

Precision Ag in Cotton - Consultant's Perspective

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PRIME LOUISIANA REAL ESTATE



OFFERS EXCELLENT HUNTING



AND A GREAT SOCIAL LIFE



AMS, Inc.

- Began in 1978
- Five Certified Consultants on Staff
 - Twelve or more seasonal employees
- Consult and/or Manage Crops
 - Cotton - 60,000 acres +
 - Grains - 10,000 acres +
- Soil Management - 5,000 acres +

Launched into Precision Ag in 2000



Precision agriculture is not new.

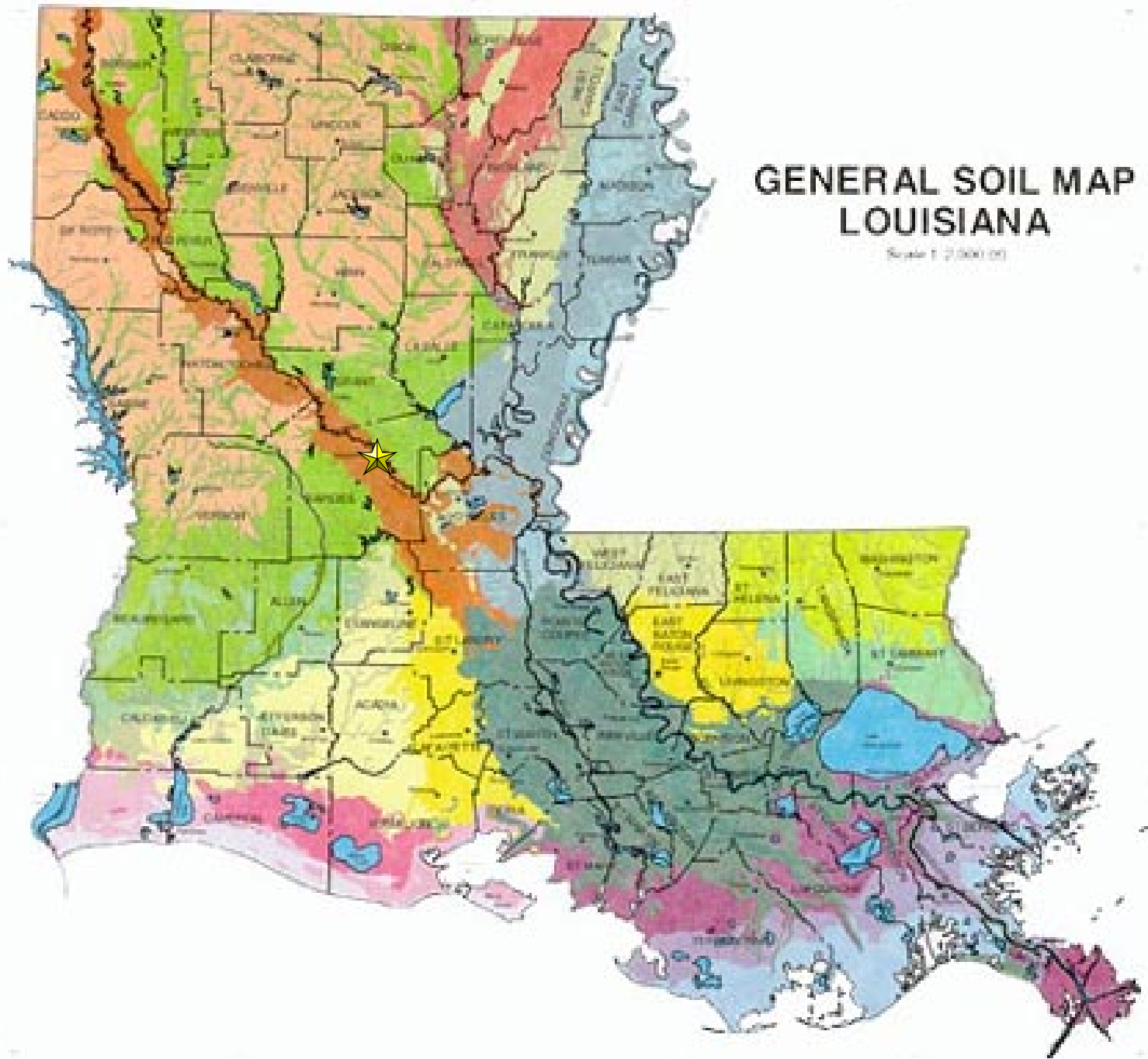
Our perception of what it entails
or includes is new.

The first “precision agriculture” occurred when man first started to sow seeds at various planting rates or depths or harvest the best portions of the fields first.

The first “site specific management” may have occurred when man put a fish head next to a plant in order to increase production.

