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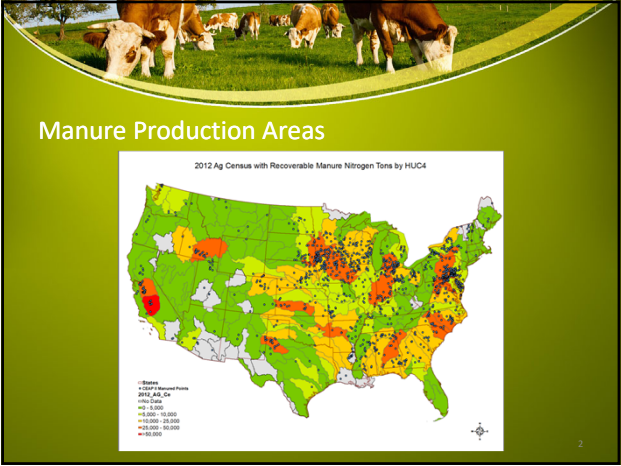
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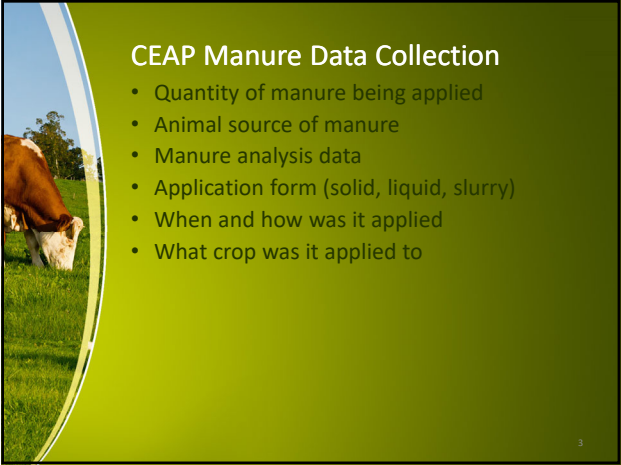
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### Manure Application Acres

Production Region	CEAP I		CEAP II		CEAP I CEAP II Acres (1000)
	Manured Acres (1000)	% of Cropland Acres	Manured Acres (1000)	% of Cropland Acres	
Atlantic and Gulf Coastal Plains	1,211	30	2,009	32	533
California Coastal	748	35	894	37	420
East Central	1,054	33	1,513	35	456
Lower Mississippi and Texas Gulf Coast	337	2	590	3	253
North Central and Midwest	15,944	13	16,311	13	367
Northeast	2,708	38	3,103	41	395
Northern Plains	1,379	3	994	2	(384)
Northwest	643	5	1,205	9	563
South Central	348	6	477	9	229
Southern and Central Plains	2,410	4	3,217	5	807
Southwest	78	10	463	15	174
National Totals	27,013		30,727		3,913



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### Manure Source

Manure Source	CEAP I Acres (1000)	CEAP II Acres (1000)	Nitrogen		Phosphorus	
			CEAP I Average Annual Rate lbs/acre	CEAP II Average Annual Rate lbs/acre	CEAP I Average Annual Rate lbs/acre	CEAP II Average Annual Rate lbs/acre
Beef cattle	7,224	7,043	70	83	26	31
Biosolids	295	542	73	37	37	19
Dairy cattle	9,966	9,845	83	78	34	31
Other	193	289	32	69	14	29
Poultry	4,586	8,859	90	80	32	32
Swine	4,749	4,148	50	62	16	18
National	27,013	30,727	76	77	29	30

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### Where was manure obtained

Manure Obtained	CEAP I Acres (1000)	CEAP II Acres (1000)	Nitrogen		Phosphorus	
			CEAP I Average Annual Rate lbs/acre	CEAP II Average Annual Rate lbs/acre	CEAP I Average Annual Rate lbs/acre	CEAP II Average Annual Rate lbs/acre
Obtained at no cost from another operation	4,453	2,759	138	128	39	38
Obtained with compensation	676	1,564	154	146	42	40
On this operation	19,350	16,889	134	147	39	39
Purchased	2,535	9,514	143	131	40	36
National	27,013	30,727	136	140	39	38

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### Manure & Soil Testing

	CEAP I				CEAP II					
	Manured Cropland Acres (1000)	Manure Test Acres (1000)	Manure Tested % of Manured Acres	Soil Test Acres (1000)	Soil Tested % of Manured Acres	Manured Cropland Acres (1000)	Manure Test Acres (1000)	Manure Tested % of Manured Acres	Soil Test Acres (1000)	Soil Tested % of Manured Acres
Atlantic and Gulf Coastal Plains	1,475	231	16	1,258	85	2,009	874	44	1,601	80
California Coastal	426	0	0	197	46	846	206	24	711	84
East Central	1,058	247	23	707	67	1,515	544	36	1,010	67
Lower Mississippi and Texas Gulf Coast	337	30	9	276	82	590	274	46	477	81
North Central and Midwest	15,944	2,499	16	10,710	67	16,311	8,369	51	12,875	79
Northeast	2,708	441	16	1,607	59	3,103	1,438	46	2,513	81
Northern Plains	1,379	77	6	571	41	994	432	43	707	71
Northwest	643	86	13	329	51	1,205	560	46	936	78
South Central	348	19	5	127	36	477	333	70	283	59
Southern and Central Plains	2,410	501	21	1,638	68	3,217	1,668	52	2,124	66
Southwest	286	35	12	63	22	461	196	43	416	90

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### Manure & Soil Testing – Application Rates

