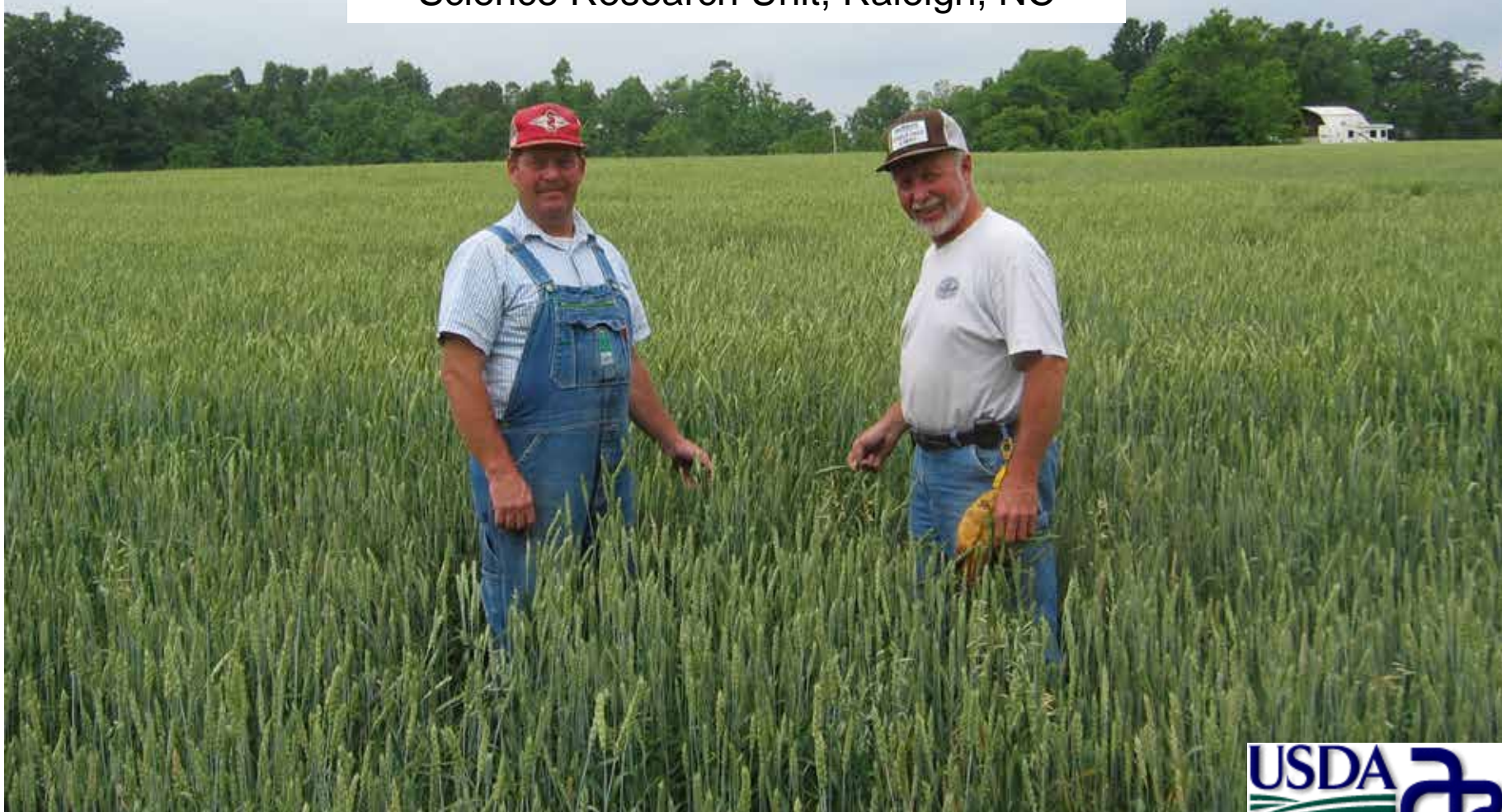


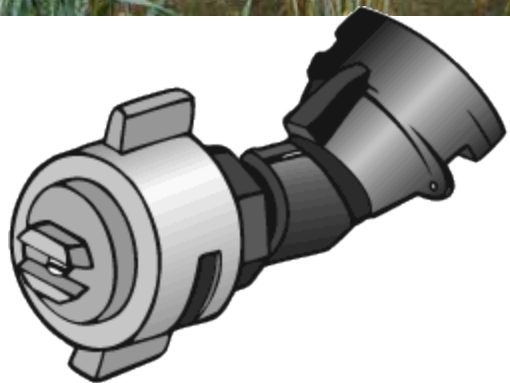
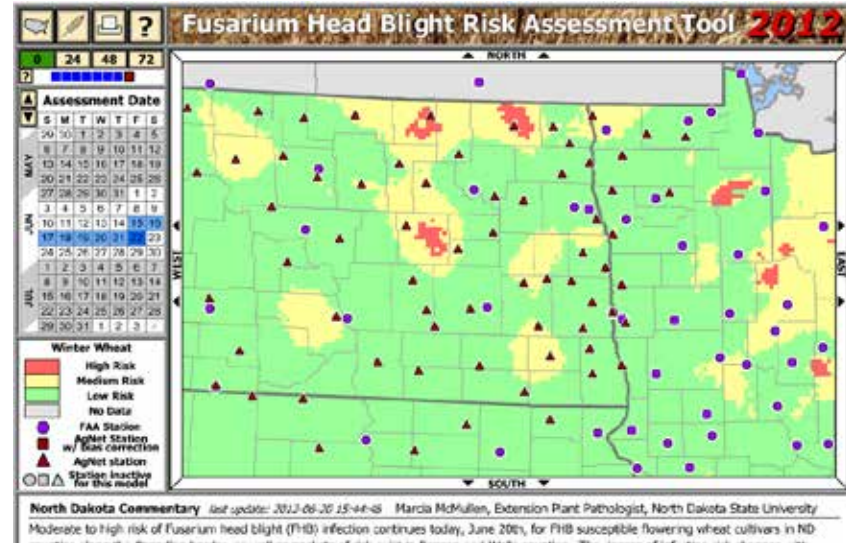
Known knowns and known unknowns: assessing adoption of scab management tools