Alluvial soils next to the Big Ditch (aka MS River) are fertile, but diverse





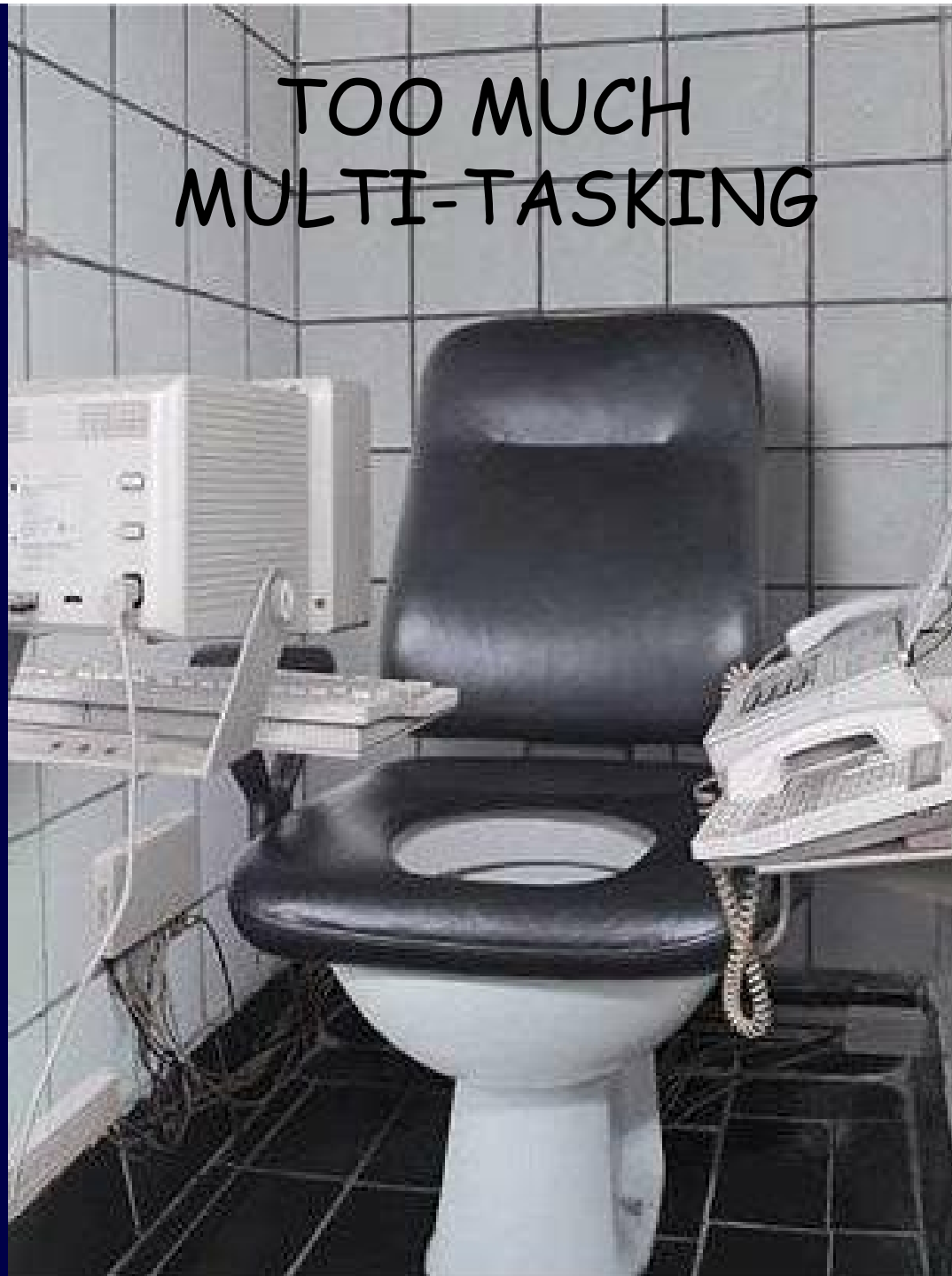
**GENERAL SOIL MAP
LOUISIANA**

Scale 1:2,000,000

OVERLOADED ASS



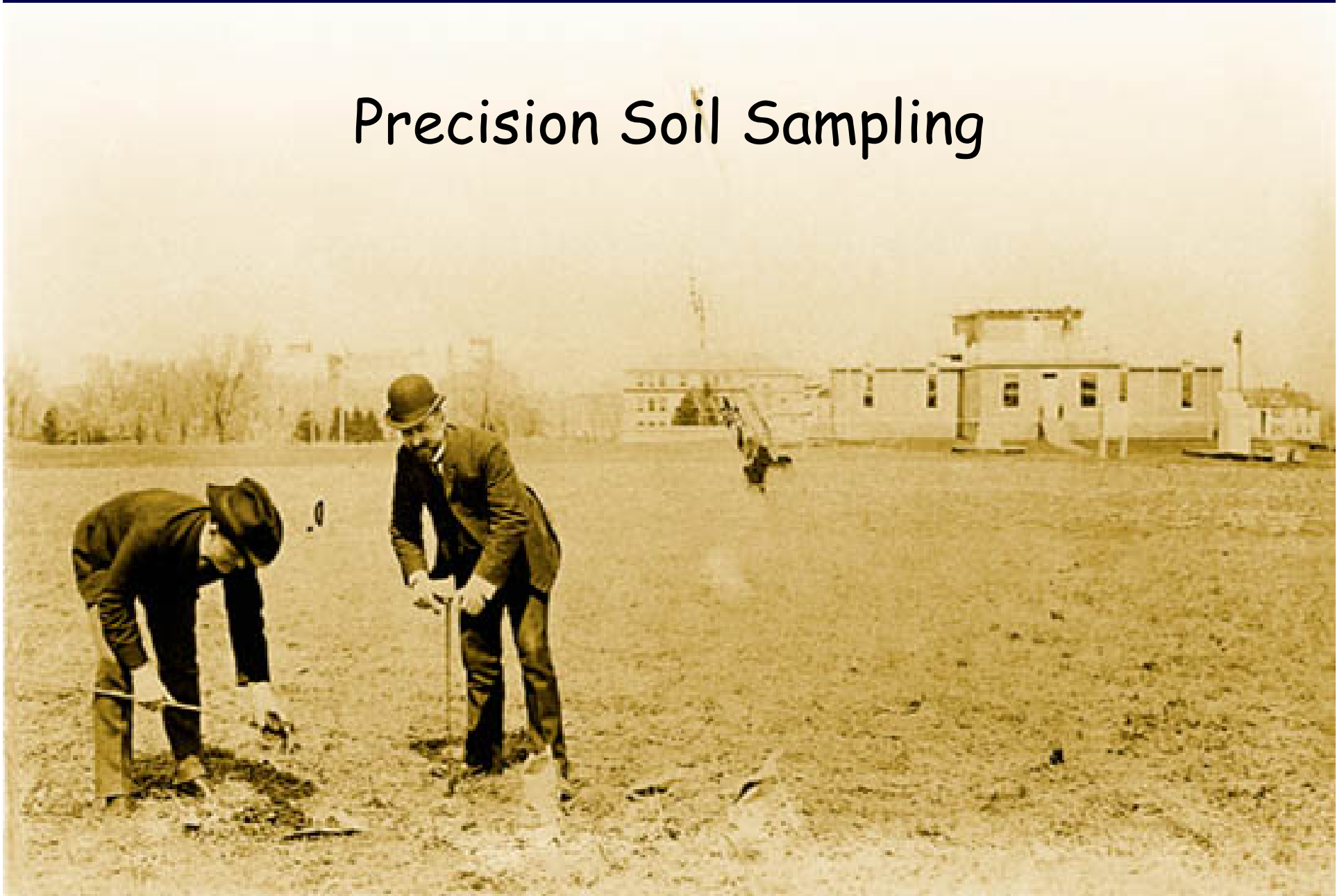
TOO MUCH
MULTI-TASKING



FEARFUL OF THE UNKNOWN



Precision Soil Sampling



Precision Tillage



P.A. HISTORY AT A.M.S.

- 1970's - began with spot sampling and spot applications
- 1980's - early 90's - reviewed & observed Midwest results from PA - observed mistakes and successes
- 2000 - began GPSing of field boundaries
- 2001 - installed 1st cotton yield monitor
- 2001 - rented Veris from Harold Lambert and recorded EC data

P.A. HISTORY AT A.M.S. (continued)

- 2002 - wrote prescription VR applications in Farm Works
- 2002 - demonstrated VR on several clients' farms
- 2003 - began using In-Time aerial imagery
- 2003-2004 - Veris'd 5,000 acres

P.A. HISTORY AT A.M.S. (2005)

- On-farm demonstrations of VR
- Signed up clients with In-Time
- Aided in selection and use of VR equipment
- Wrote prescriptions
- Begin fee program

P.A. HISTORY AT A.M.S. (2005)

- EC Data - 4,000 Acres
- Zone Sampling - 19,000 Acres
 - 15,000 Sub-contracted Acres in Mississippi & Arkansas
- Continuing Education of Clients

P.A. HISTORY AT A.M.S. (2006)

- EC Data - 4,000 Acres
- Zone Sampling - 5,000 Acres
- Continuing Education of Clients
- Encouraged Sign-Up on NRCS-PA Program.

EQIP - Precision Ag

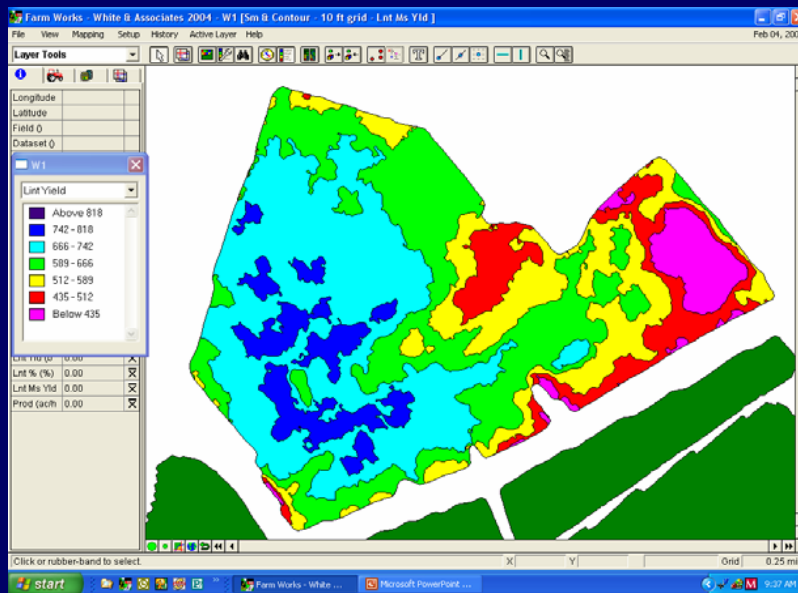
1st Year - sampling from EC data or grids

2nd & 3rd Year - VR fertilizer + yield monitor data

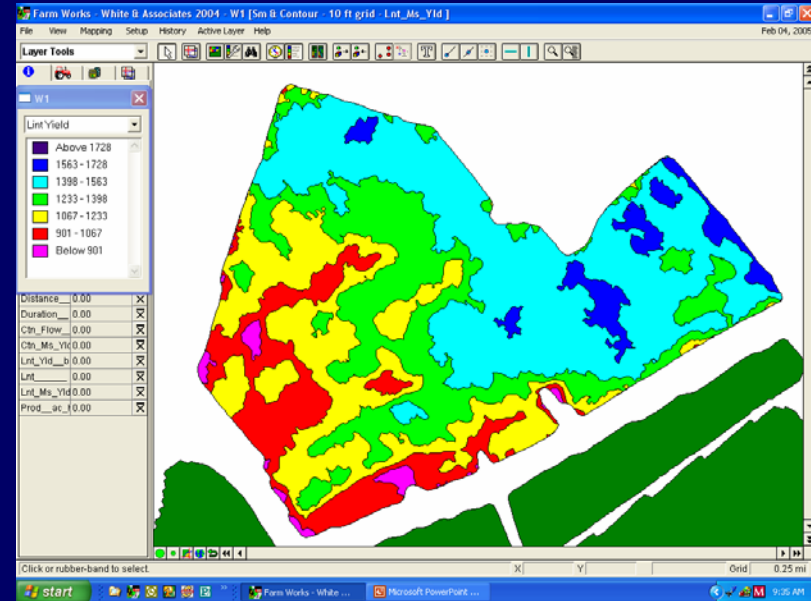
Pays \$14/acre/year (\$42/acre/3 yr) with YM data or \$7/acre/year (\$21/acre/3 yr) without YM data

