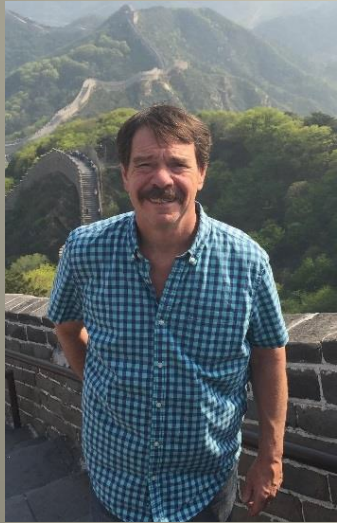


# Connecting the Agronomist & the Nutritionist to Make Management Decisions



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<sup>LW</sup>  
**Extension**



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**DAIRY SCIENCE**  
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# 2012 US Milk Production by Herd Size

## Feb.-2013

Herd Size	% Dairies	% Cows	% Milk
2000+	1.5%	32.6%	34.7%
1,000-1,999	1.8%	14.0%	15.9%
500-999	3.1%	11.9%	12.4%
200-499	7.5%	12.5%	12.6%
Total ≥ 200	13.9%	71.0%	75.6%

# Feed & Forage Use on 4000-Cow Dairy

- Assumptions for calculations:
  - 3200 milk cows; 800 dry cows; no growing heifers
  - 80 lb. Milk/cow/day
  - Total DMI
    - Lactating Cows (LC) 50 lb/d; Dry Cows (DC) 30 lb/d
  - Dietary Forage Content (% of DM)
    - LC 50%; DC 80%; Total 54%
  - Forage DMI:
    - LC 25 lb/d; DC 24 lb/d

# Total Feed Use on 4000-Cow Dairy

	TMR Fed <sup>a</sup> (tons DM)
Daily	95
Weekly	663
Monthly	2,843
Annually	34,587
	Approx. Annual \$ Value
	\$7,000,000 to \$9,000,000
Approx. Milk \$ Value	\$15,000,000 to \$20,000,000

