

**SEAMAN
CROP
CONSULTING
LLC**

.....Since 1977



Cotton Since 1997

ARE YOU DISAPPOINTED ??

WHY ???

WHY ??

WHY ?



Disappointment ?



Welcome --A New Day!



Best Water Management

Start Planning Now

COMMIT TO MANAGEMENT

PLANNING NOW

- 1. When did the last crop quit using moisture?
- 2. If needed, is prewater available ?
- 3. Are we sharing water with another crop ?
- 4. What is the elevation, lay of the land ?
- 5. How long maturity cotton variety ?
- 6. Is pop/ac a consideration ?
- 7. What are options, if cotton planting fails ?

**IF YOU DON'T HAVE TIME
TO DO IT RIGHT.....**

**YOU MUST HAVE TIME
TO DO IT OVER.....**

In Cotton... NO, Wrong !!!

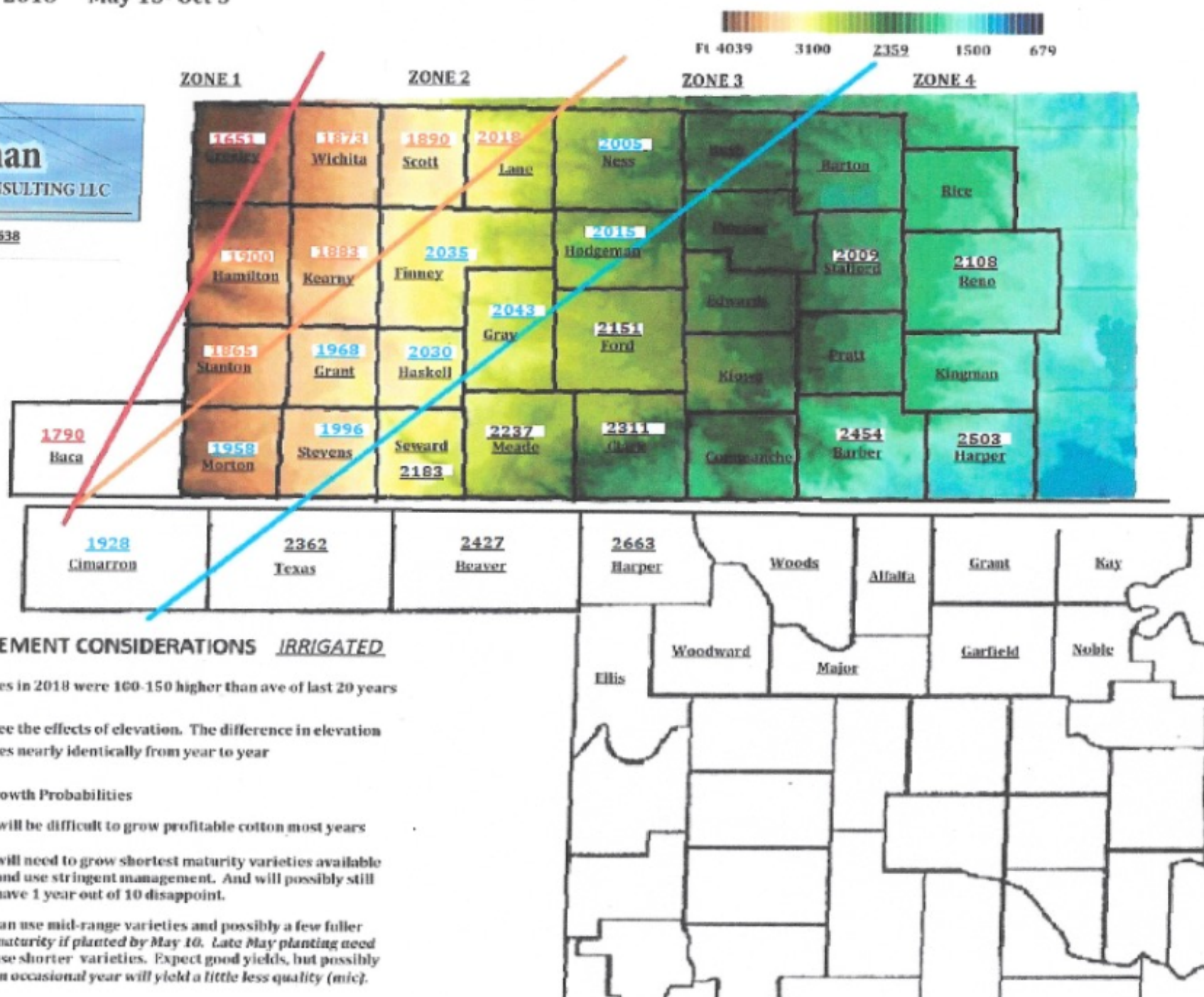
Most Efficient Ways to Waste Water @ 600 gpm