Limited to 600 acres/entity/county

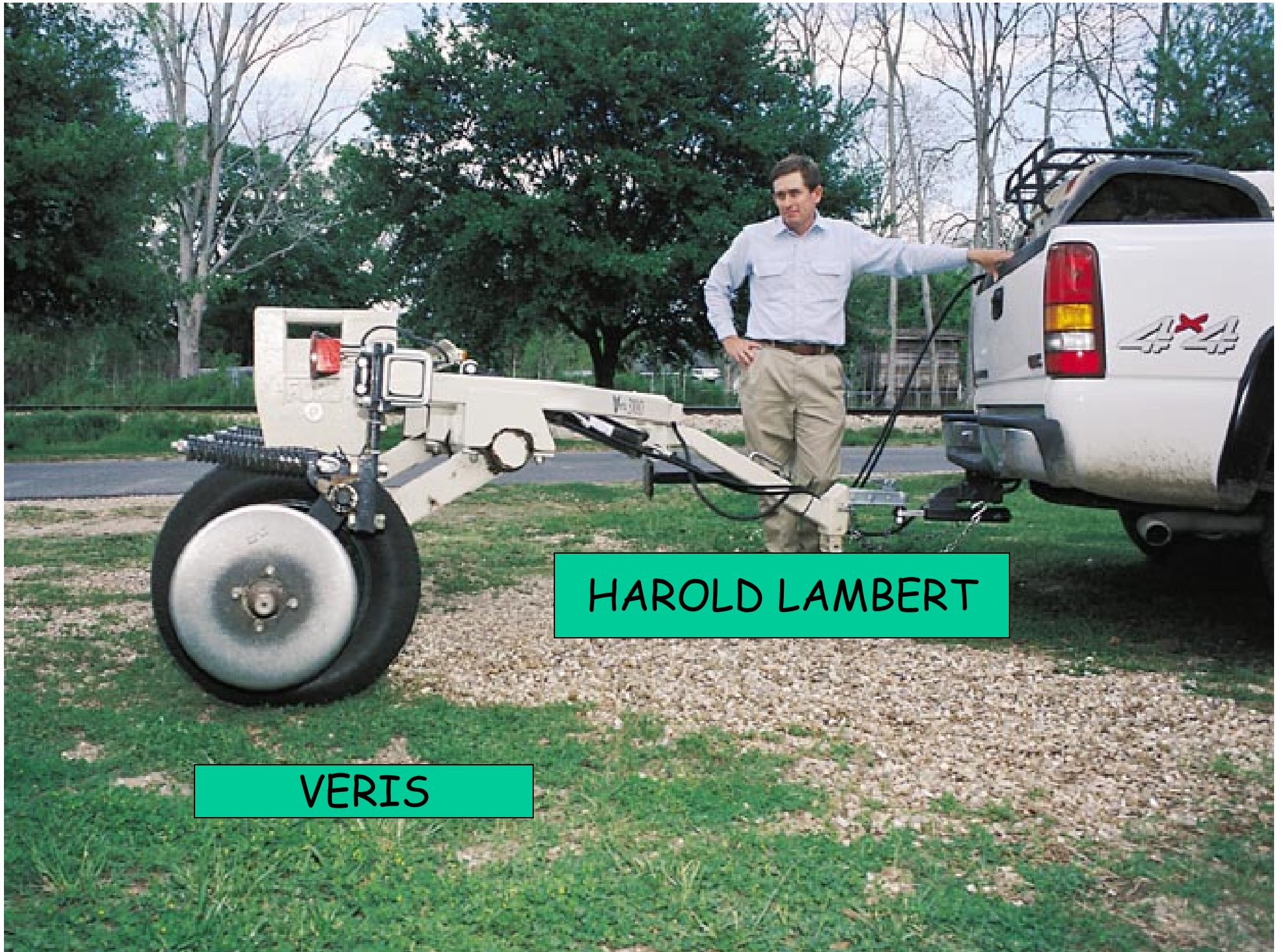
YIELD 2002 VS 2003



2002

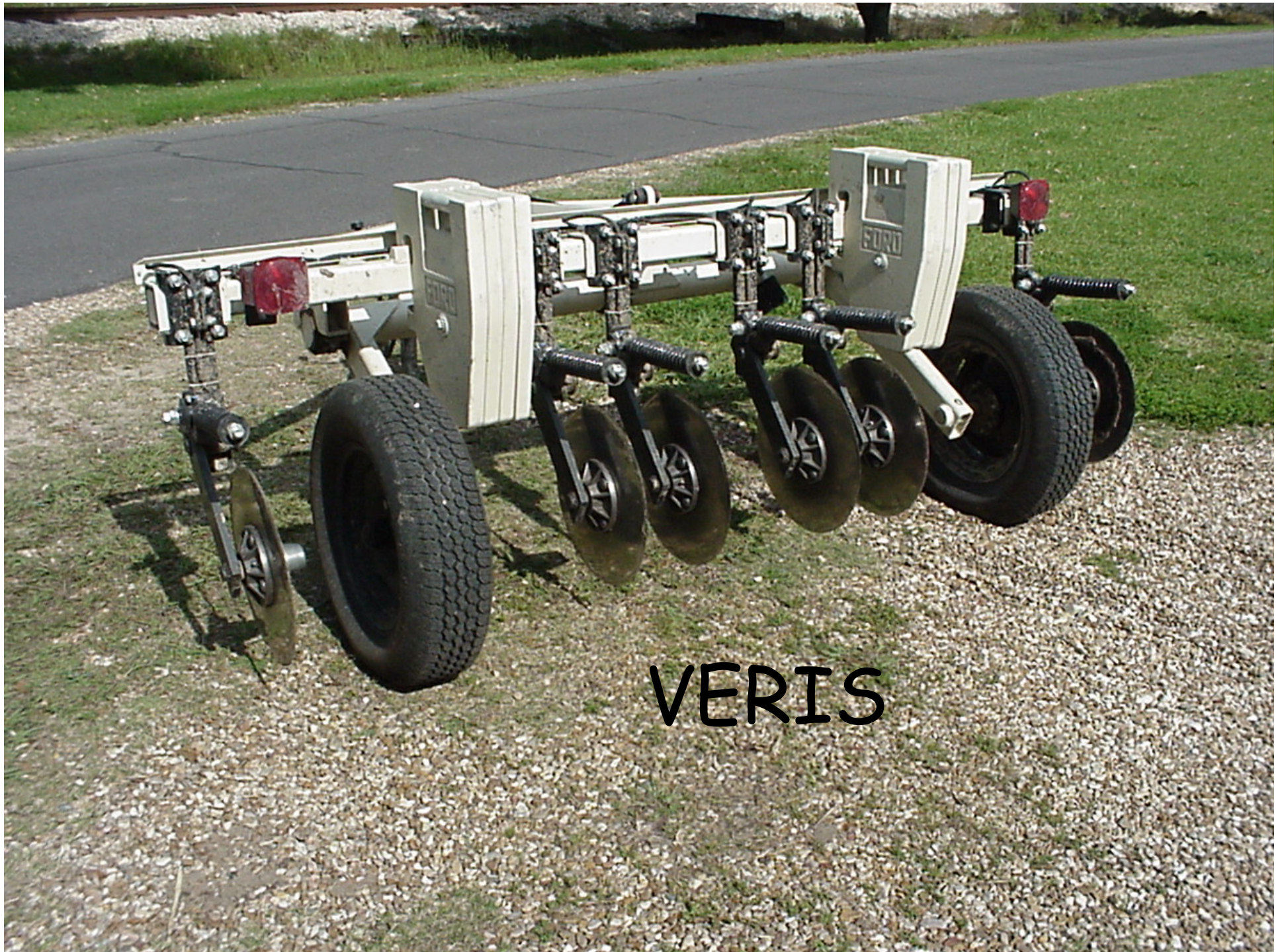


2003



HAROLD LAMBERT

VERIS



VERIS

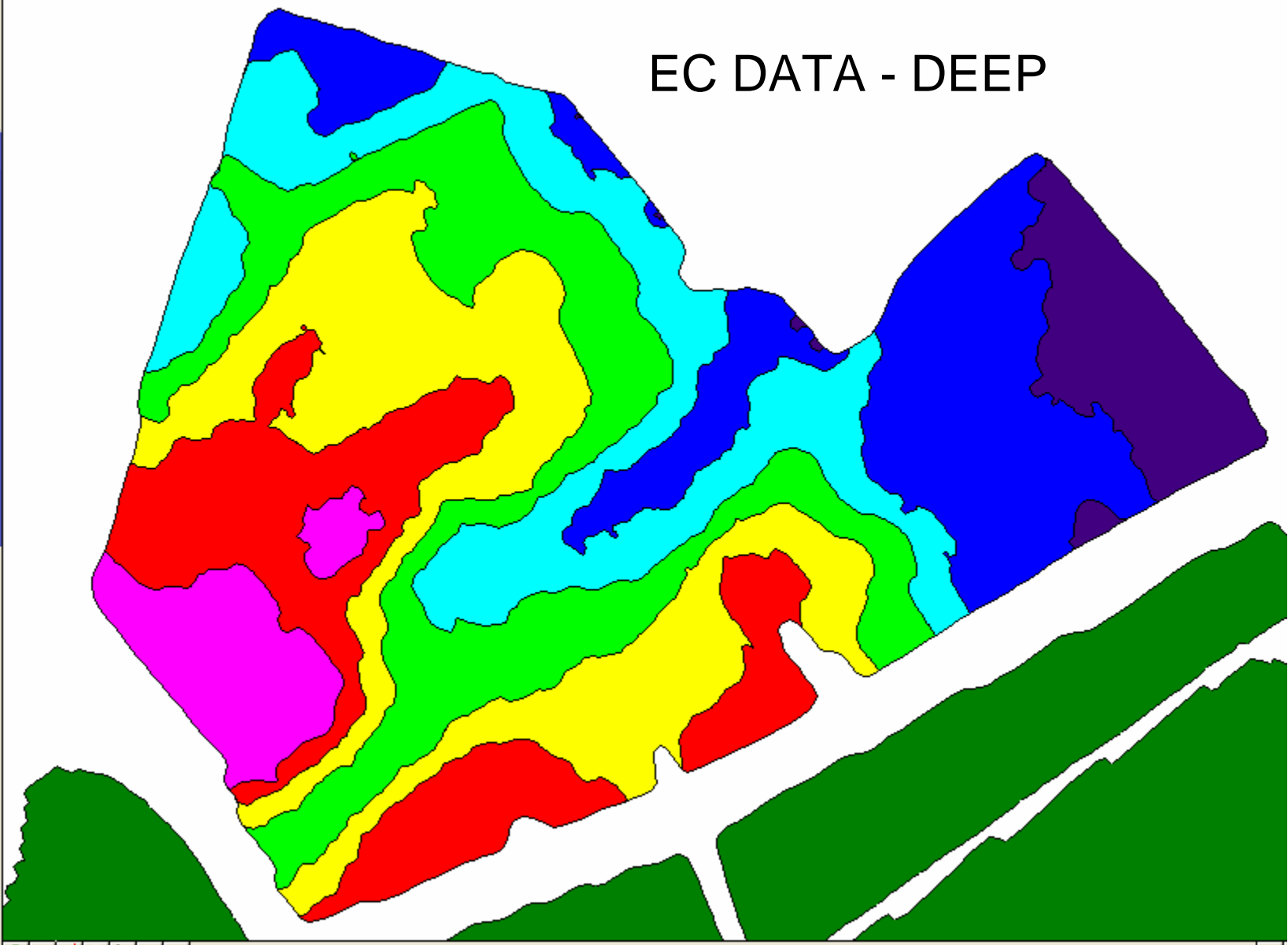


Veris Raw
W1

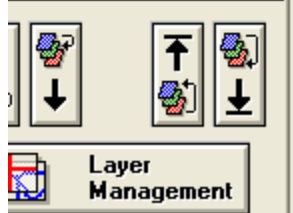
ep EC

- Above 118
- 104-118
- 90-104
- 75-90
- 60-75
- 45-60
- Below 45

EC DATA - DEEP



Layer Management



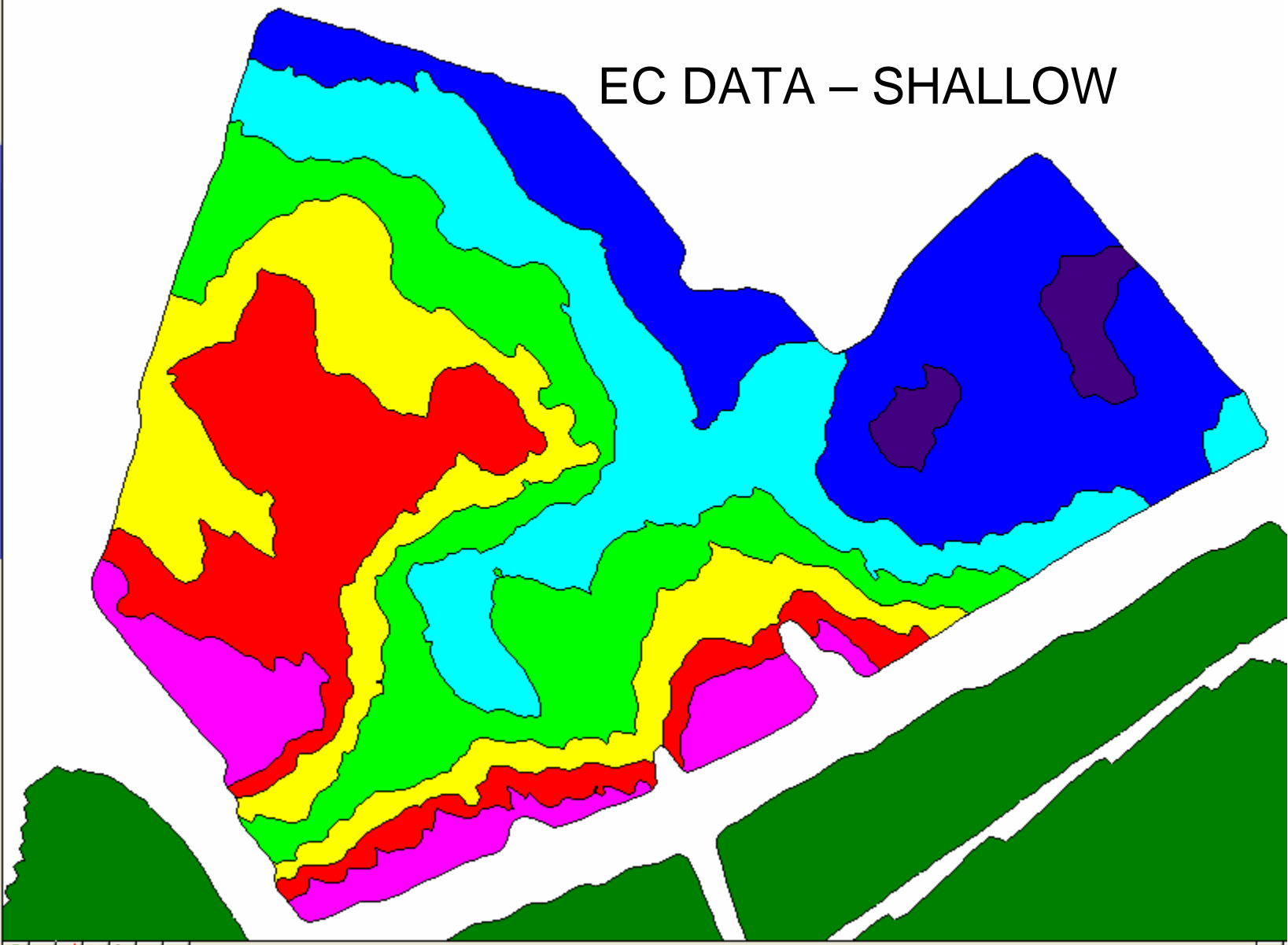


Veris Raw
W1

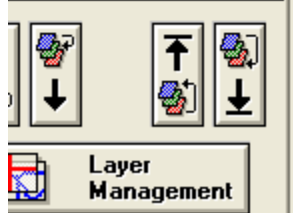