Christina Cowger, USDA-ARS Plant
Science Research Unit, Raleigh, NC



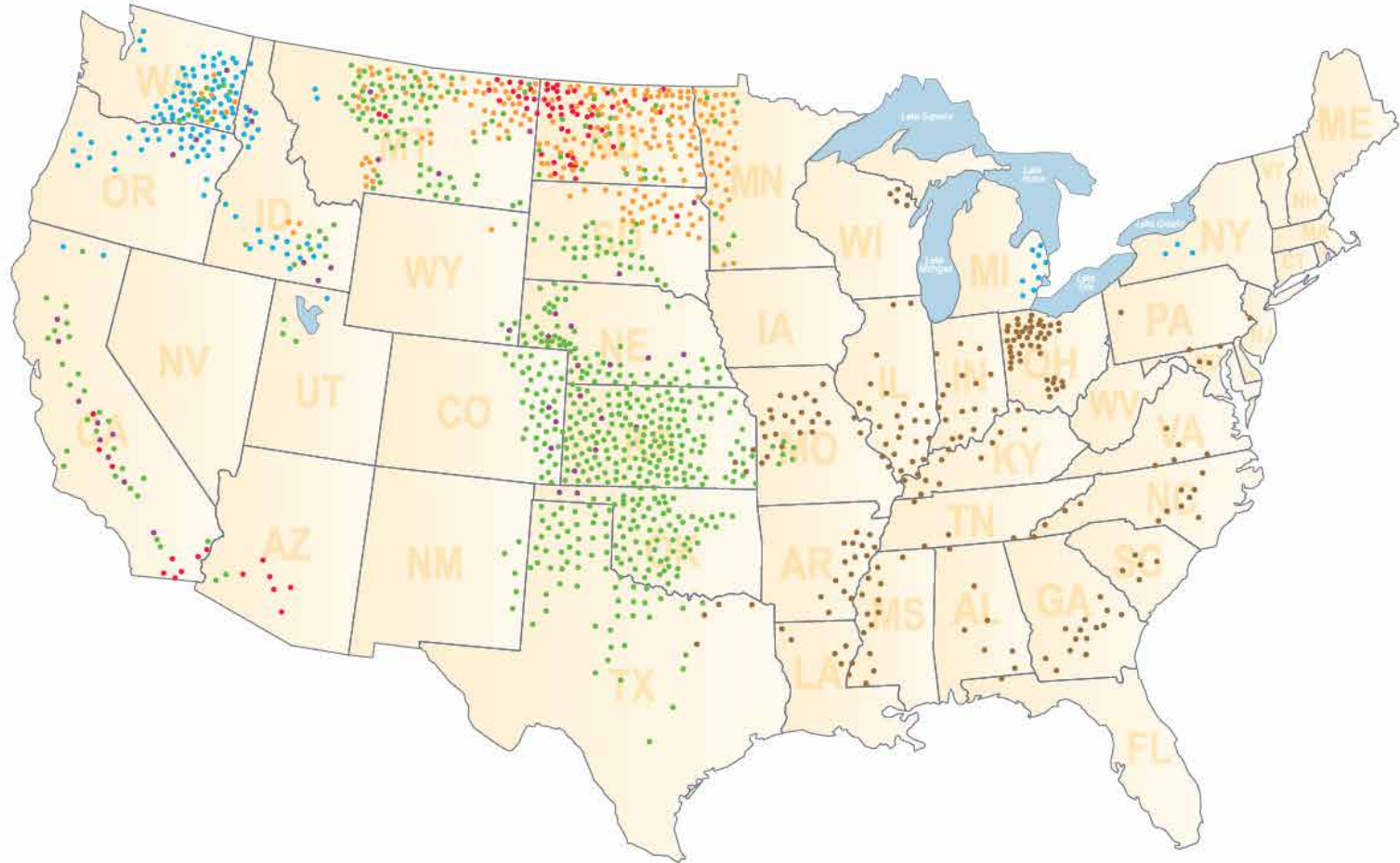


Adoption



* **Subscribing to scab alerts**

* **Planting moderately resistant varieties**

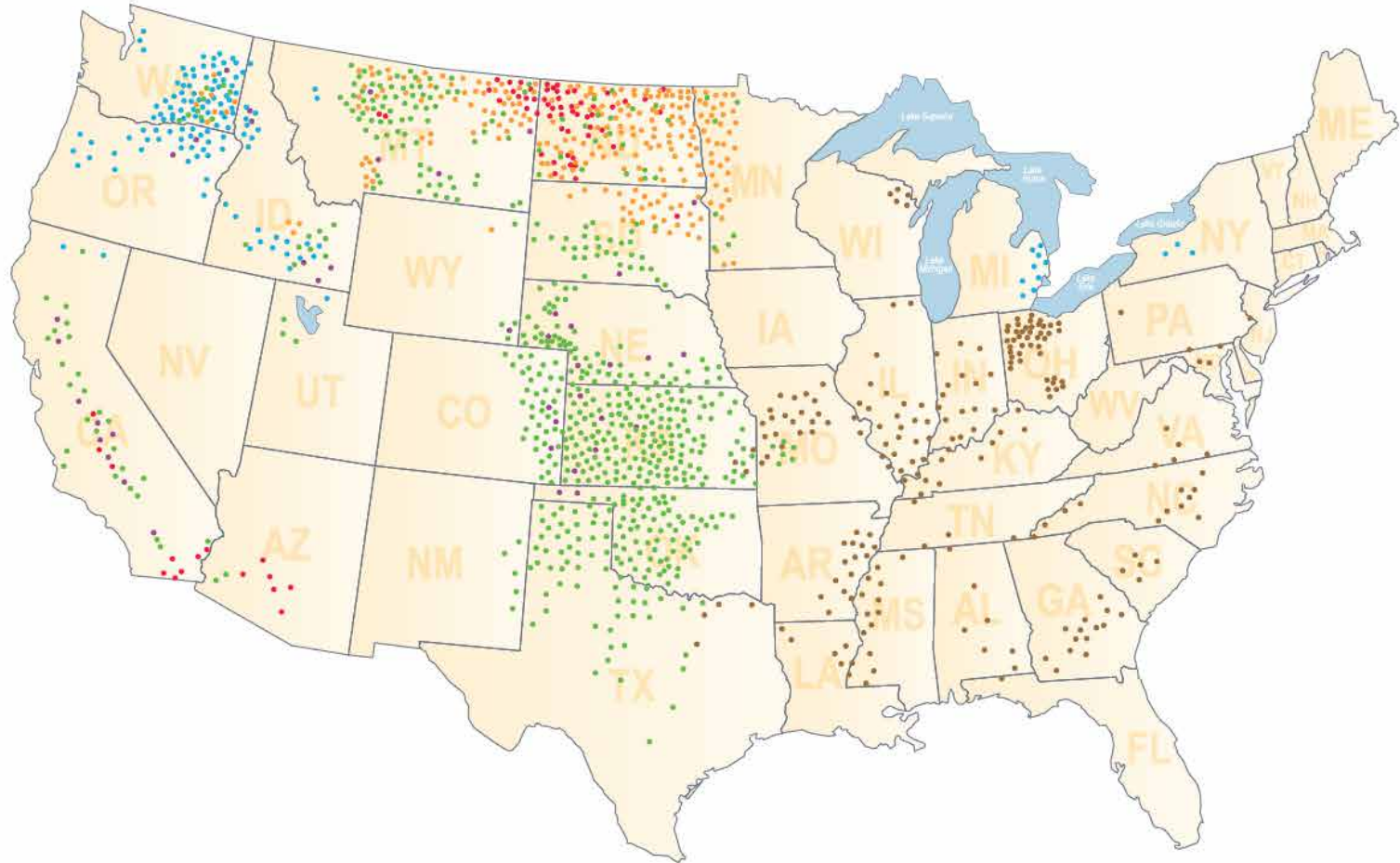


National Association of Wheat Growers

● HARD RED WINTER ● HARD RED SPRING ● SOFT RED WINTER ● SOFT WHITE ● HARD WHITE ● DURUM

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● HARD RED WINTER ● HARD RED SPRING ● SOFT RED WINTER ● SOFT WHITE ● HARD WHITE ● DURUM

Fusarium Head Blight Risk Assessment Tool 2012



0 24 48 72

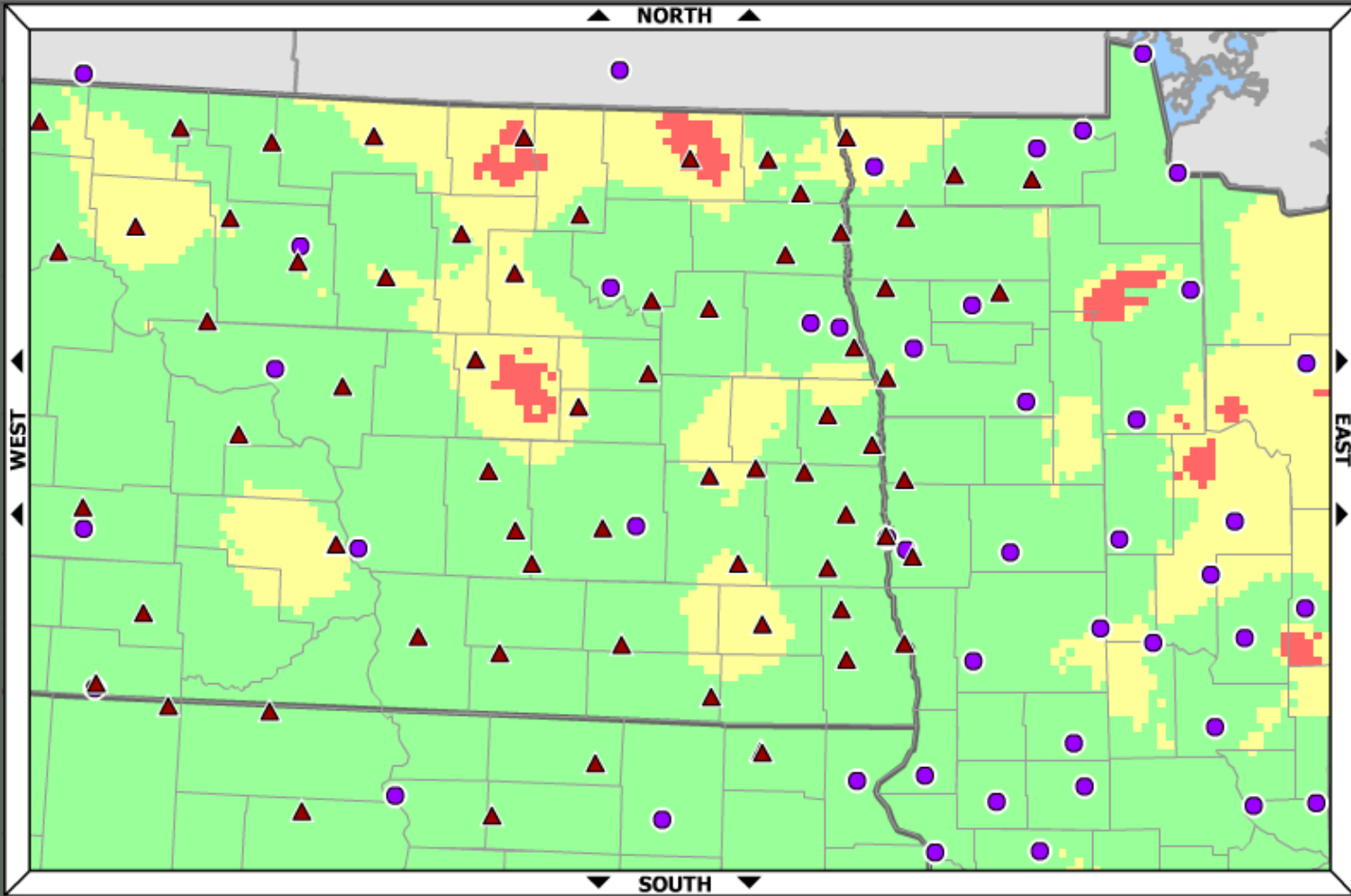


▲ Assessment Date

	S	M	T	W	T	F	S
	29	30	1	2	3	4	5
	6	7	8	9	10	11	12
MAY	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	1	2
JUN	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
JUL	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31	1	2	3	4

Winter Wheat

- High Risk
- Medium Risk
- Low Risk
- No Data
- FAA Station
- AgNet Station w/ bias correction
- AgNet station
- Station inactive for this model



North Dakota Commentary *last update: 2012-06-20 15:44:48* Marcia McMullen, Extension Plant Pathologist, North Dakota State University

Moderate to high risk of Fusarium head blight (FHB) infection continues today, June 20th, for FHB susceptible flowering wheat cultivars in ND counties along the Canadian border, as well as pockets of risk exist in Benson and Wells counties. The degree of infection risk changes with the level of resistance in the variety, with much lower risk indicated for cultivars having moderate resistance to FHB.