<sup>a</sup>Assumes 3% feed bunk refusals

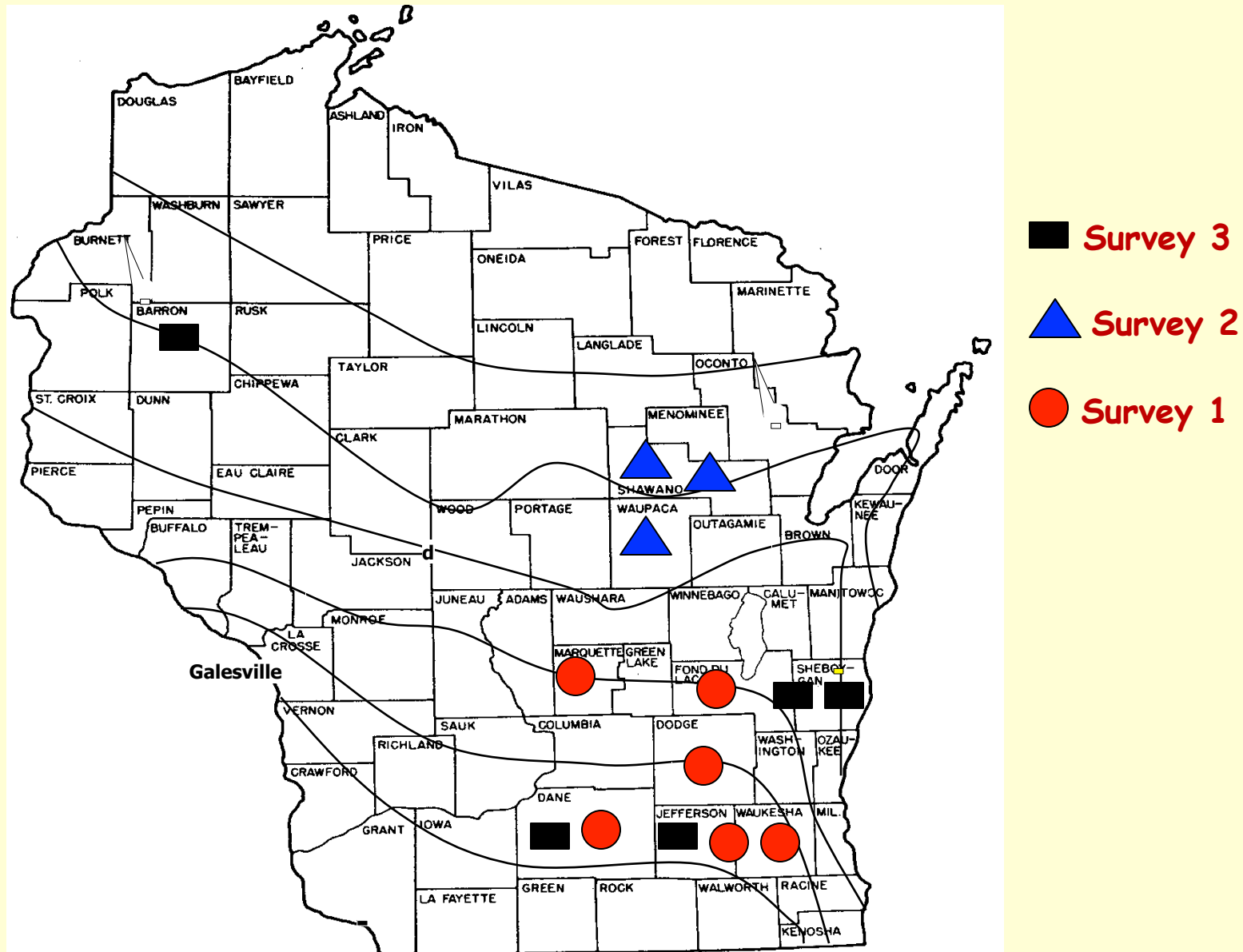
# Forage Use on 4000-Cow Dairy

	Forage Needs @ 15% Shrink Tons DM	Acres Needed @ 6 ton DM avg. yield
Daily	51	9
Weekly	411	69
Monthly	1,763	294
Annually	21,444	3,574