allow EC

- Above 75
- 64 - 75
- 53 - 64
- 42 - 53
- 30 - 42
- 18 - 30
- Below 18

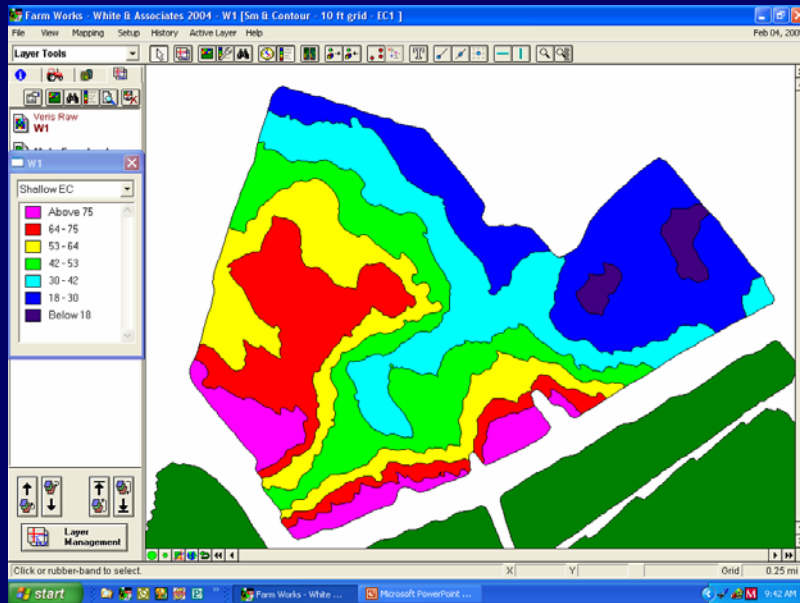
EC DATA – SHALLOW



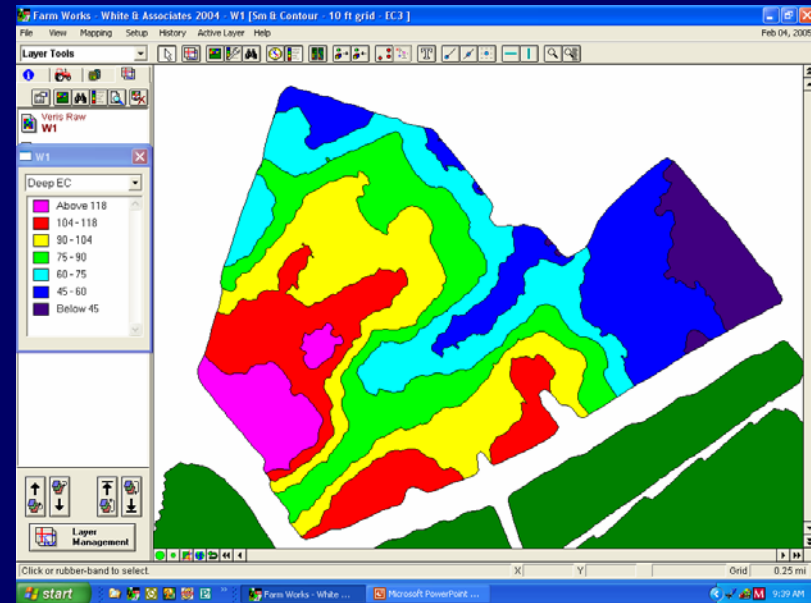
Layer Management



SHALLOW VS DEEP



DEEP



SHALLOW



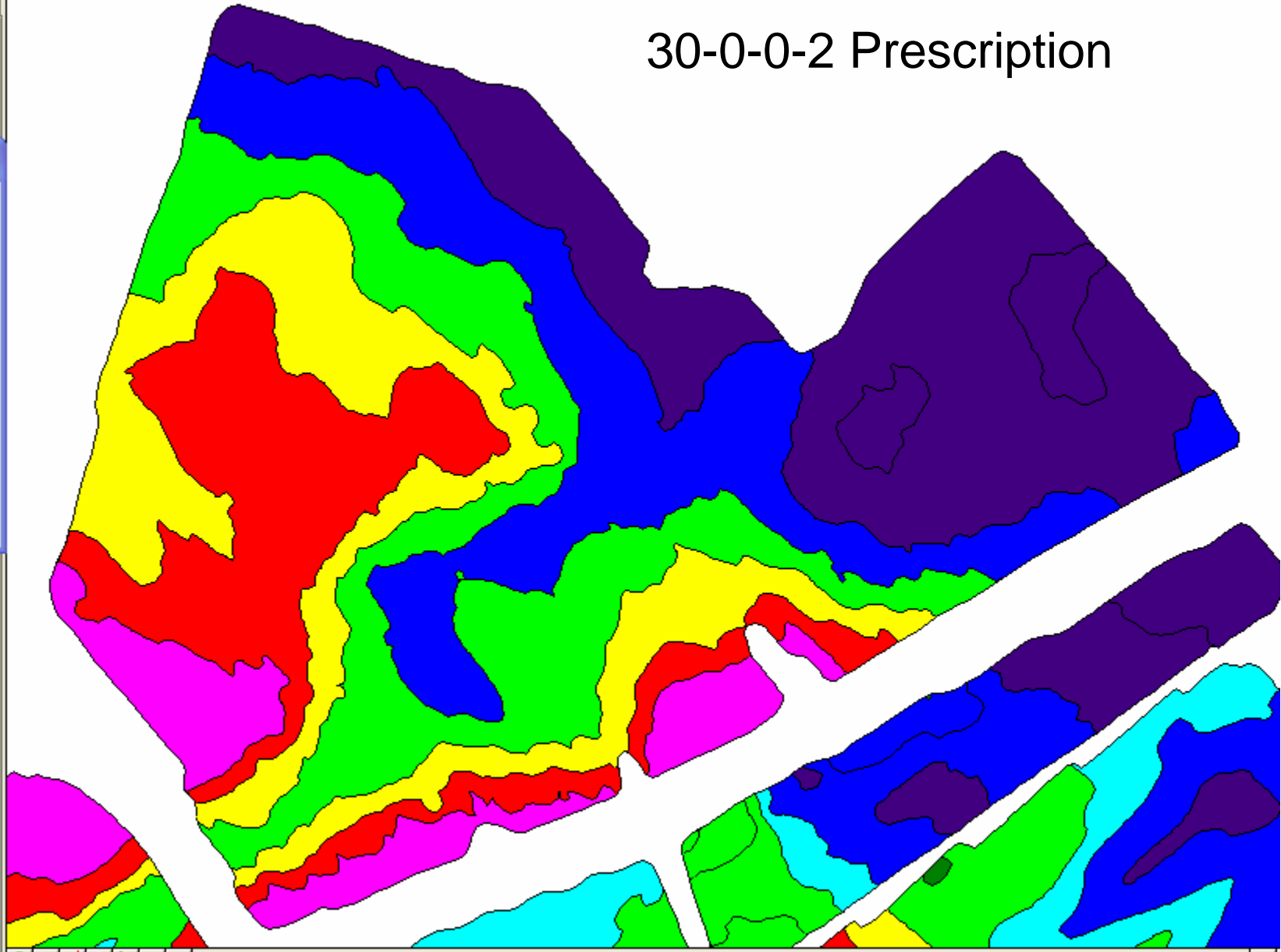
Nitrogen Files
Wildsville

Wildsville

-0-0-2 Presc. Map

- Above 35.01
- 33.01 - 35.01
- 31.01 - 33.01
- 29.01 - 31.01
- 27.01 - 29.01
- 25.01 - 27.01
- 23.01 - 25.01
- Below 23.01