Fusarium Head Blight Risk Assessment Tool **2012**

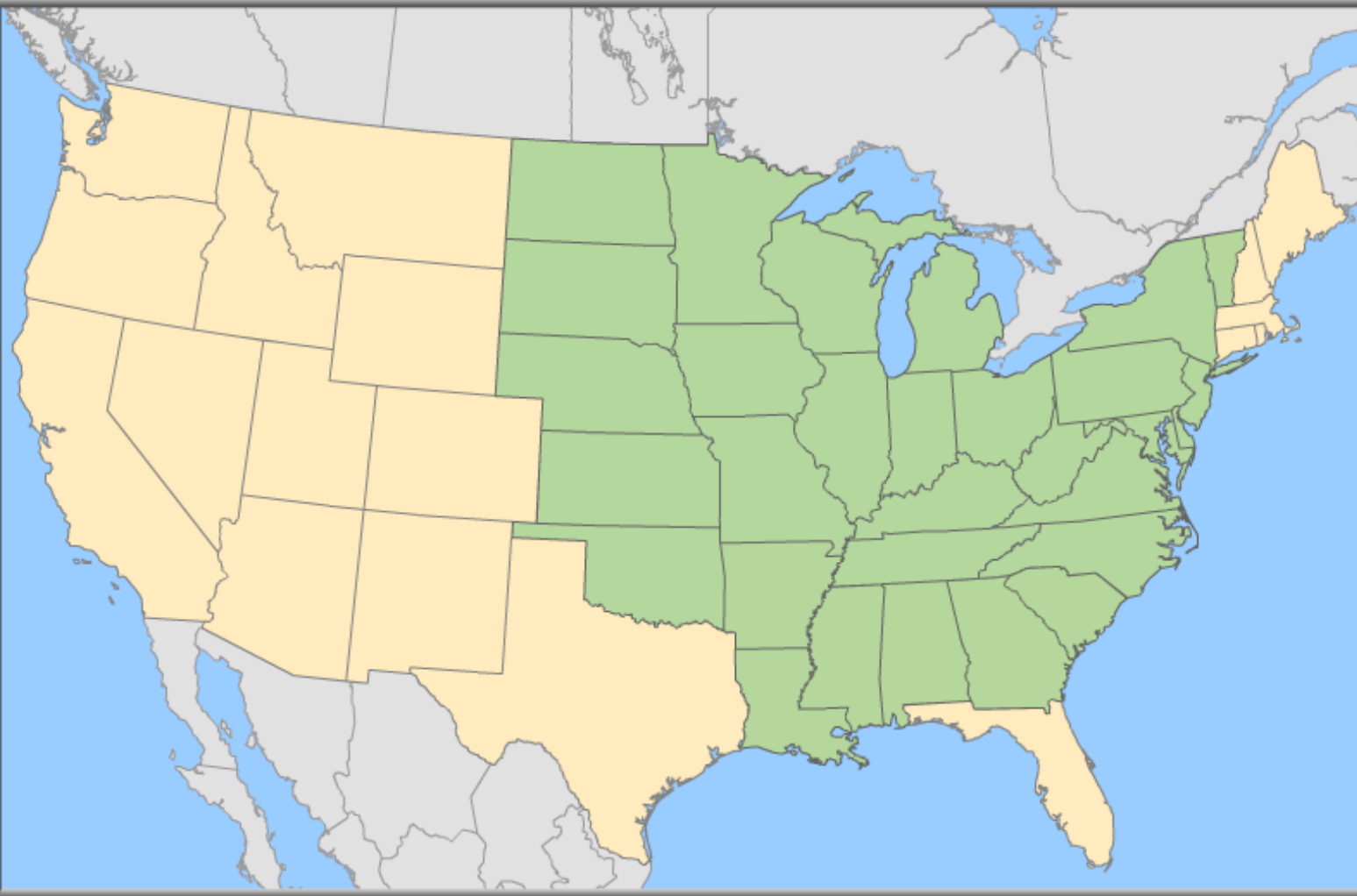



0 24 48 72


? ■ ■

Assessment Date

	S	M	T	W	T	F	S
	29	30	1	2	3	4	5
	6	7	8	9	10	11	12
MAY	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	1	2
	3	4	5	6	7	8	9
JUN	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
JUL	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31	1	2	3	4



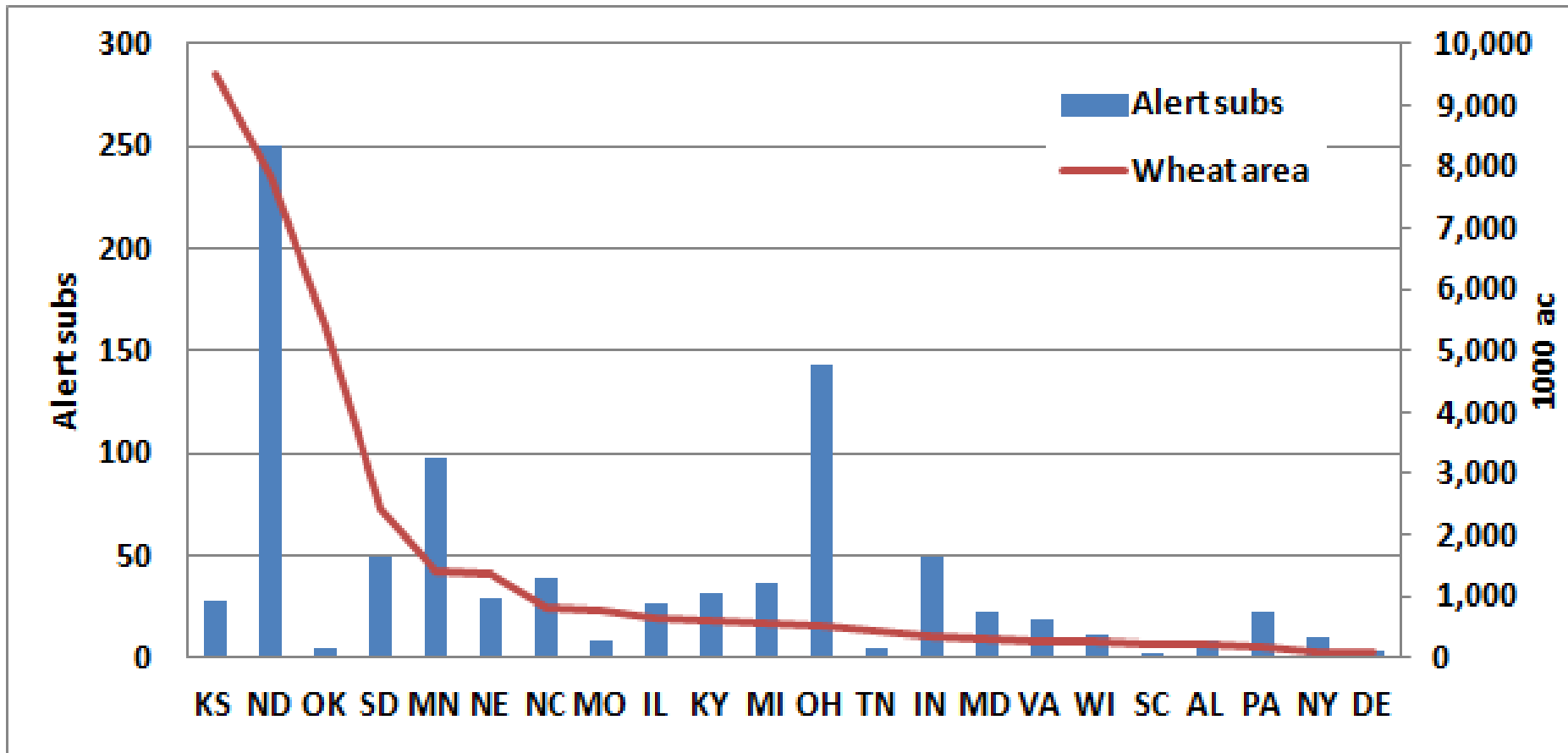
 **Assessment Available**
click on state to zoom in