- 1. Let weeds grow on fallow
- 2. Apply so little per rev that evaporation takes a large percent.
- 3. Leaks- a small leak running at 23 gpm for a 100 day period = 1" on 122 ac.
- 4. Stuck pivots- a stuck pivot for four hours at four different times = 21 ac in
- 5. Grow a crop that makes no money.

Save Water in Light Sandy Soil

- Overwatering pushes water below the possible root zone and this amount is lost and actually heads back toward the aquifer
- This is water that is metered out for use and never even goes through your crop.
- This is water you pay for in the pumping cost

620-544-9638

MANAGEMENT CONSIDERATIONS IRRIGATED

1. GDU values in 2018 were 160-150 higher than ave of last 20 years
2. You can see the effects of elevation. The difference in elevation contributes nearly identically from year to year
3. Cotton Growth Probabilities
 - ZONE 1- will be difficult to grow profitable cotton most years
 - ZONE 2- will need to grow shortest maturity varieties available and use stringent management. And will possibly still have 1 year out of 10 disappoint.
 - ZONE 3- can use mid-range varieties and possibly a few fuller maturity if planted by May 10. Late May planting need use shorter varieties. Expect good yields, but possibly an occasional year will yield a little less quality (mic).

Yr 04,06,09,10,11 Cot GDU

RECENT

CUMUL
GDU

2500

2000

1500

1000

500

0

May Jun Jul Aug Sept Oct

2011

2010

2006

2009

2004

18

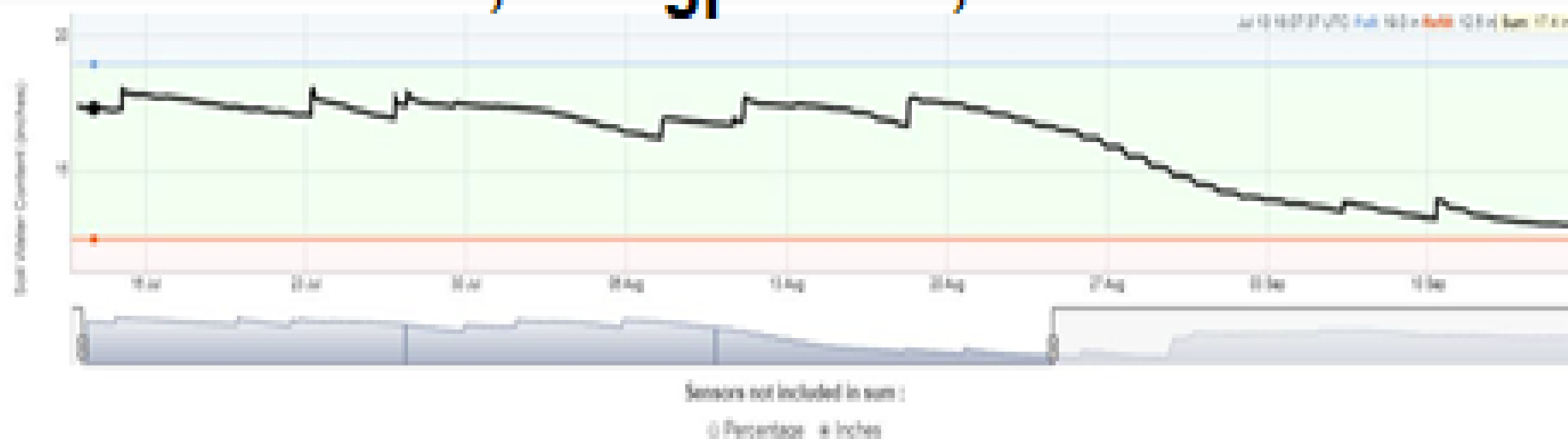
17,19,20

21



Sum

240 Acres, 500 gpm well, Cotton / Corn



Sum





- 36" core probe
- 48" auger

HOW MUCH WATER NECESSARY ? Ks

Generally 9-13" water is needed in-season

- **Too much rain or irrig is problematic**
- **a. Excess growth - less maturity**
- **less quality**
- **less yield**
- **b. More input cost – PGR \$**
- **Prewatering on silt loam - only up to 75%**
- **of the 3' profile**

Best Rec. for Irrigation

Start with a full profile 3 - 4' at 75% WHC

Water lightly to get germ of cotton + weeds

Water at begin flower

Do not overwater. A 73% profile is easiest
to manage.