30-0-0-2 Prescription



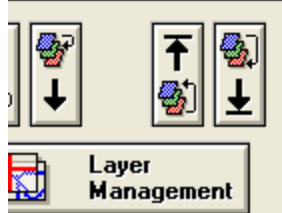
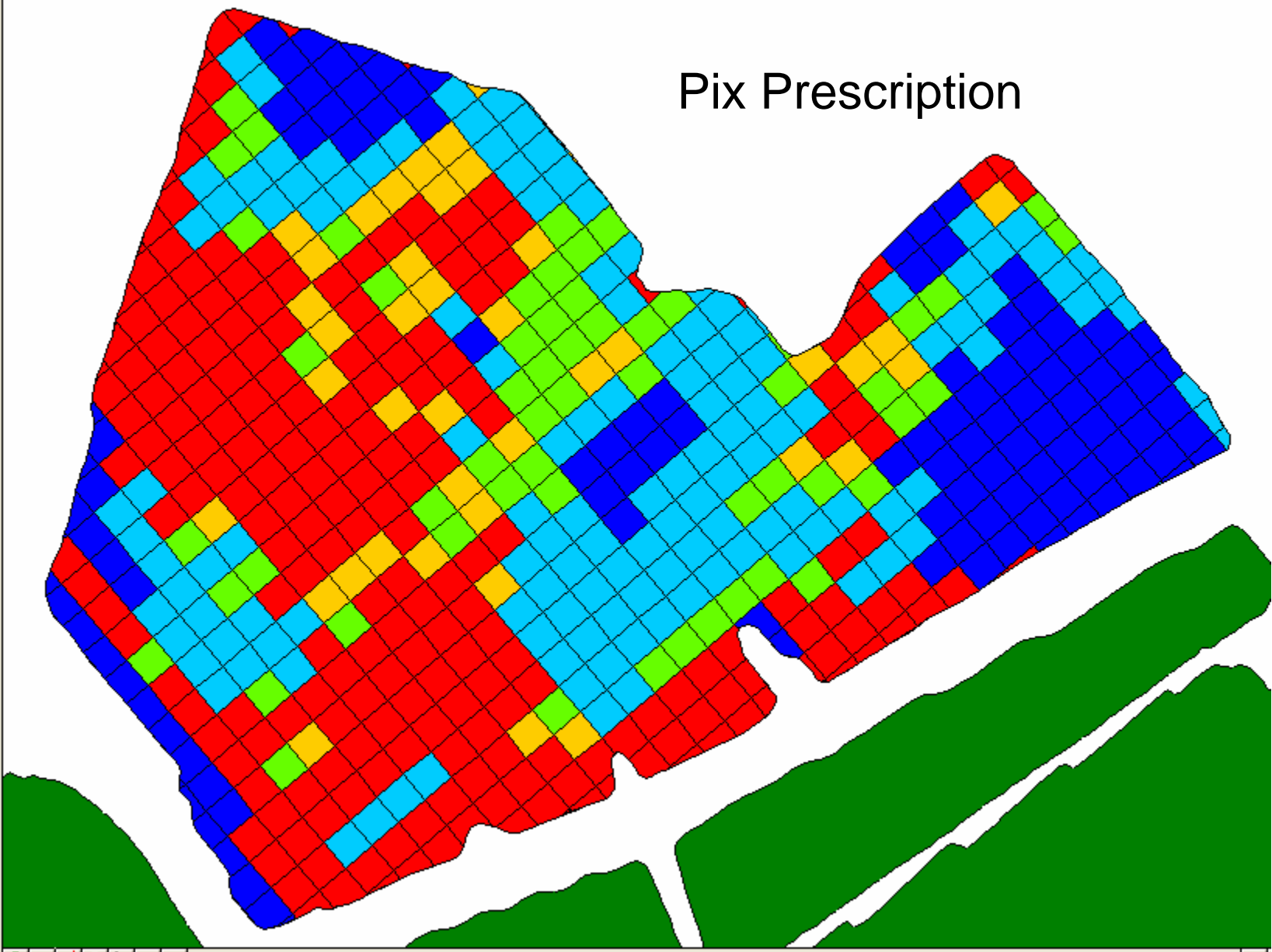
Layer Management

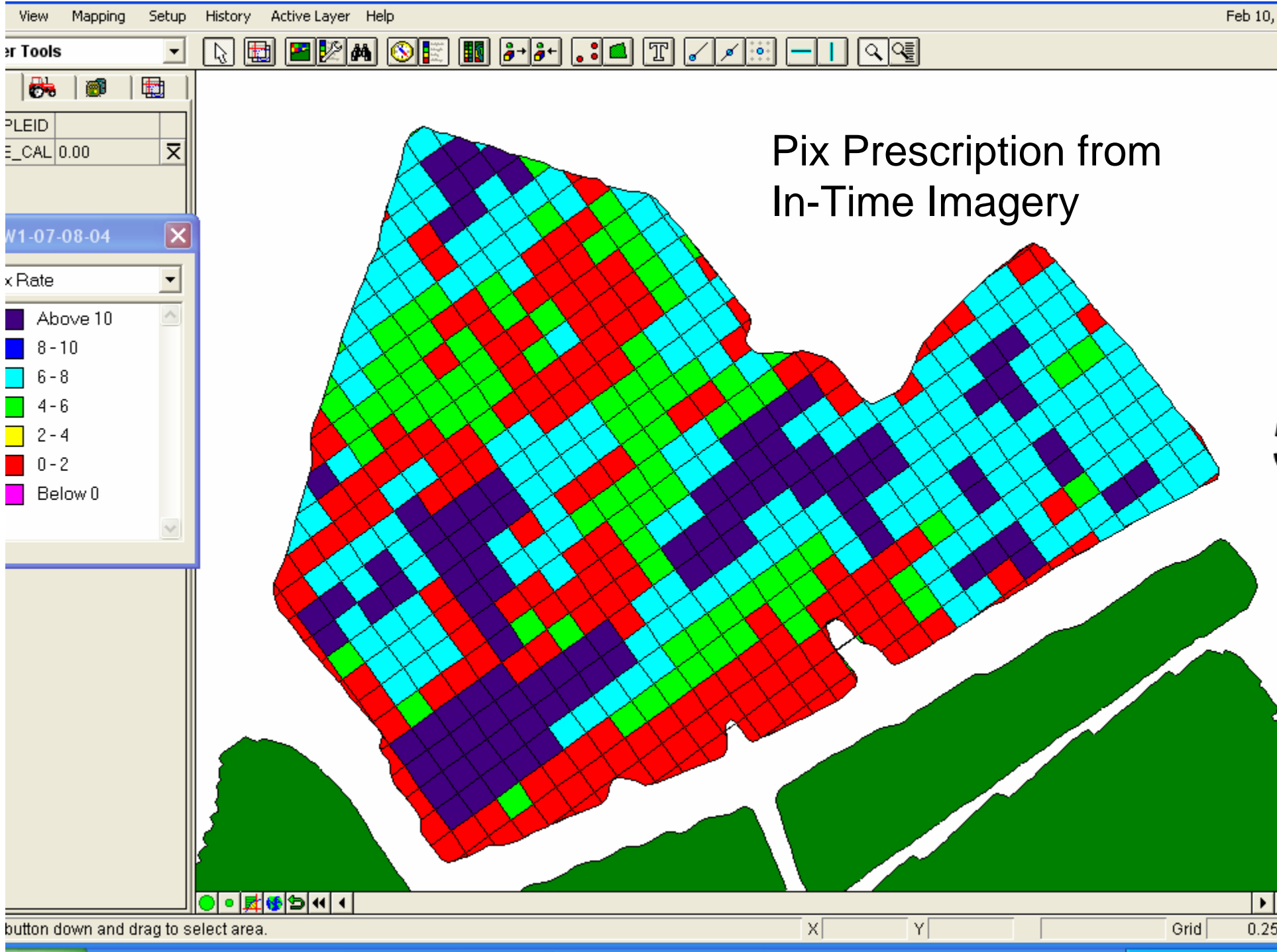
A set of icons for layer management, including a plus sign, a minus sign, and arrows for moving layers up and down.



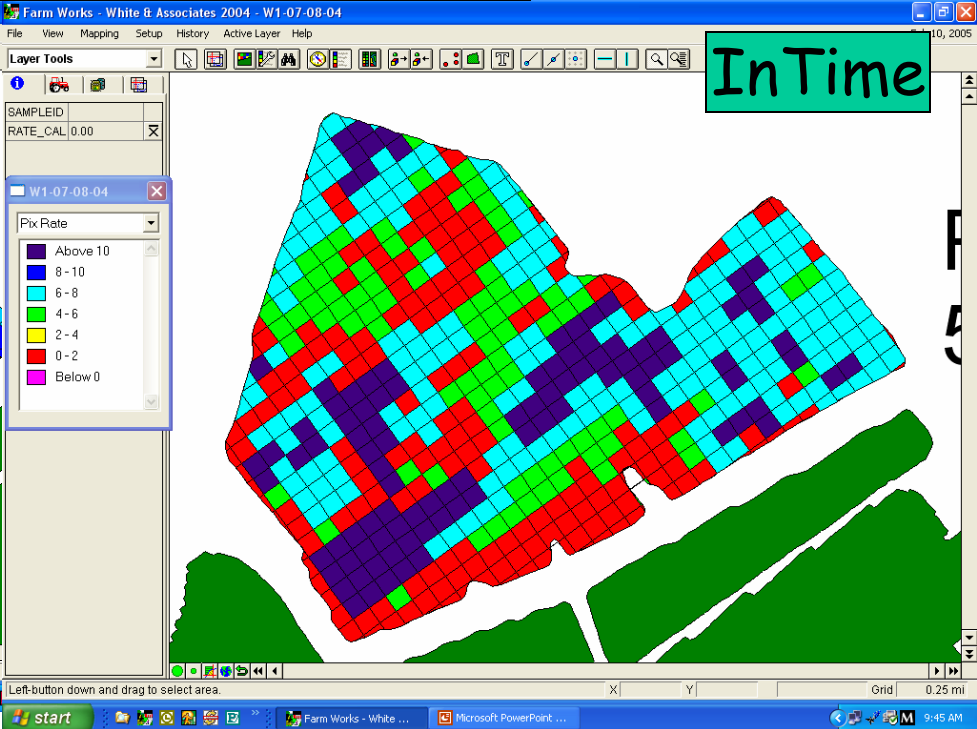
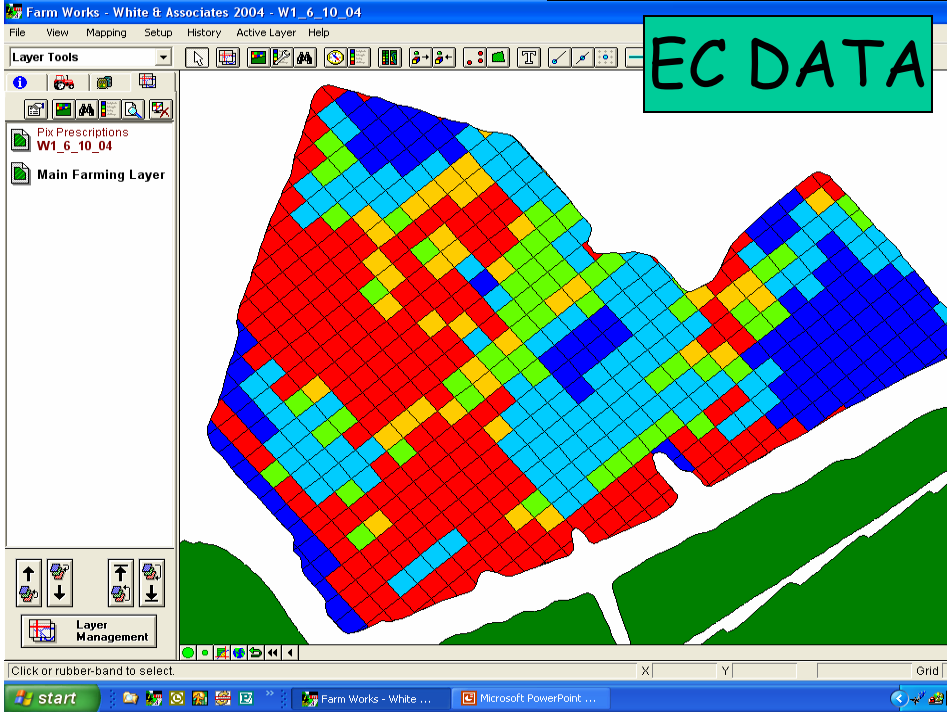
Pix Prescriptions
W1_6_10_04
Main Farming Layer