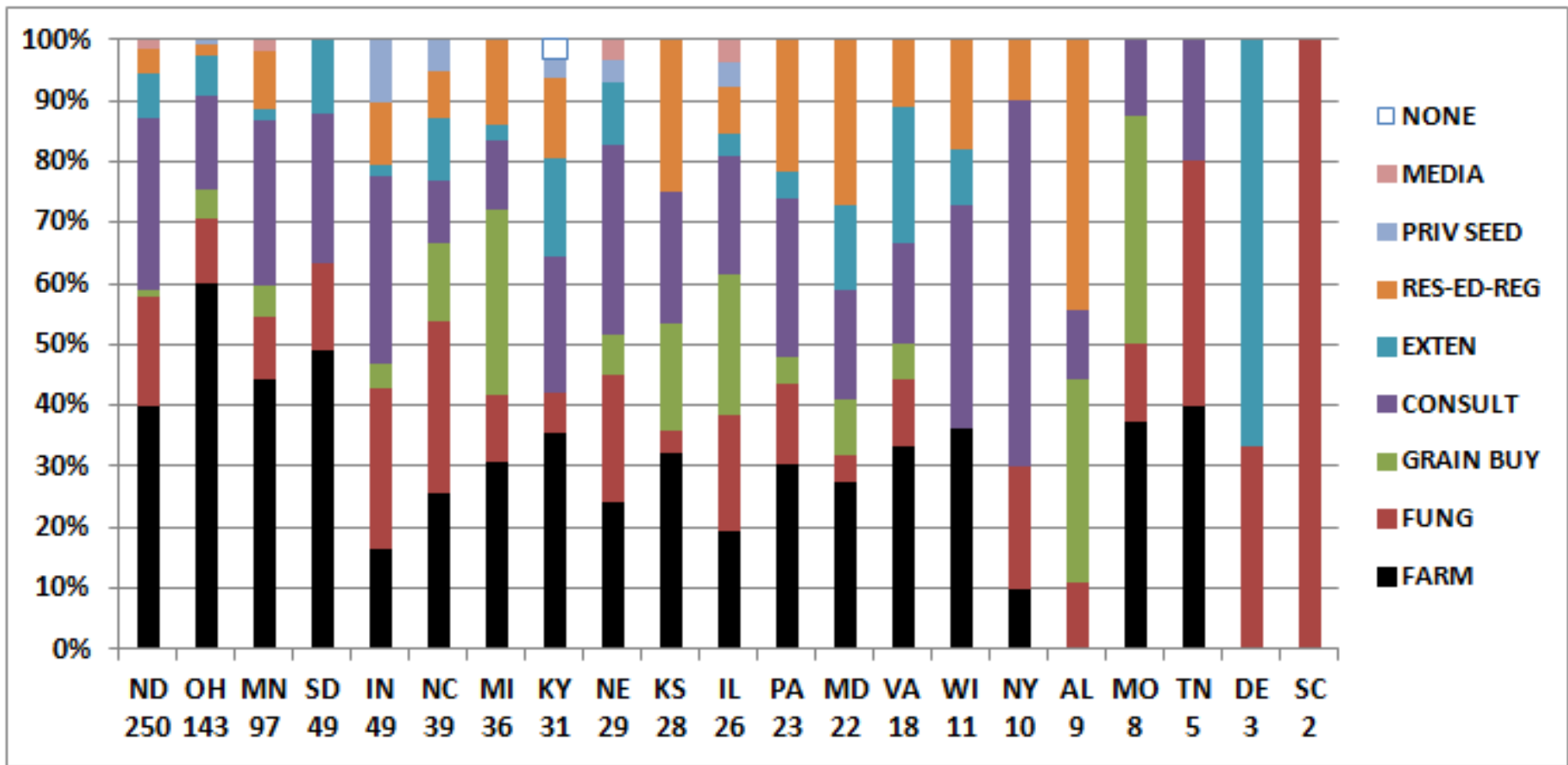
 **No Assessment Available**

National Commentary

last update: 2012-06-12 15:48:14

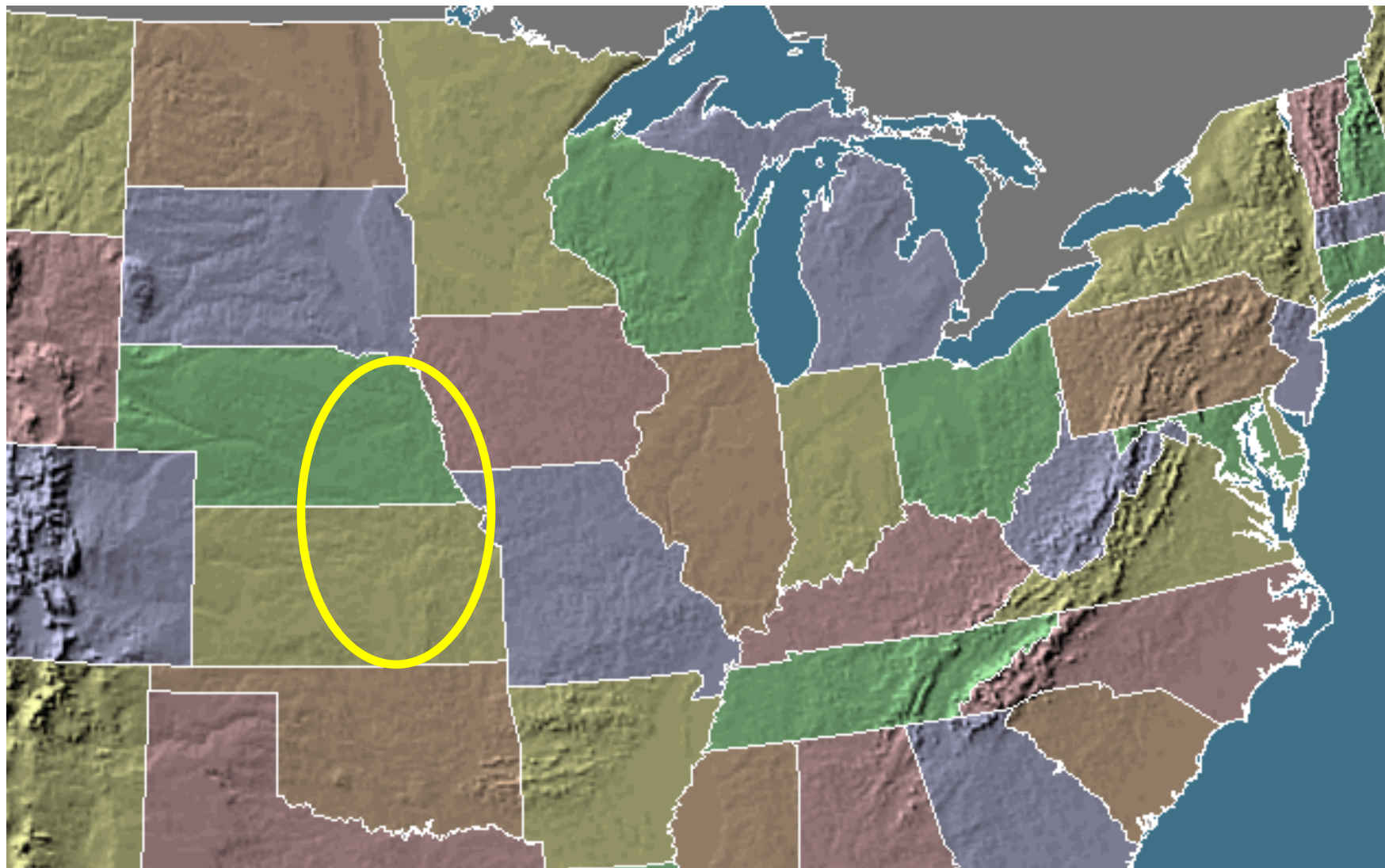
The focus of the FHB prediction effort is now on North Dakota, South Dakota and Minnesota. Spring wheat in this area of the country generally will reach critical growth stages mid June in parts of SD and late June for southern ND. Current estimates of disease risk indicate moderate and high risk in some areas along the ND border with Canada.