# Forage Use on 4000-Cow Dairy

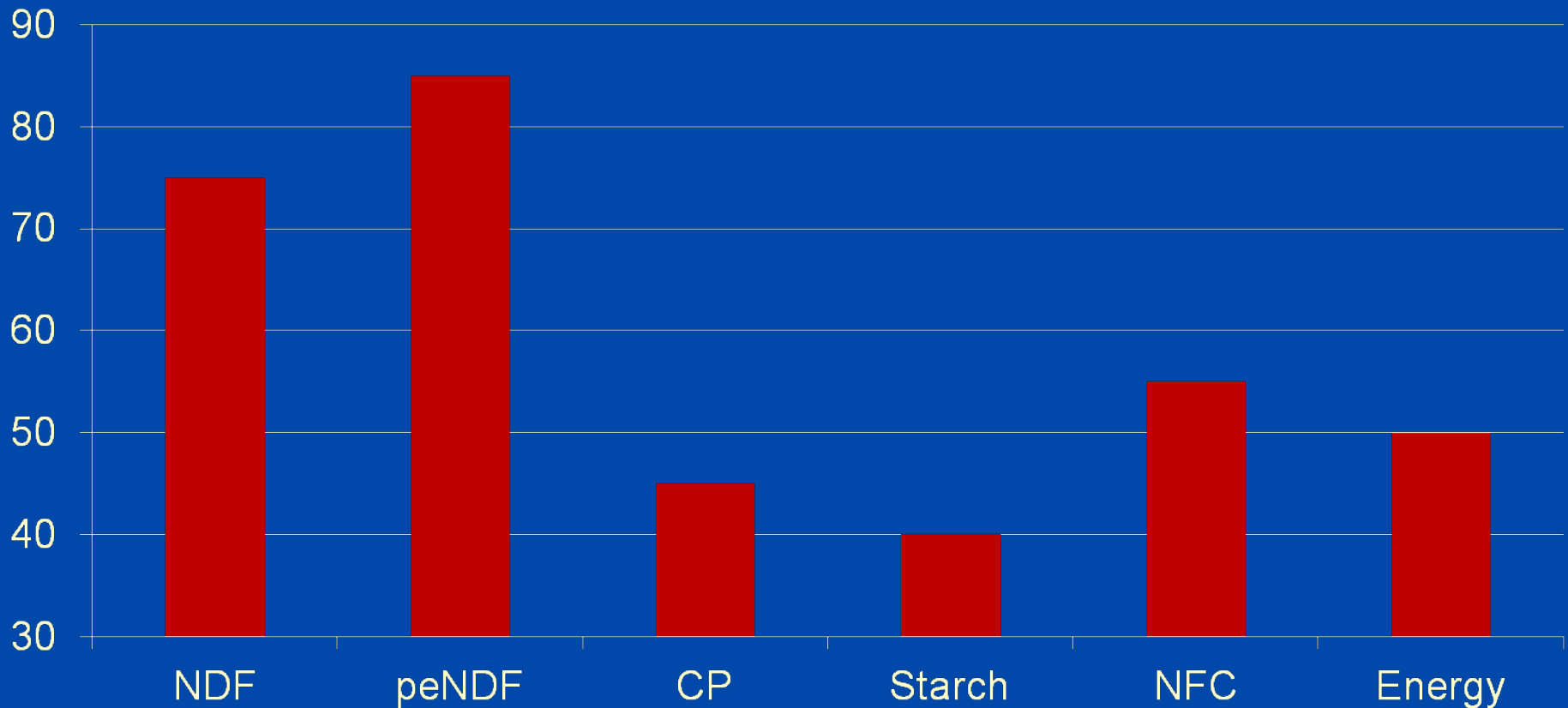
	Acres Needed
10% Yield Drag	+397
10%-units more forage in LC Diet DM	+576
Both	+1,038