Dammer-diking will help -less ponding in low spots

Excess Nitrogen- Problem

- Leads to excess vegetative growth + shading
- Shading causes slowdown in maturity
- Less maturity causes- lower mic grade
- tough leaf drop
- high risk of bark
- You must deep sample nitrate !!!!!

1522 lb/ac

8" irrig

NO SUMMER RAIN



28/11/2011

Irrig amts vs Expected Yields

Starting with a good 3' profile..... No rainfall

Yield lb/ac

<u>Gpm</u>	<u>"/ac</u>	<u>sandy loam</u>	<u>silt loam</u>
• 200	4.55	375	475
• 350	6.37	575	700
• 475	8.20	800	1000
• 550	10.00	1100	1200
• 600	11.00	1350	1600

Regulation Guidelines

<u>GDU</u>	<u>Stage</u>	<u>Date</u>
500	1 st square	June 15
1000	1 st flower	July 12
1450	Speckle	Aug 10

*If you do not meet these parameters.....
consider the crop behind in maturity.
Don't wait, action is required.*

DRYLAND SKIP-ROW

2006



2007



2008



NE 3-31-36 659 lb



NW 2-31-36 662 lb



NW 15-31-35 783 lb



How much prewater?

- Depends on current soil moisture
- Probe with a core probe.
- Consider soil type for WHC
- Figure amount of irrig needed to attain %
- Do not try for more than 4' profile.
- Consider what you will have left for in-season.

SOIL TYPE and WHC

Know your soil types to a depth of 3-4 ft	WHC/ft
Sand	1.50"
Sandy Loam	1.75"
Loam	2.0"
Silt Loam	2.2"
Silty Clay Loam	2.4"



Prewater.....Change Pivot Speed



04/09/2011



Variable Rate Irrigation

- Redistribution of water; program rate for every 6 degrees around circle. Speed control.
 - to match prevailing soil types across the field.
 - to apply more on hilltops, lighter WHC soils
 - to apply less in areas of runoff
 - Can be used to effectively water the best acres and place the other acres in a different crop requiring less water.
 - Can be used for variable rate fertilizer applic

Common Irrig Pivot Problems

- Declining water table
- Poor nozzling –regulation
- Migration of salts, pH increases in topsoil
- Poor records