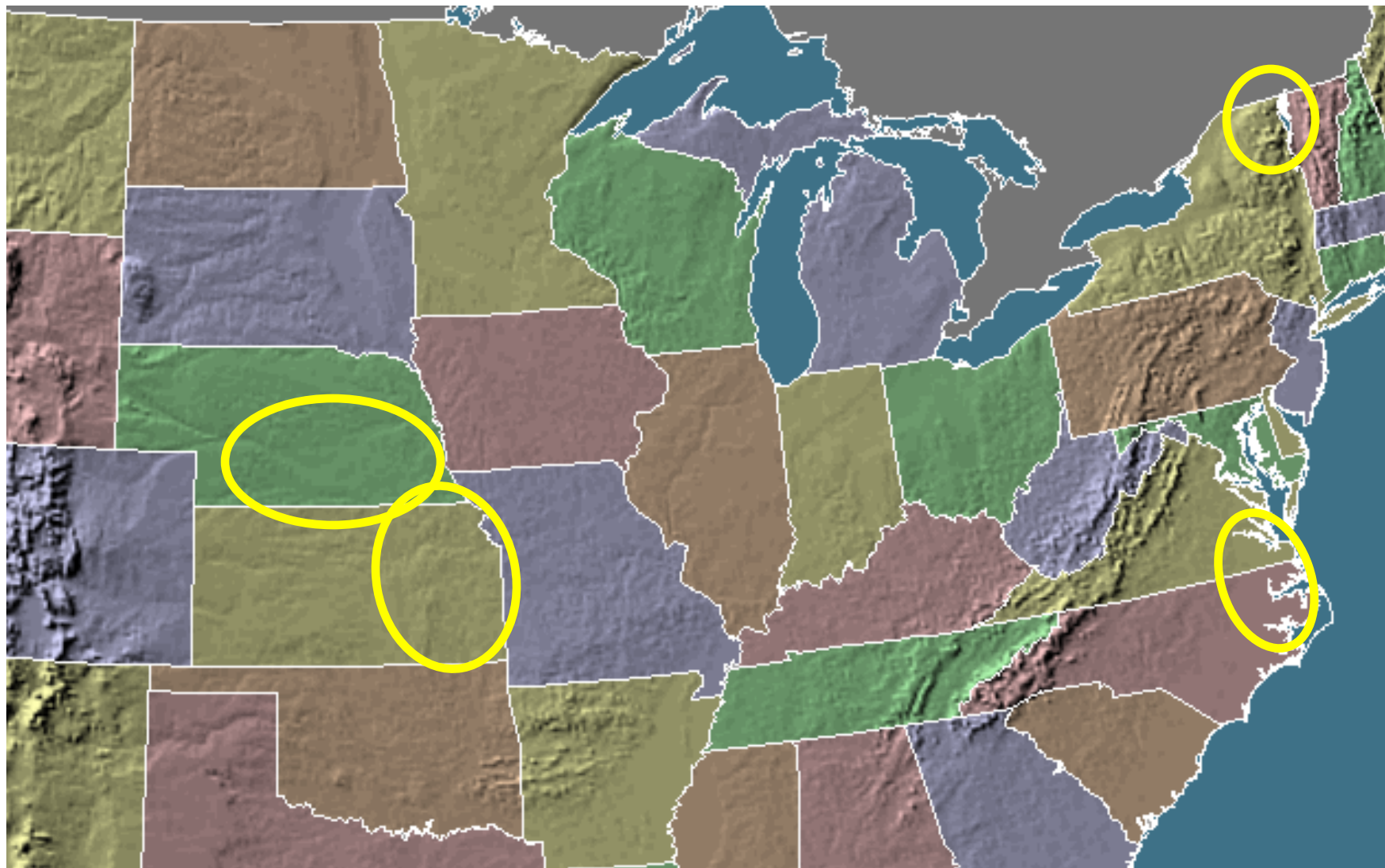


Total subs: 888

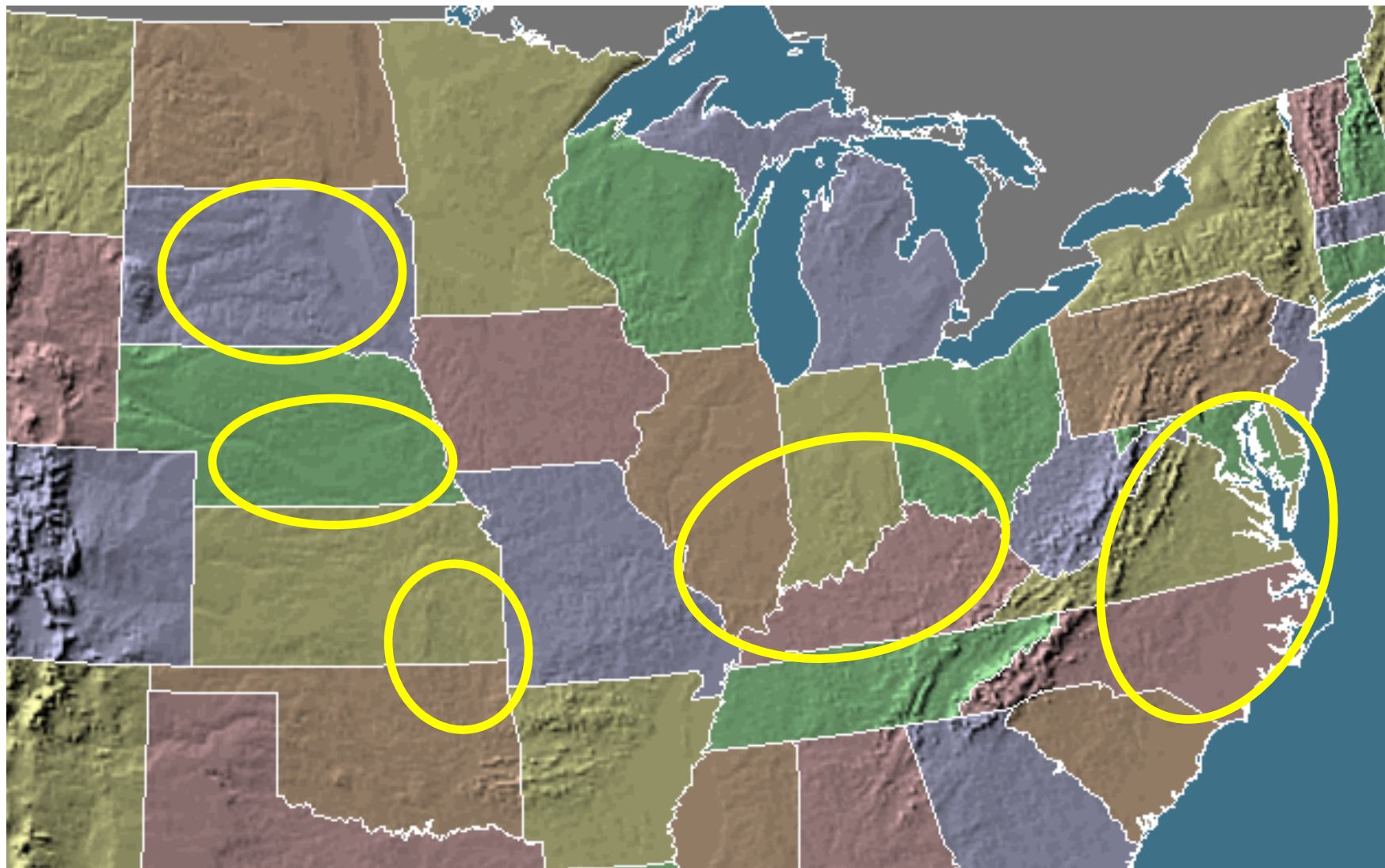
2007



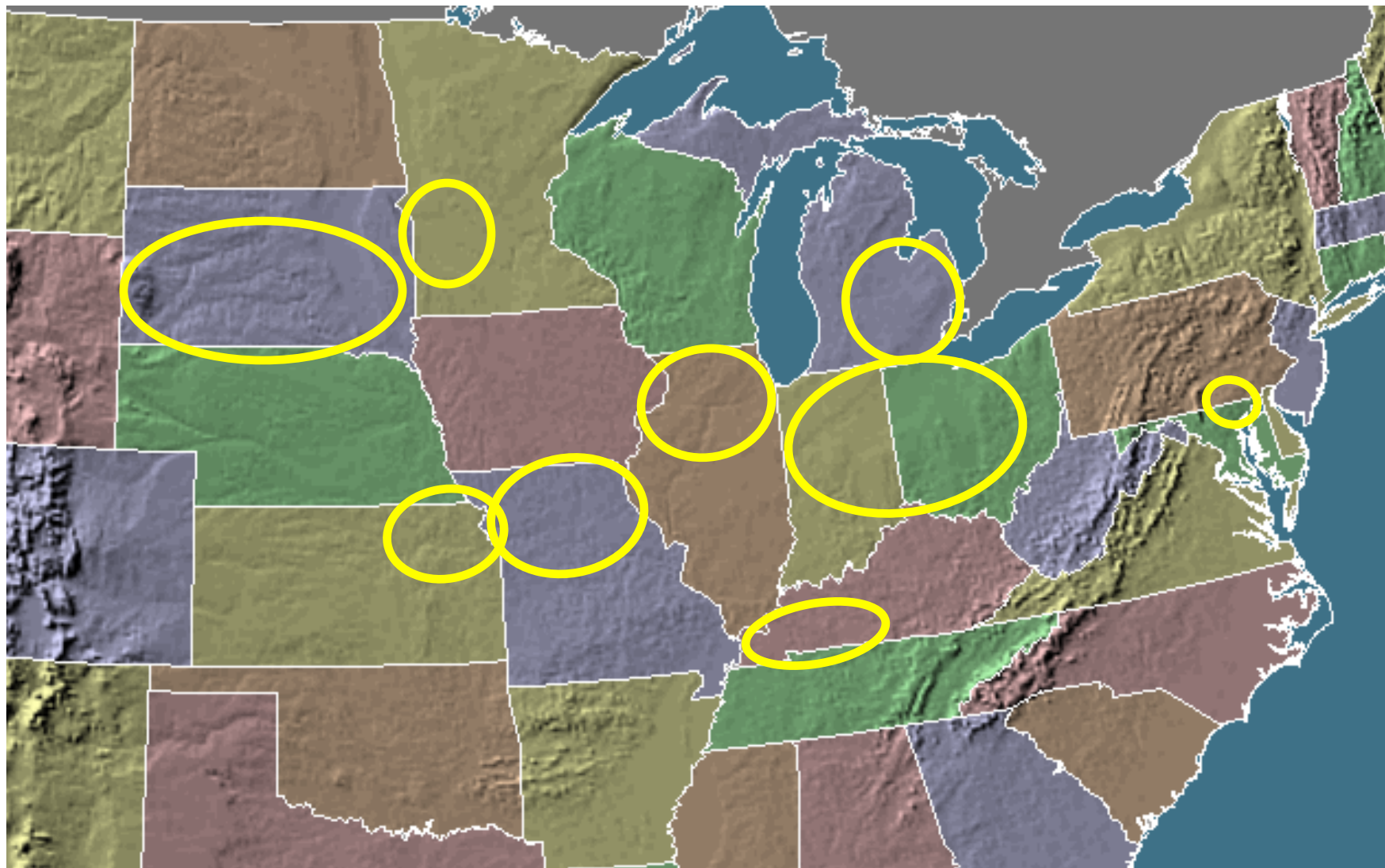
2008



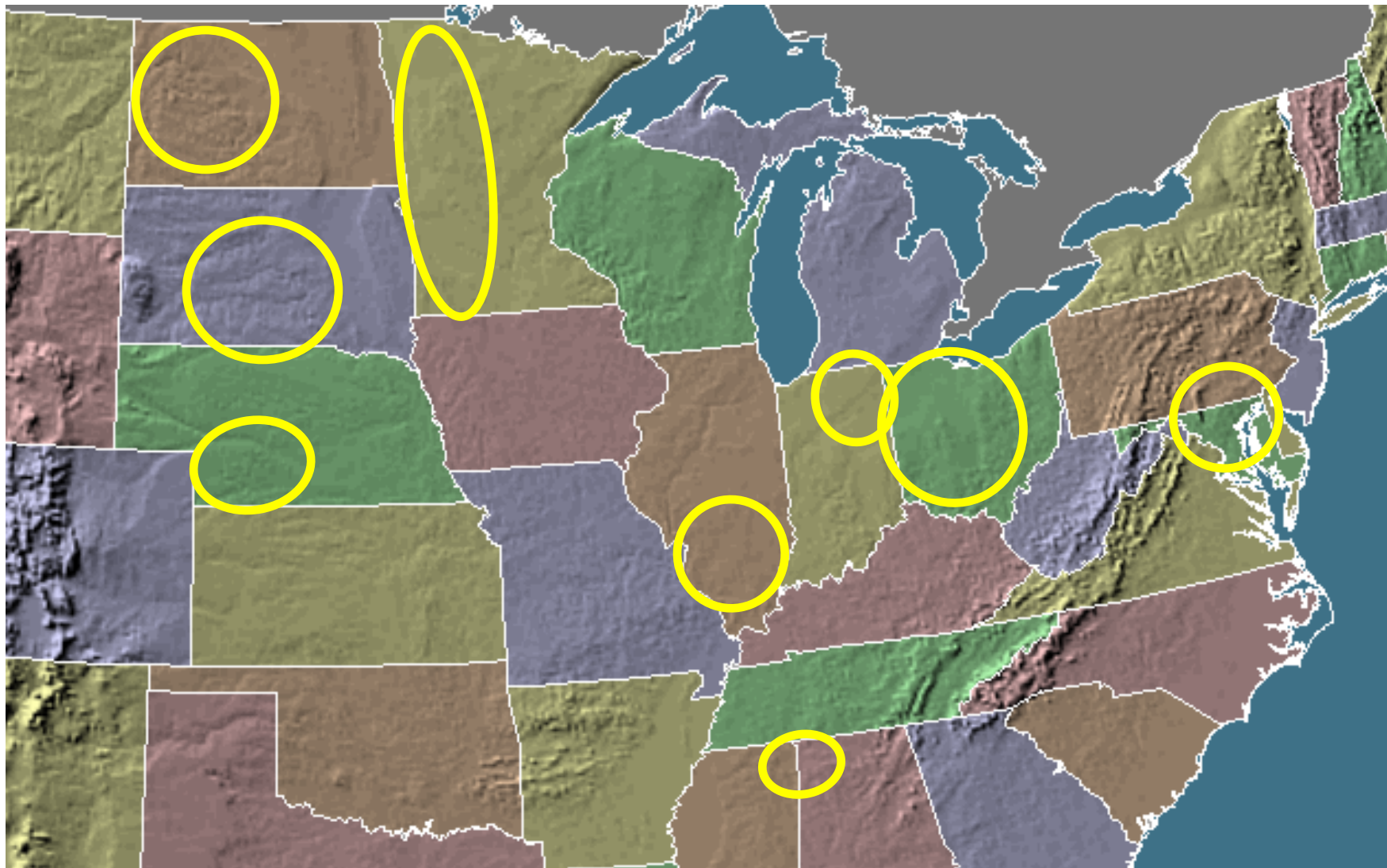
2009

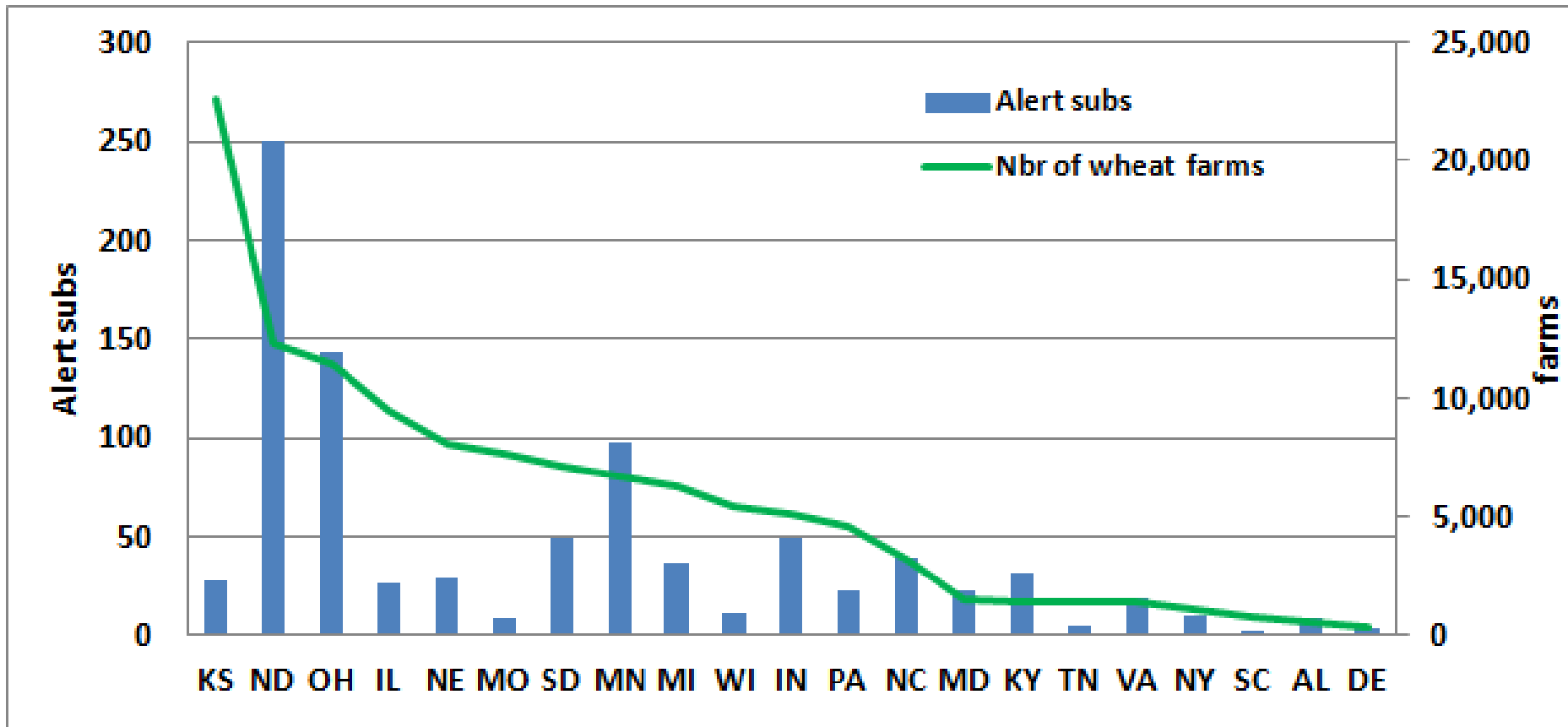


2010

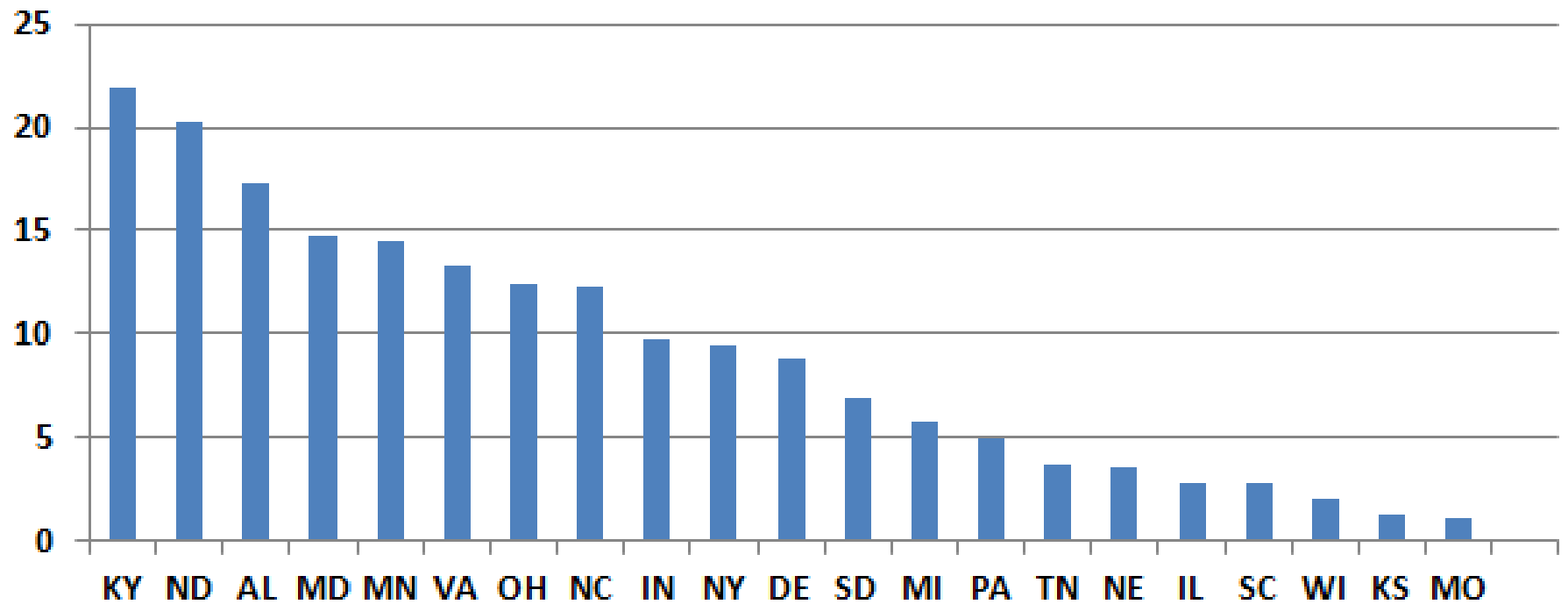


2011



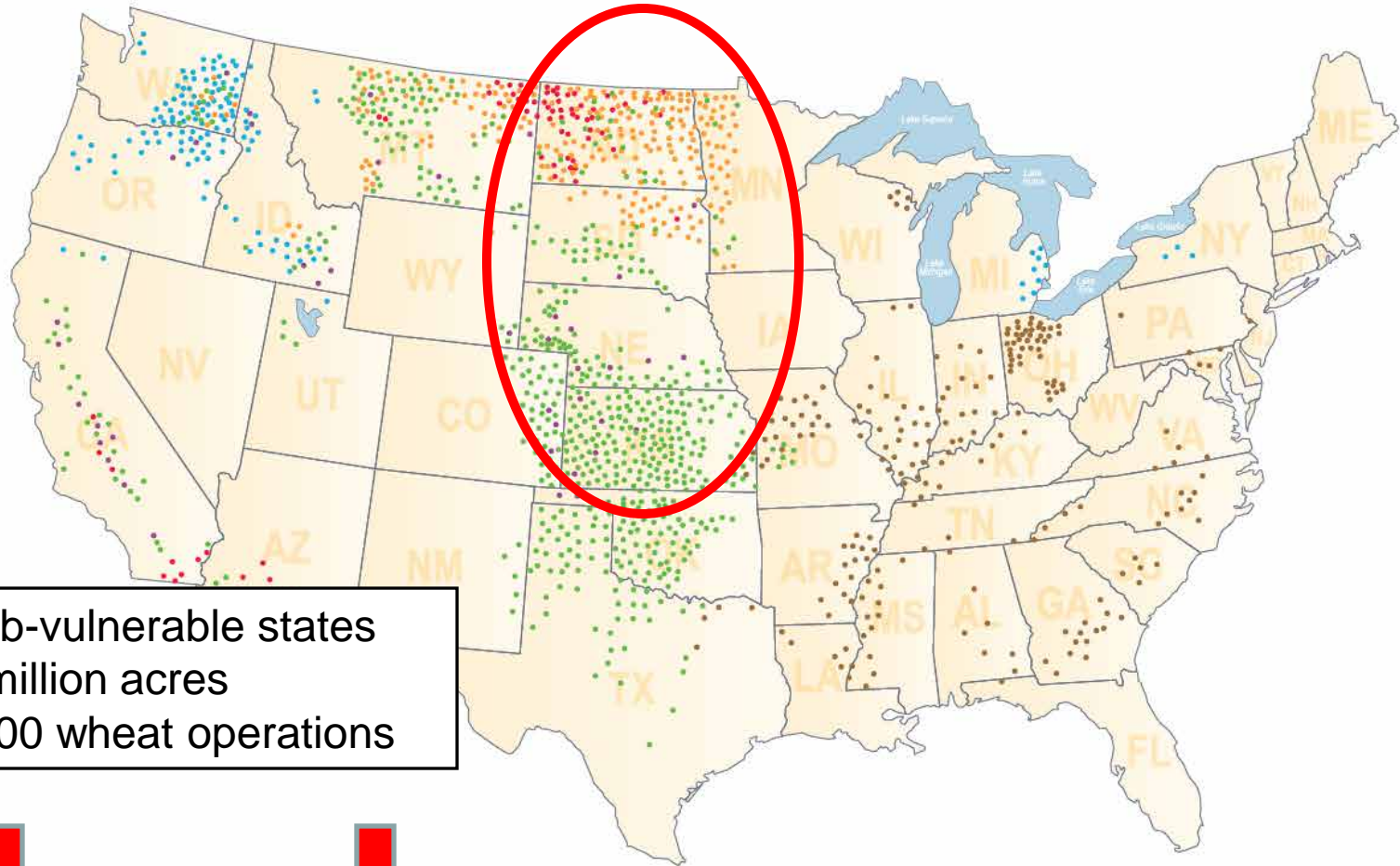