# Top-Producing Survey Herd Locations



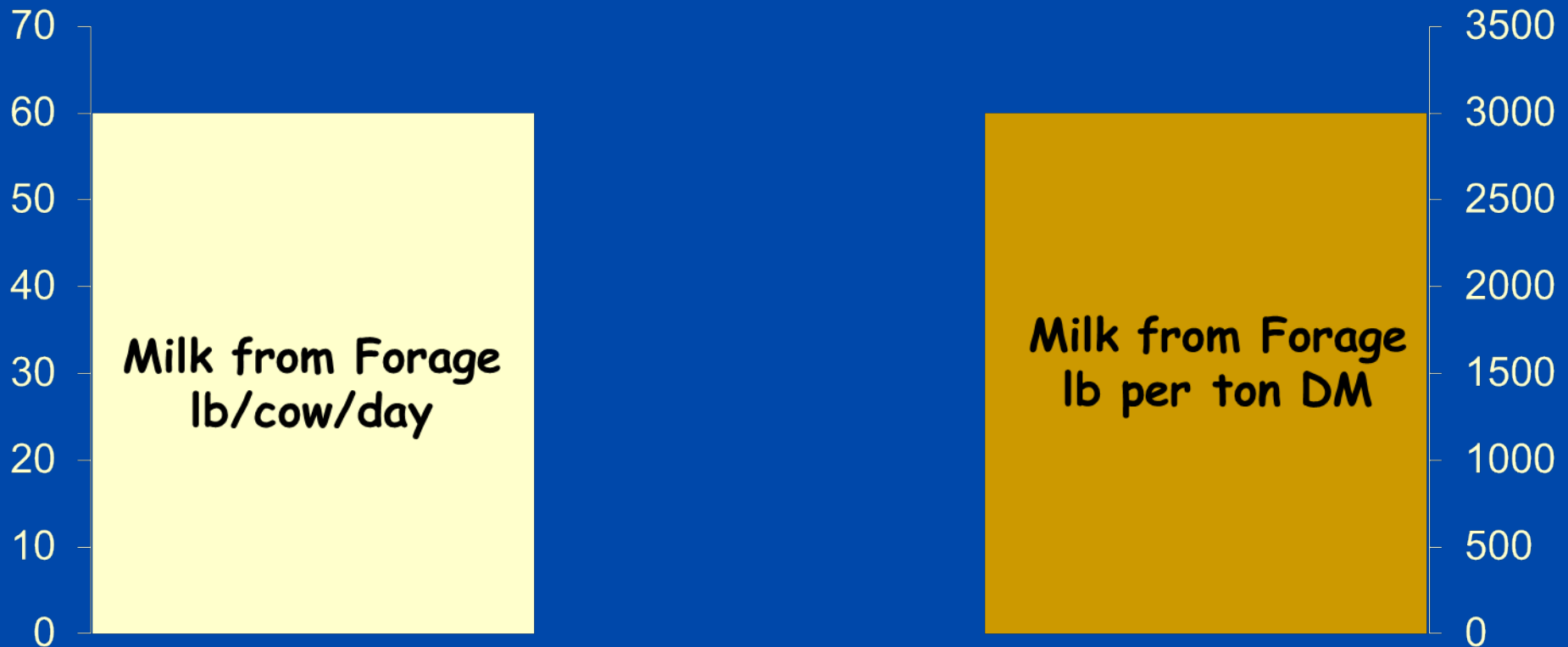
# Calculated from Survey Summaries

## % of Dietary Nutrient Provided By Forage





# Calculated from Survey Summaries



Maintenance & BWG energy requirements apportioned to forage or concentrate according to diet F:C ratio

# The Agronomist – Dairy Nutritionist Interface

- Feed Inventory & Crop Rotations
  - Lactating Cows vs. Dry Cows vs. Replacements
  - Corn Silage vs. Haycrop Silage
  - Carry-Over of Corn Silage & High-Moisture Corn
  - Cover-Crop Forages
  - Low-K Forages
- Manure Storage & Application
- Nutrient Management Plans
- Expansion Planning

# The Agronomist - Dairy Nutritionist Interface

- Yield vs. Quality

- Targeting relative qualities to livestock groups
- Targeting harvest maturity by crop/livestock group
- Proportion of corn silage to haycrop silage
- Opportunities grasses or alfalfa: grass mixtures
- Hybrid, Variety Selection
- BMR corn silage; Reduced-lignin alfalfa
- Crop Fungicides

- Feed Testing

- Reducing variation
- Benchmarking

# The Agronomist – Dairy Nutritionist Interface

- Harvest & Storage
  - Custom Harvesting
    - Firm Selection; Cost; Communication; QC
  - Harvest Maturity, Moisture Guidelines; QC
  - Chop Length, Processing Guidelines; QC
  - Silo Packing, Covering, Face Mgmt.; QC
  - Silage Inoculant Selection & Use