30/10/2012



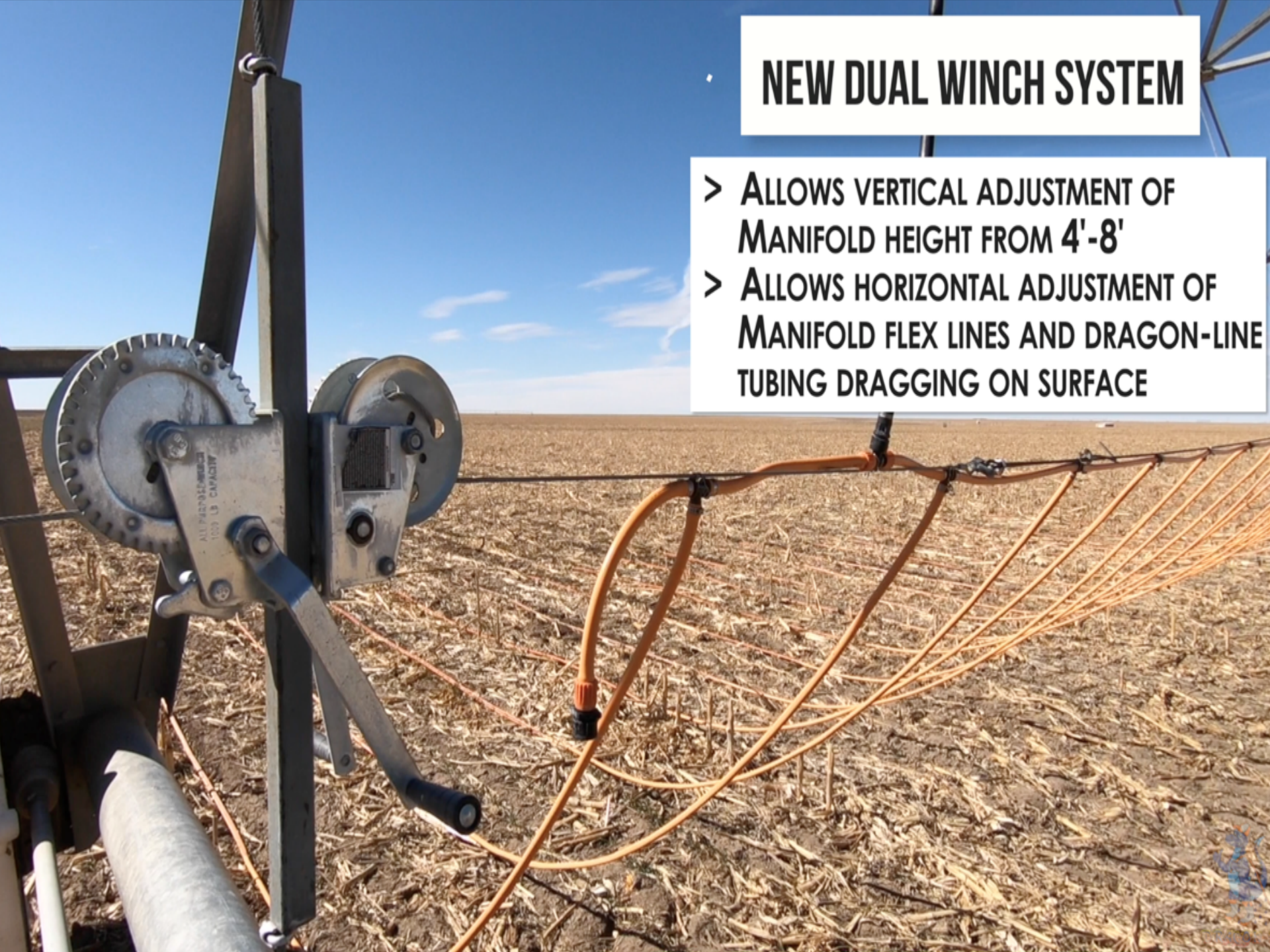


Dragonline 2014



NEW DUAL WINCH SYSTEM

- > **ALLOWS VERTICAL ADJUSTMENT OF MANIFOLD HEIGHT FROM 4'-8'**
- > **ALLOWS HORIZONTAL ADJUSTMENT OF MANIFOLD FLEX LINES AND DRAGON-LINE TUBING DRAGGING ON SURFACE**









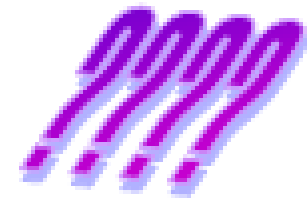






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Questions??

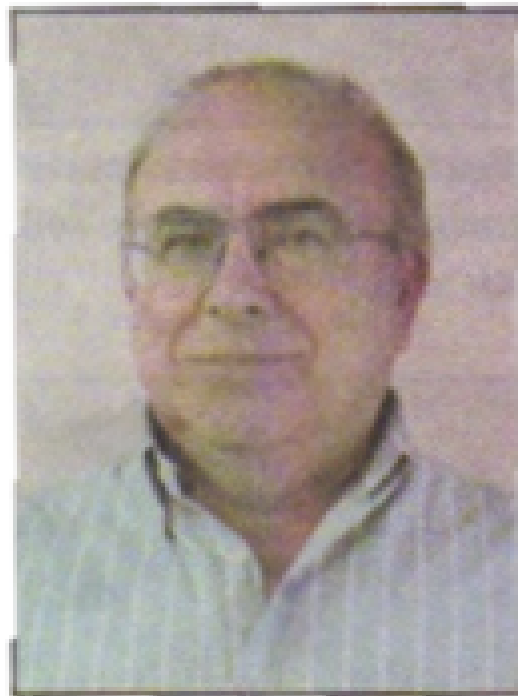


Wishing You Good Cotton !!



WANTED

(for shirking honey-do's)



Suspect frequently poses as
crop consultant

Call Lillian 544-7562