Alert subs per 1000 wheat farms



* **Subscribing to scab alerts**

* **Planting moderately resistant varieties**



- 5 scab-vulnerable states
- >22 million acres
- ~57,000 wheat operations



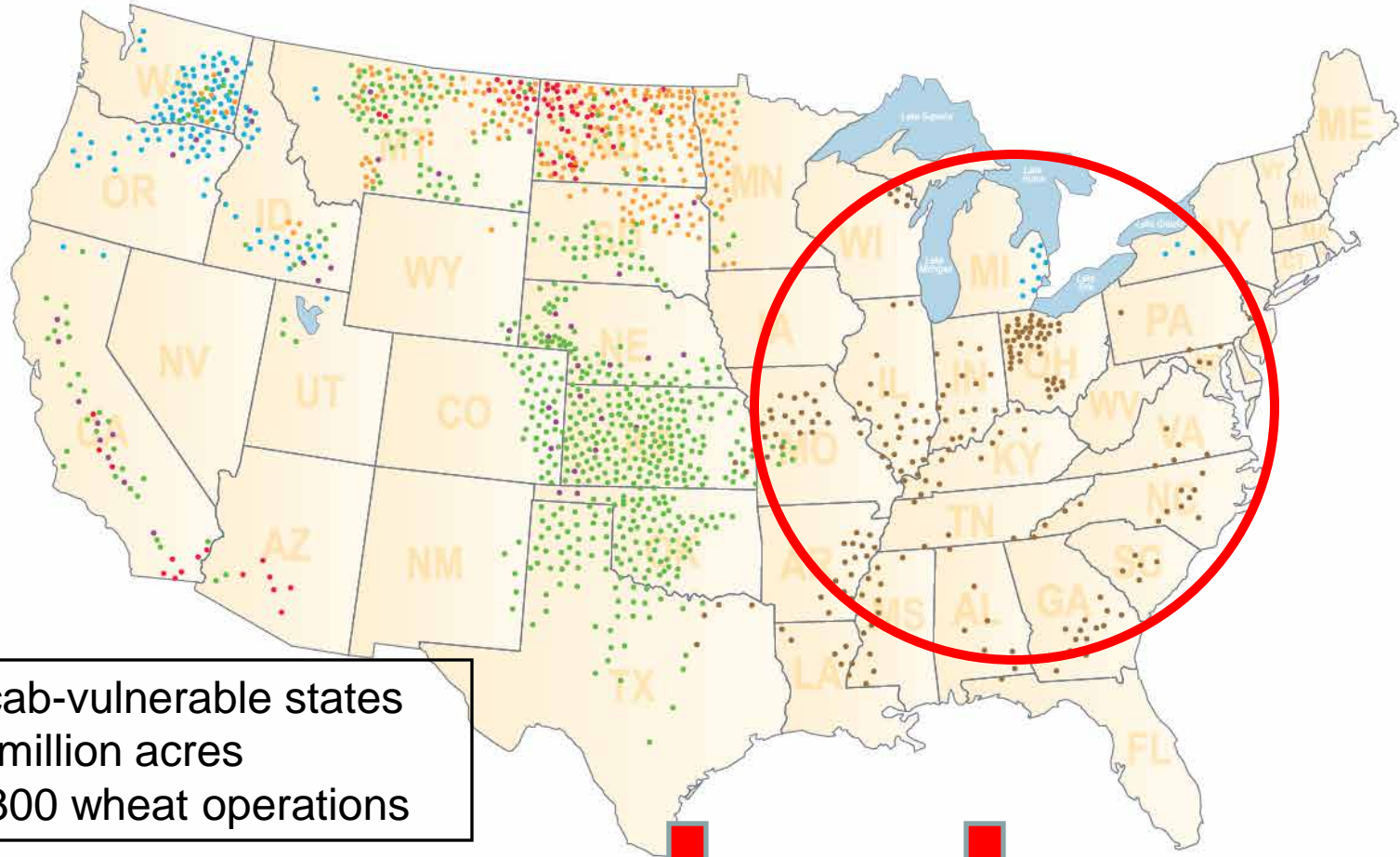
● HARD RED WINTER ● HARD RED SPRING ● SOFT RED WINTER ● SOFT WHITE ● HARD WHITE ● DURUM

Hard & durum wheat

			% of total (2011)		
State	Wheat area <i>(2011 planted ac)</i>	Market class	MR	MS	S
ND	5,650,000	HRS	57	33	10
	400,000	HRW	0	2	98
	750,000	Durum	39	37	25
SD	1,250,000	HRS	57	43	0
	1,650,000	HRW	31	60	9
MN	1,390,000	HRS	62	31	7
NE – all	1,520,000	HRW	31	61	8
NE – e. 2/3		HRW	28	61	11
KS - all	8,800,000	HRW	5	76	19
KS – e. 2/3		HRW	4	81	15

