08	48	67	11.06	0.13
Site 6	50	45	15.05	0.02	12	46	14.59	0.07
Averages	70	57	13.22	0.15	40	58	12.90	0.21
Total	59	50	12.54	0.22	40	51	12.35	0.27

N-Rich Strips

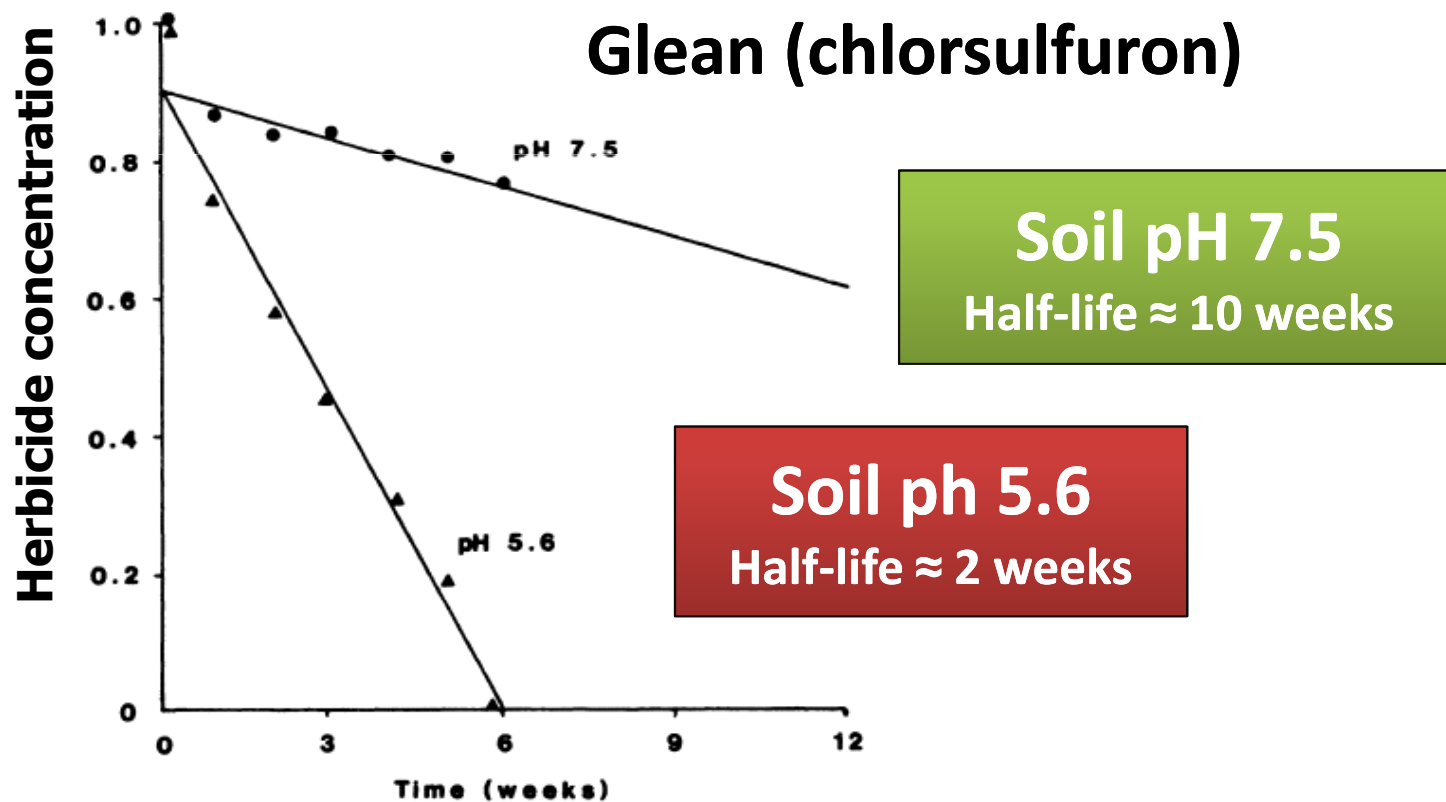
- Econ 11 of 14 sites SBNRC > FP (.5 and 5)
- Conservative guess,
 - coverage of 400-500,000 acres
- Nutrient Management BMP
- Late season assessment of N status

2010-2011

- Timing of N application and its impact on yield and protein.
 - Late 90's OSU pre and post Anthesis
 - Positive results but post was better.
 - Flag leaf versus Post Anthesis
 - Multiple sources and rates
 - UAN cut with H₂O, Foliar N product
 - 6, 12, 18 lbs total N.

2010-2011

- pH and Herbicide Interaction (ALS)
 - Joe Armstrong



Thank you!!!



Brian Arnall

373 Ag Hall

405-744-1722

b.arnall@okstate.edu

Presentation available at

www.npk.okstate.edu