# The Agronomist – Dairy Nutritionist Interface

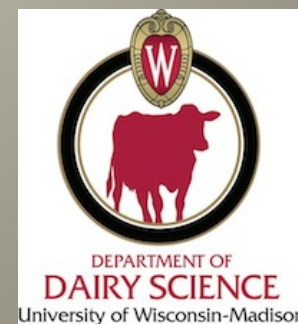
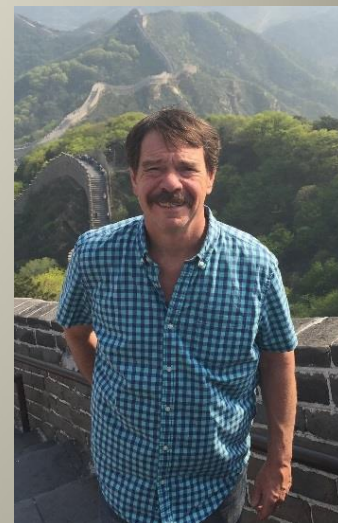
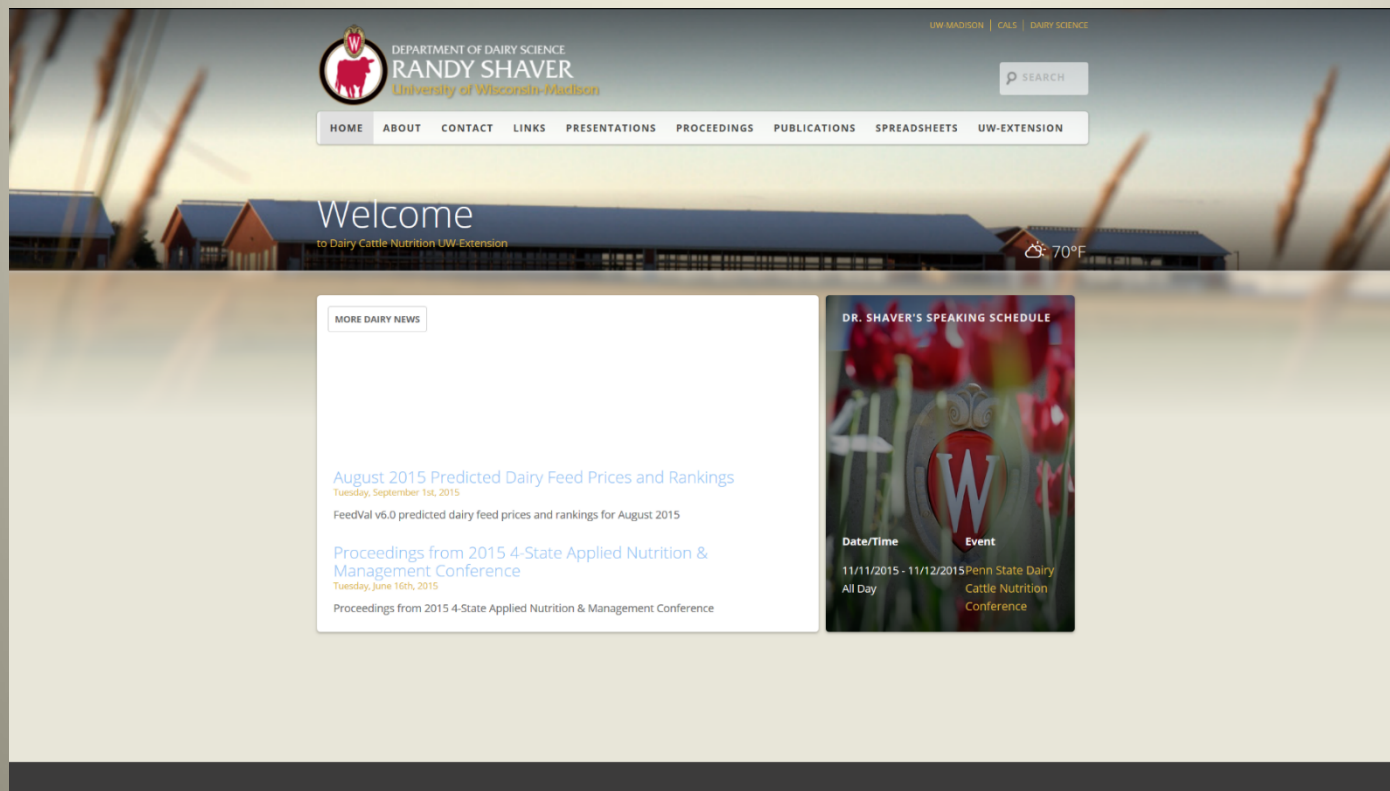
- Feed Value
  - Nutrient value
  - Pricing
    - Purchase
    - Sell
    - Assets
  - Contracts

# The Agronomist – Dairy Nutritionist Interface

- Management/Consultant Team Meetings
  - Define Roles
  - Provide Leadership
  - Set/Review Goals
  - Forward Planning
  - Benchmark Comparisons
  - Identify Bottlenecks
- Staff Training

# Visit UW Extension Dairy Cattle Nutrition Website

<http://www.shaverlab.dysci.wisc.edu/>



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