* **Subscribing to scab alerts**

* **Planting moderately resistant varieties**

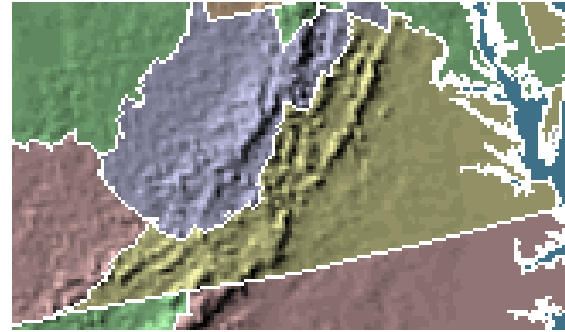


•16 scab-vulnerable states
•~6.4 million acres
•~61,300 wheat operations



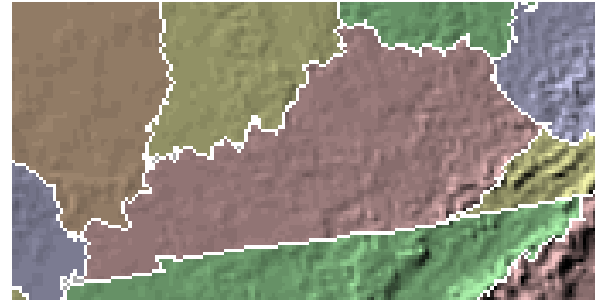
● HARD RED WINTER ● HARD RED SPRING ● SOFT RED WINTER ● SOFT WHITE ● HARD WHITE ● DURUM

Virginia certified seed



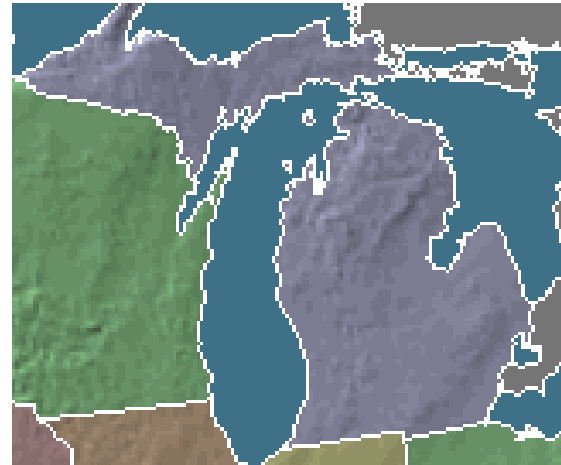
	2011	2012
	<i>4,324 ac</i>	<i>5,450 ac</i>
MR	44%	36%
MS	26%	35%
S	30%	24%

Kentucky consultant's estimates



	2011
	<i>580,000 planted acres</i>
MR	28%
MS	50%
S	22%

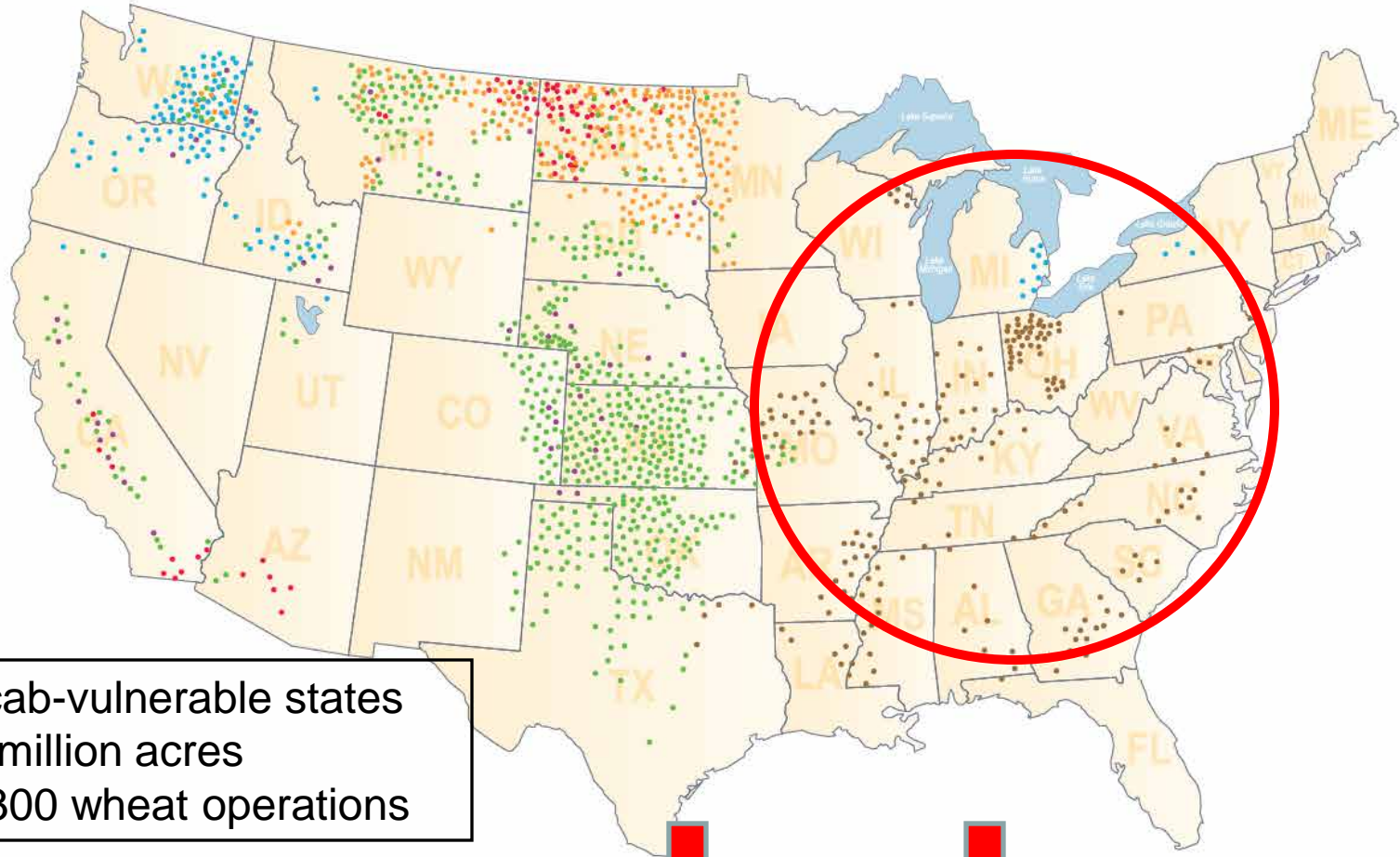
One exception: Michigan



	2011	
	<i>700,000 planted acres</i>	
	SRW	SWW
MR	14%	21%
MS	30%	32%
S	56%	46%

* **Subscribing to scab alerts**

* **Planting moderately resistant varieties**



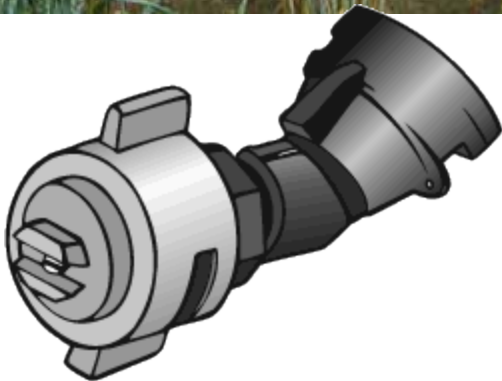
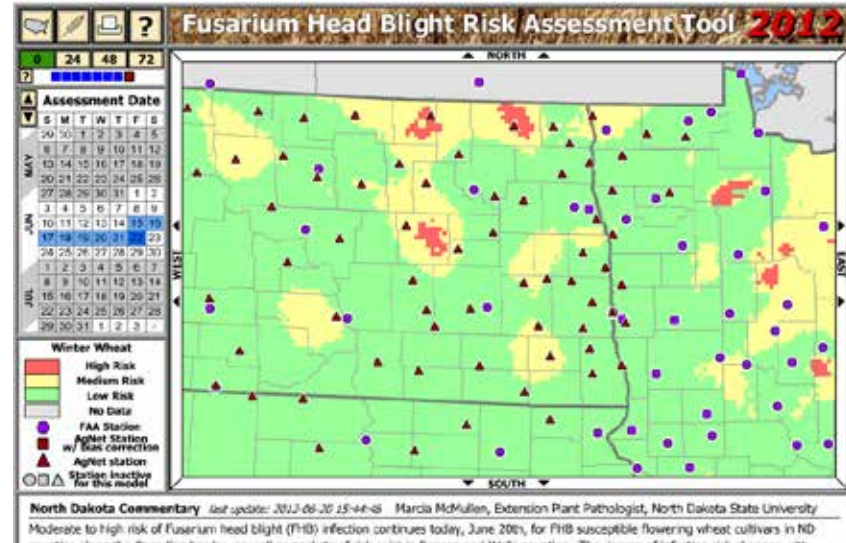
•16 scab-vulnerable states
•~6.4 million acres
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● HARD RED WINTER ● HARD RED SPRING ● SOFT RED WINTER ● SOFT WHITE ● HARD WHITE ● DURUM



Adoption



**Thanks to U.S. Wheat
& Barley Scab
Initiative!**