Pix Prescription





PIX PRESCRIPTIONS



Desktop

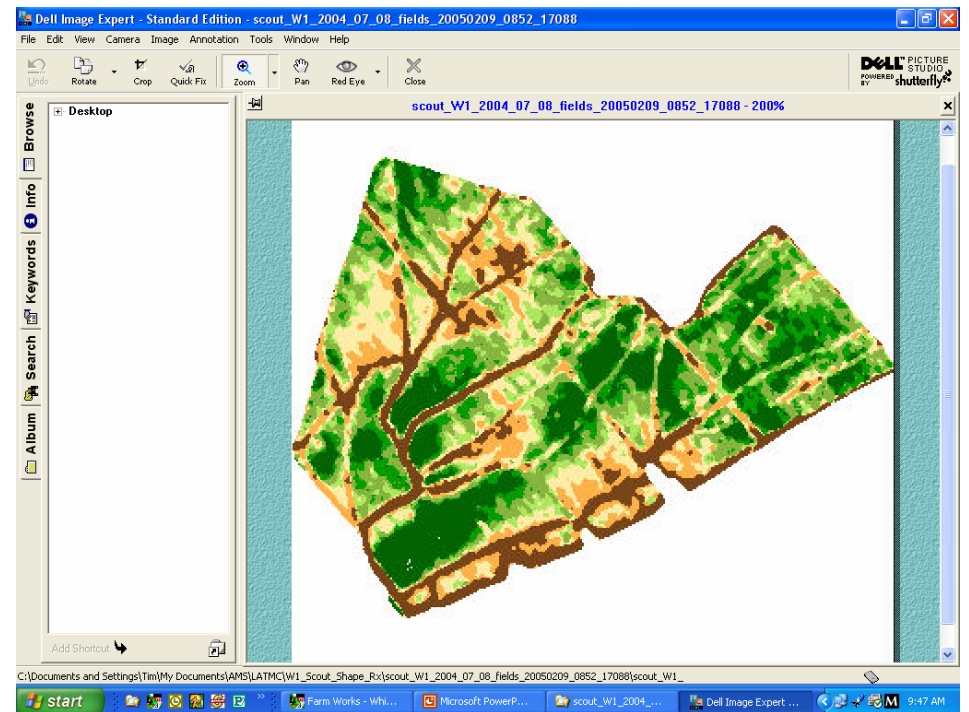
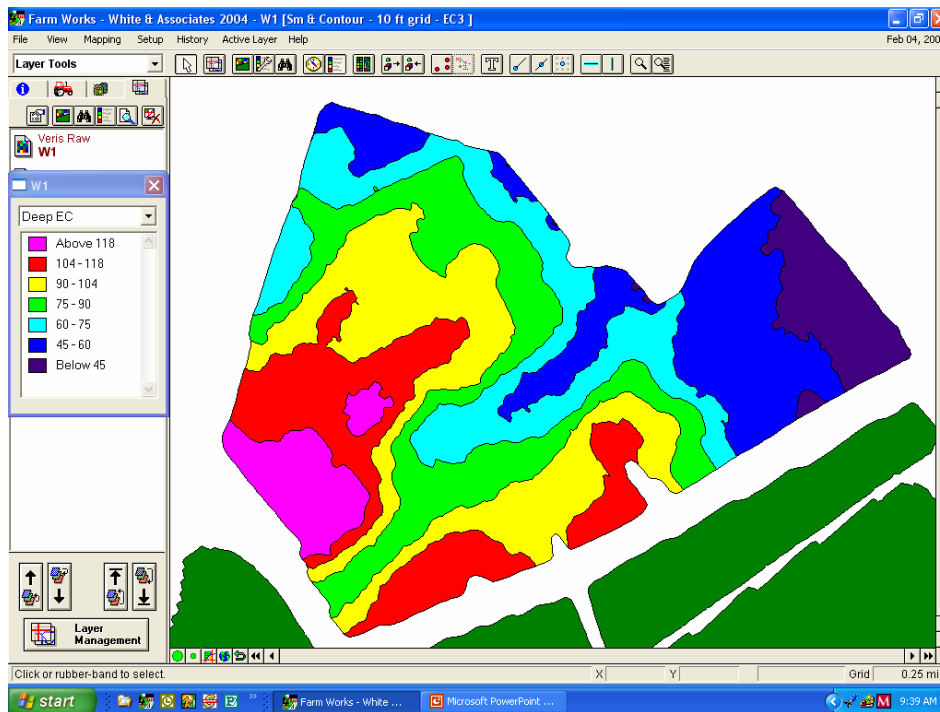
Add Shortcut

scout_W1_2004_07_08_fields_20050209_0852_17088 - 200%

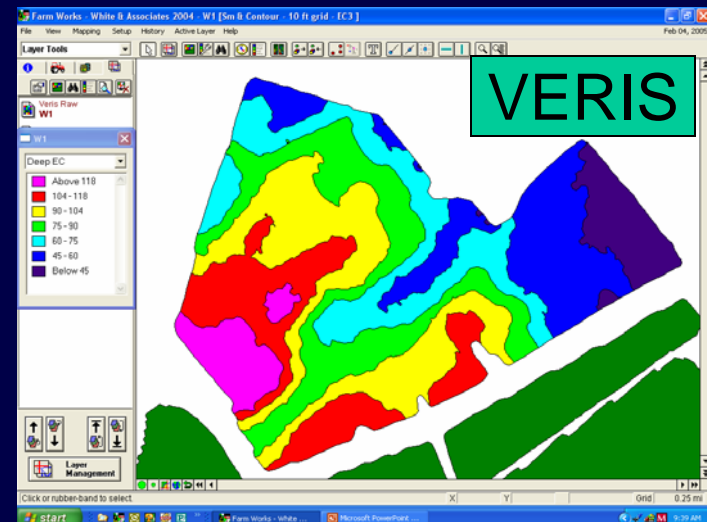
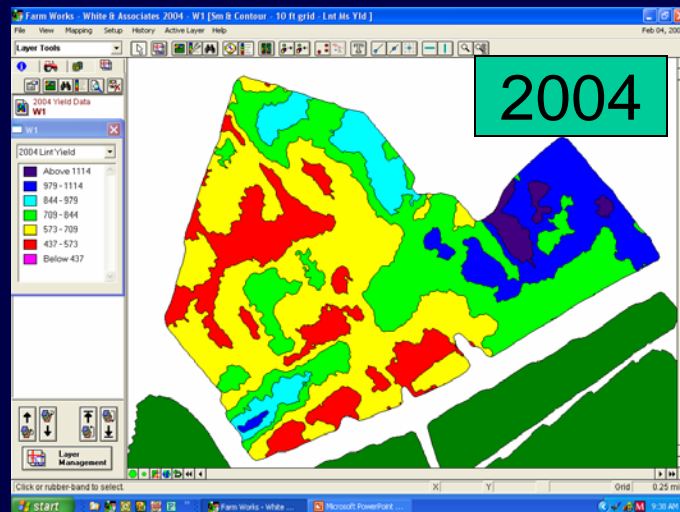
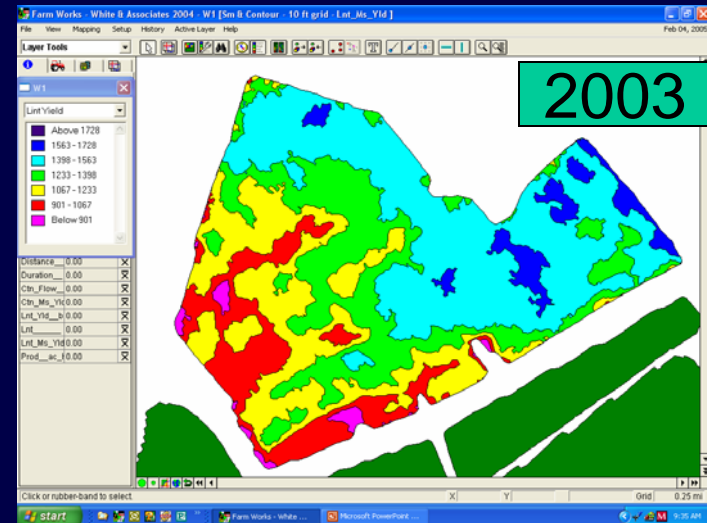
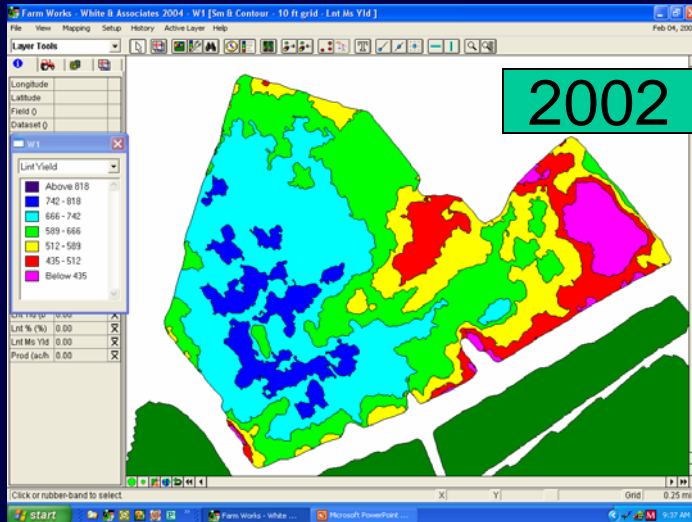
In-Time Scout Map



