Fertilizer Value of Manure?

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Outline

- Marketing Manure
- Marketing Demo
- Economic Benefits
- Fertilizer Value Considerations
- Cost
- Calculating Fertilizer Value
- Farm Operation Example
- Questions

Think Manure

Marketing Manure?

- Not a typically "traded commodity"

- No formal marketing system

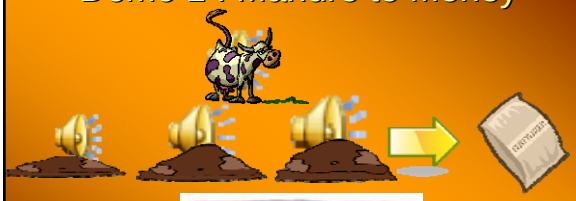
- Manure nutrient value
  - Estimated using current commercial fertilizer costs

Alternative Markets

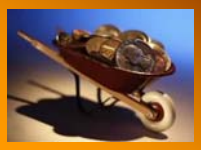
- Fuel/energy
  - Bio-gas
- Manure hauling and brokerage
- Sell/trade/auction
  - PA. $15-$22/ton

- Build partnerships
- Paper-
  - Kangaroo, Wombats, elephants

Demo 1 : Manure to Money



Demo 2: Manure to Money



Don't Throw Away Money

……Or roast it on an open fire

Economic Benefits

- Reduced fertilizer costs
- Increased production
  - Nutrient and microbial
- Organic matter
  - Improve soil quality
  - Increase soil moisture
- Water quality

Fertilizer Value Considerations

- Nutrient loss:
  - Collection
  - Storage
  - Application

- Variability in nutrient content
  - *See your local NRCS service center or University Extension Service*
- Hazards:
  - Excess application-water quality

Cost

- Application Costs
- Storage Facilities
- Equipment/labor/fuel
- Environmental

Application Costs

Storage Facilities

Equipment

Fuel and Buildings

Calculating the Fertilizer Value of Manure

Estimating Nutrients

- Animal type/units/production
- Field size/crop type
- Nutrient content/availability
  - Days stored
  - Storage type
  - Application method
- Crop nutrient requirements
  - Soil Requirements

Farm Operation Example

Operator:	Rocking Raindrop Ranch
Location:	McMinnville, OR
Animal Type:	Beef Cows
Animal Units:	50
Days Storage:	200
Manure Storage Method:	Dry Stack
Manure Application Method:	Broadcast
Crop Manure Applied To:	Wheat
Target Yield/Unit:	80 Bu
Previous Crop:	Grass Seed
Manure Management Improvement:	
Build Dry Stack Facility	
Life (yrs):	10
Discount Rate:	8.00%

Spreadsheet Example

Results:

Field Size (Ac):	100
Cost Savings ($/Yr):	$506
Cost Savings (Ac/Yr):	$5.06
Lost Nutrient Value ($/Yr):	$0
Lost Value ($/Ac/Yr):	$0.00
Break-Even Cost on Manure Management Improvement:	$3,395
Maximum Acres Served:	96
Cost Savings ($/Yr):	$556
Cost Savings ($/Ac/Yr):	$5.77

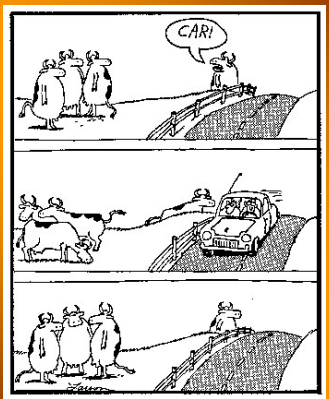
Where Are You?

Where Are You ?

Questions ?

Wisconsin boasts most manure-to-energy projects
By Thomas Content of the Journal Sentinel Posted: Dec. 6, 2008

…….. and remember the Far Side?



http://www.medicsp.net/content/0002/0002/0204_cowpower.html