**Nitrogen**

	CEAP I		CEAP II	
	Average Annual Rate WITH TEST lbs/acre	Average Annual Rate WITHOUT TEST lbs/acre	Average Annual Rate WITH TEST lbs/acre	Average Annual Rate WITHOUT TEST lbs/acre
Manure Test	83	75	69	84
Soil Test	75	78	77	75
Both Manure and Soil Test	80	76	69	79

**Phosphorus**

	CEAP I		CEAP II	
	Average Annual Rate WITH TEST lbs/acre	Average Annual Rate WITHOUT TEST lbs/acre	Average Annual Rate WITH TEST lbs/acre	Average Annual Rate WITHOUT TEST lbs/acre
Manure Test	28	29	24	34
Soil Test	28	31	29	32
Both Manure and Soil Test	27	30	23	33

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### Manure vs. Commercial Fertilizer Applications

	CEAP I Acres (1000)	CEAP II Acres (1000)	CEAP II - CEAP I N Acres (1000)
Manure Only	3,241	4,150	908
Manure w/wo Commercial Fertilizer	27,013	30,727	3,713
Commercial N Fertilizer without Manure	267,371	263,343	(4,028)
Commercial P Fertilizer without Manure	241,459	248,132	6,673

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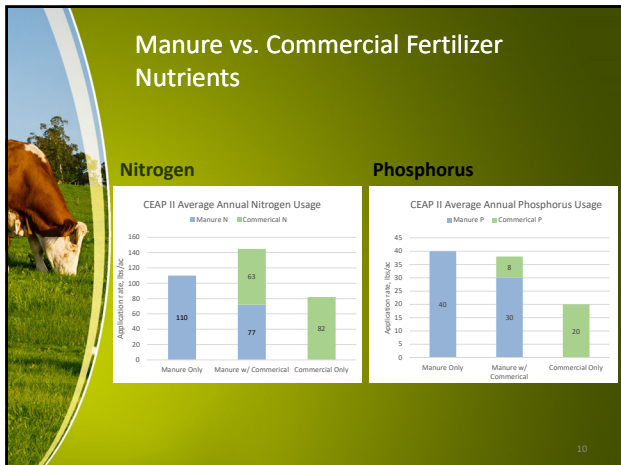
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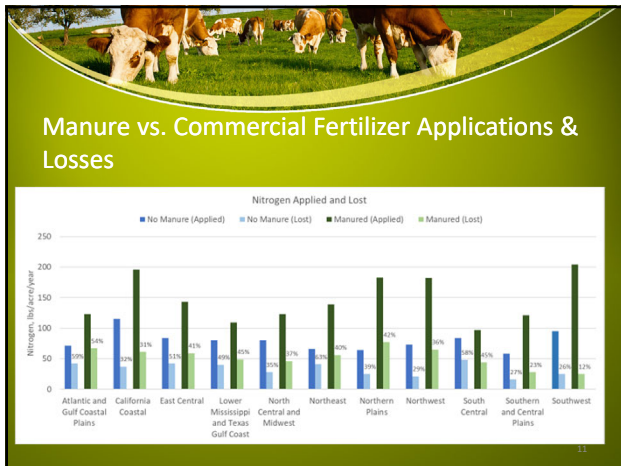
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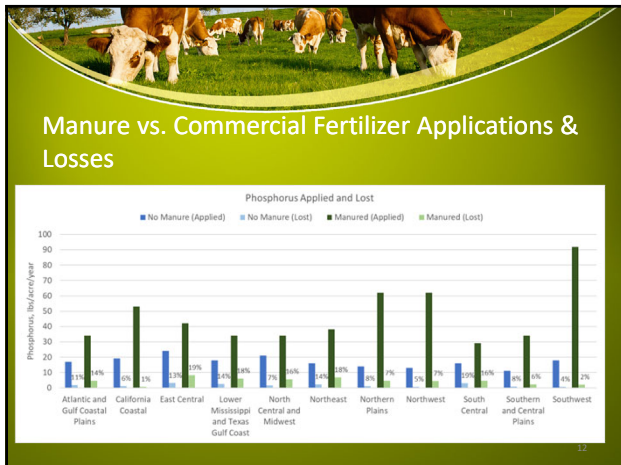
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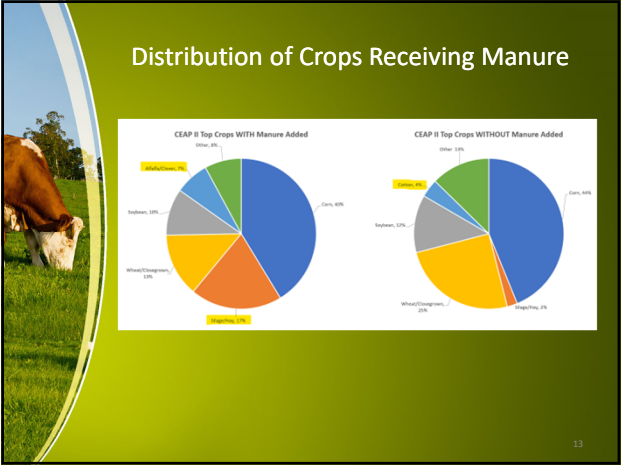
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- ### Key Points
- Large increase in acres with purchased manure indicating a growing market for manure
  - Manure testing tends to reduce total application rates
  - 45% of total N applied and 22% of total P applied to manured acres is from commercial fertilizer.
  - Nitrogen and phosphorus rates on manured acres far exceed those of commercial fertilized only acres. Indicating higher soil testing rates is not leading to improved rate management.
  - Improved understanding of availability of manure nutrients is needed to improve nutrient use efficiency, reduce losses, and reduce input costs from commercial sources.

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