VERIS VS AERIAL



YIELD VS VERIS



EC DATA & AERIAL IMAGERY

EC DATA

- + Good until soil moves
- + Can measure fertility
- Not user friendly
- More expensive
- Timeliness
- Conditions must be right
- Not right for every soil

AERIAL IMAGERY

- + Actual plant growth
- + Inexpensive
- + User friendly
- Requires clear weather
- +/- Timeliness
- Must keep crops clean

COMPAQ

iPAQ

Pocket PC

IPAQ
WITH
A
RECIPE

Farm Site Mate 2:36

Map Data Configure

Q

Setup

Stop

RX

Applied

VRA



No GPS data received

File Tank Log

IPAQ CONNECTED TO SPRAY CONTROLLER



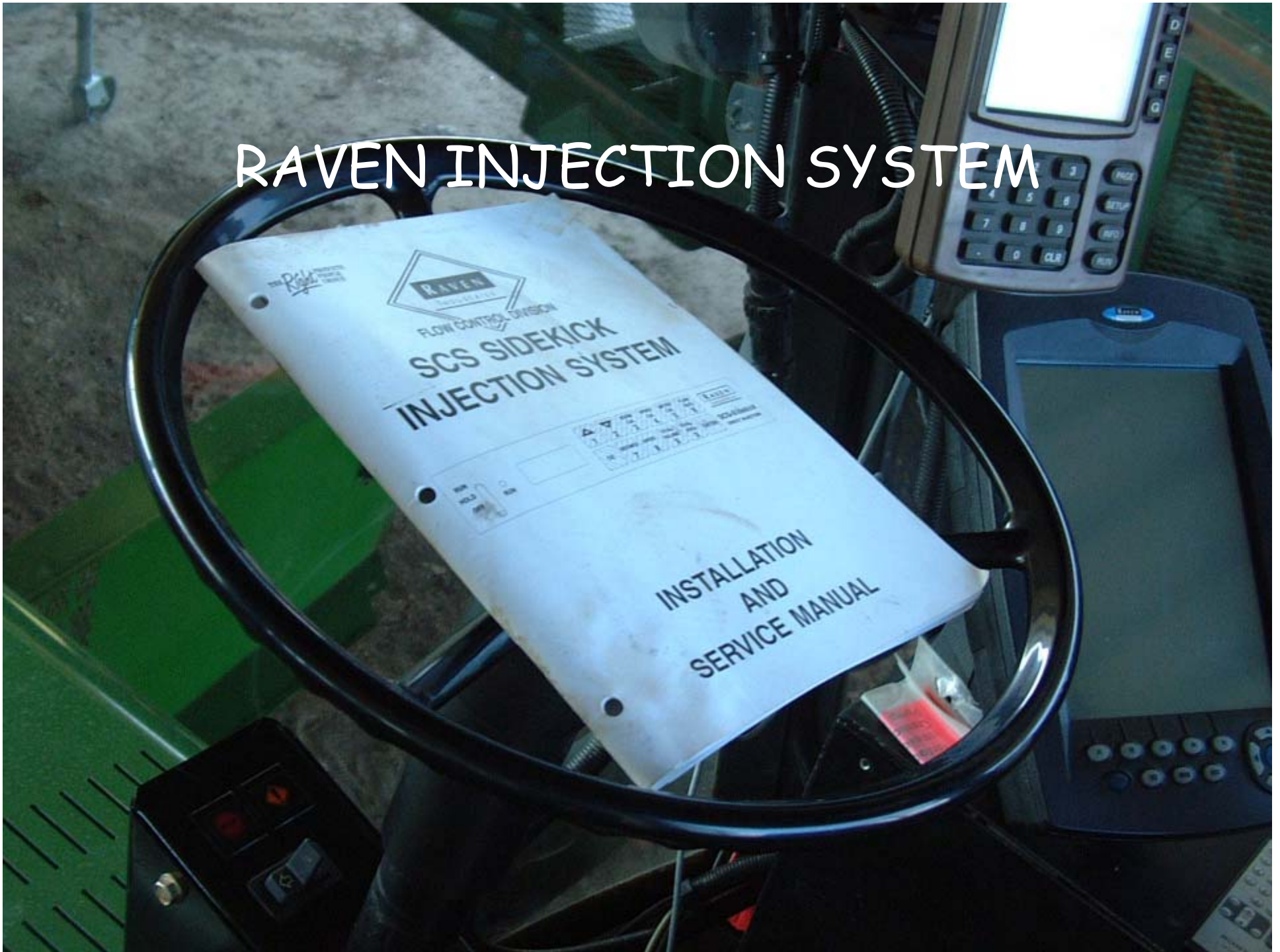
SPRAY CONTROLLER VALVE



RAVEN INJECTION SYSTEM

RAVEN
FLOW CONTROL DIVISION
**SCS SIDEKICK
INJECTION SYSTEM**

**INSTALLATION
AND
SERVICE MANUAL**



RAVEN INJECTION SYSTEM





RAVEN INDUSTRIES
SCS-Sidekick
DIRECT INJECTION

RUN HOLD OFF	RUN	1	2	BOOM CAL 3	SPEED CAL 4	METER CAL 5	FLOW RATE 6
		CE	DISTANCE 7	SPEED 8	TOTAL VOLUME 9	TOTAL AREA 0	ENTER

RAVEN INDUSTRIES

O
A
B
C
D
E
F
G

1	2	3	PAGE
4	5	6	SETUP
7	8	9	INFO
.	0	CLR	RUN

RAVEN

RAVEN VIPER WITH PRESCRIPTION



RECIPE

Controls OFF

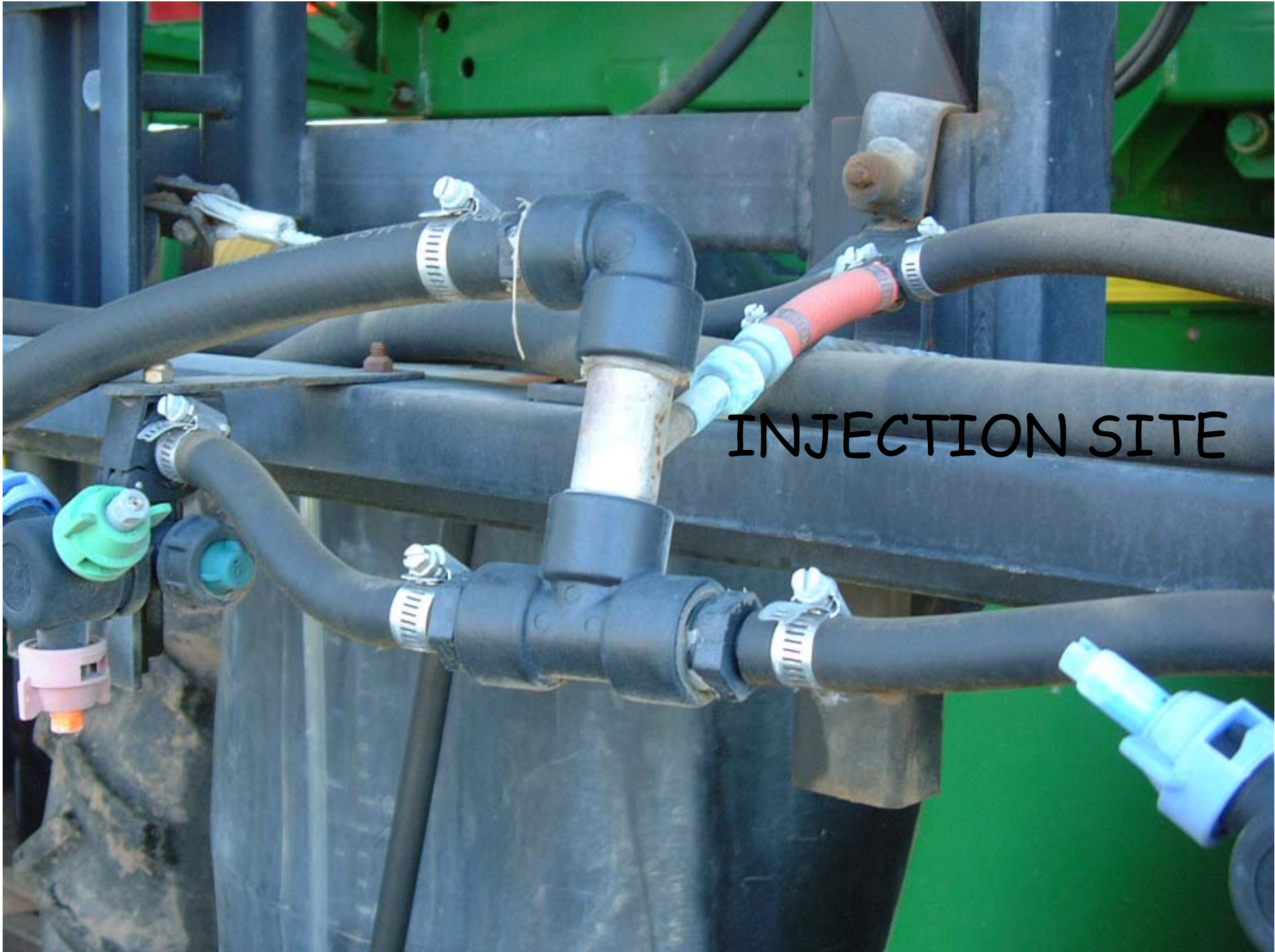
Record ON

WAYPT1	WA
WAYPT2	WA

INJECTION TANK







INJECTION SITE

COMMERCIAL VR GROUND APPLICATOR



VR APPLICATORS

- Two aerial applicators with VR equipment
- 3 - 6 ground applicators with VR equipment - only two have dry material capabilities
- Three farmers with complete VR equipment
- Numerous farmers with VR spray controllers, some with GPS, few with both
- Will have 20+ fully equipped by 2007

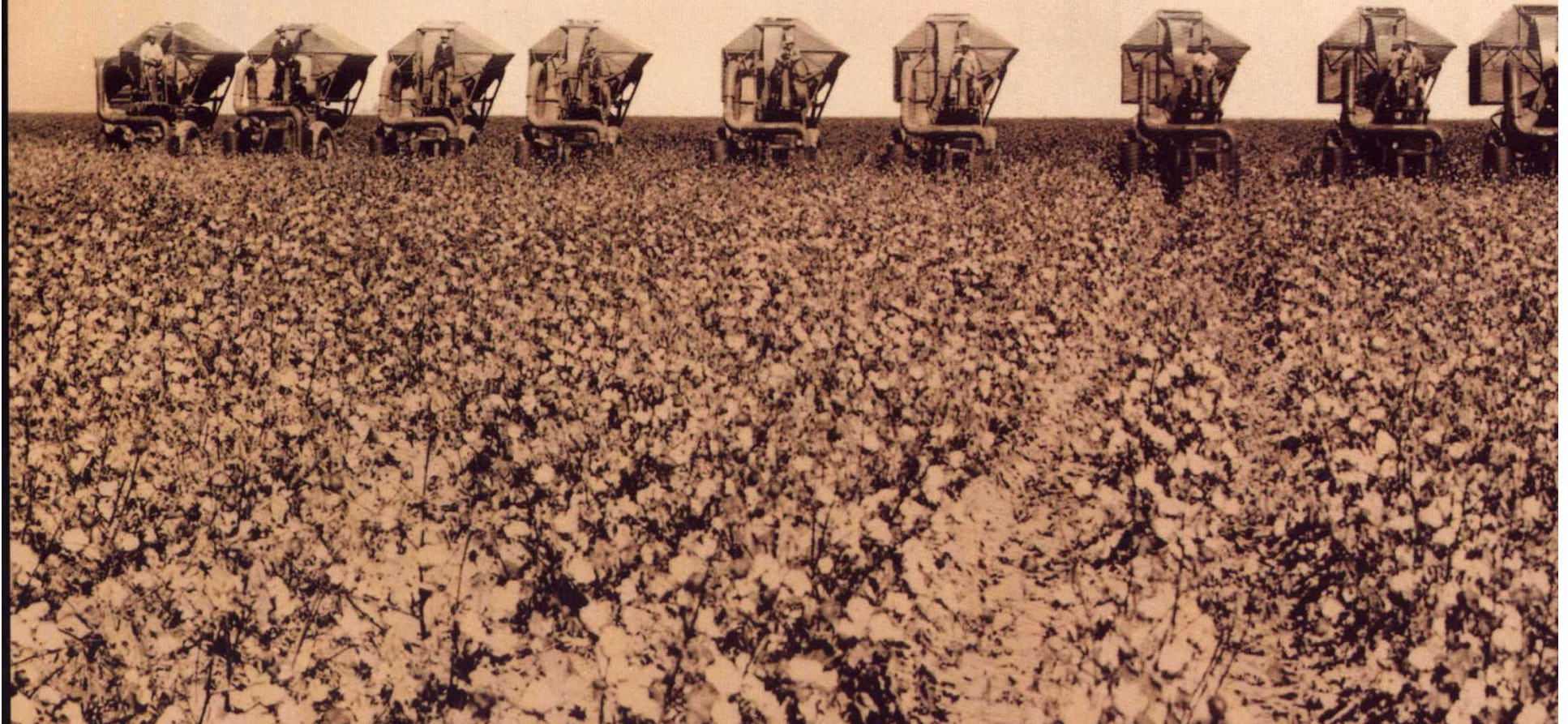
2007

- RTK compatible equipment
- RTK remotes & towers
- 5,000 acres committed for EC data & sampling

FROM THE OLD



TO THE NEW



FEEES

- Veris - \$5/acre/year x 2
- Prescriptions - \$0.50 - \$1.50/acre
- Zone Sampling including analysis - \$2.00 - \$4.00/acre
- Mapping - \$0.00 - \$1.00/acre
- Equipment Instruction - \$50 - \$200 /hr

SITE SPECIFIC MANAGEMENT

- **7,320,000 SITES ON GOOGLE**
- **MANY UNIVERSITY SITES**
- **www.ppi-far.org/ssmg**

PA, PF, SSM

- **BEGIN TODAY**
- **DON'T GET BOGGED DOWN IN DEFINITIONS**
- **KEEP IT SIMPLE**
- **WORK IT EVERY DAY**

PA,PF,SSM

- **OUTSOURCE – YOU CAN'T DO IT ALL**
- **WORK WITH FRIENDS, PARTNERS, GROUPS**
- **REVENUE-EARNING VALUE-ADDED SERVICES**

PA,PF,SSM

- **MAY REDUCE INPUTS/ACRE**
- **MAY ENHANCE YIELDS**
- **MAY IMPROVE COTTON QUALITY**
- **WILL ALLOW PRODUCERS TO PUT CERTAIN RATES ON CERTAIN AREAS**
- **SHOULD RETURN MANY TIMES OVER INVESTMENT**

PA,PF,SSM

**UTILIZING VERIS DATA, WE REDUCED
NITROGEN USE BY \$6.25/AC, AND
REDUCED PIX USAGE BY \$7.50/AC**

**UTILIZING IN-TIME IMAGERY, WE
REDUCED DEFOLIANT COST BY
\$7.24/AC**

EVERYONE IS WATCHING



INCLUDING THE SHARKS



© KURT JONES 2003

DON'T LOCK AWAY A PROFIT



LOTS OF WARM & FUZZY FOLKS
WILLING TO HELP



© Alan & Sandy Daway



BUT PERHAPS ONLY A LIMITED AMOUNT
OF GOVERNMENT BONE TO CHEW ON

ROGER'S AXIOMS

- **EXPENSIVE EQUIPMENT WILL NOT MAKE UP FOR LACK OF TALENT OR PRACTICE.**
- **IGNORANCE IS EXPENSIVE.**
- **CONSULTANTS AND DEALERS - RISK YOUR MONEY, NOT YOUR CLIENTS' MONEY.**

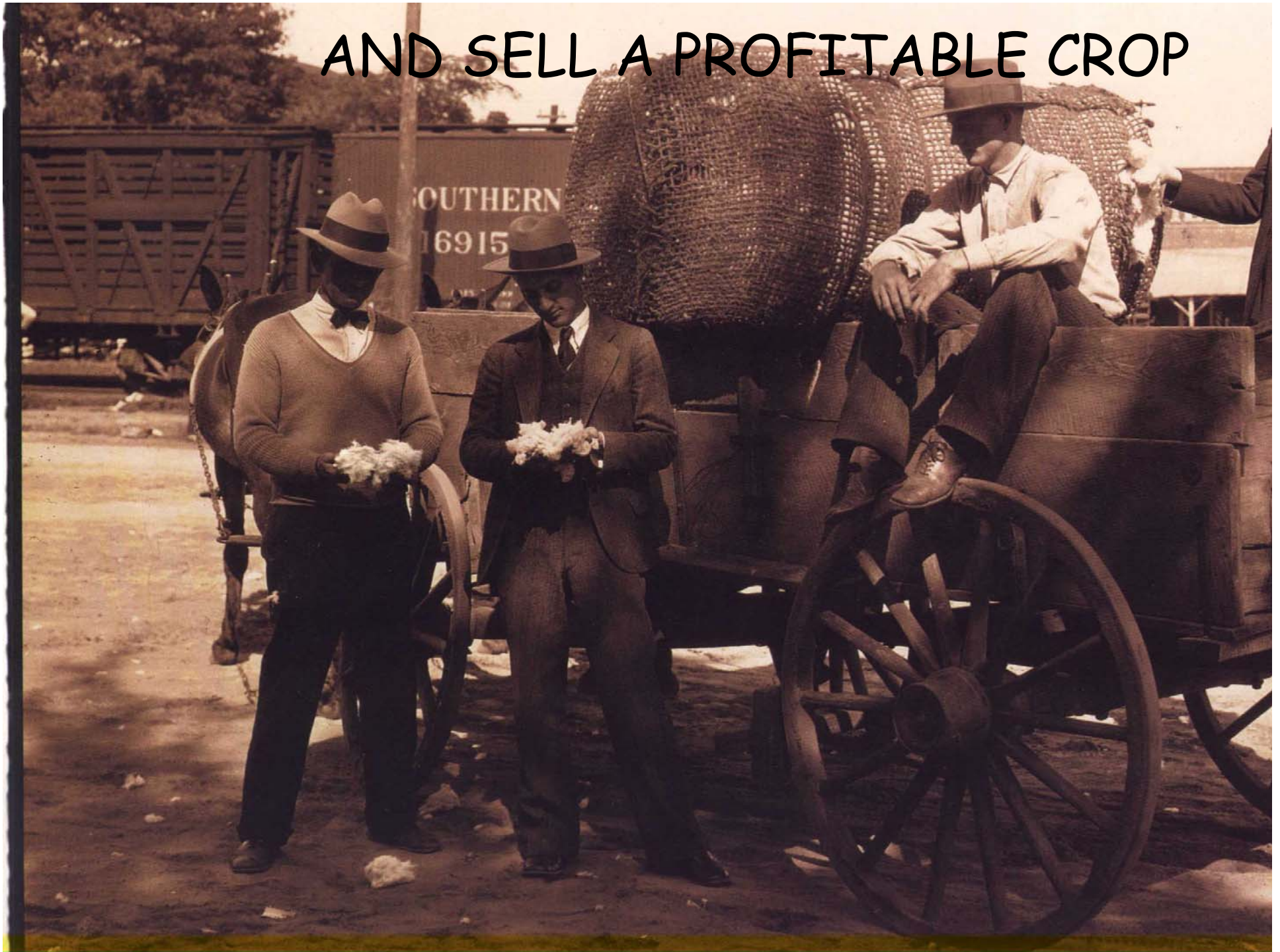
HELP FARMERS PICK





GIN

AND SELL A PROFITABLE CROP



ATTILAIISMS

PROBLEMS AND SOLUTIONS

- > Huns should be taught to focus on opportunities rather than on problems.
- > Some Huns have solutions for which there are no problems.

Leadership Secrets of Attila the Hun
Dr. Wess Roberts

PRECISION AG DOES NOT SOLVE
ALL OF OUR PROBLEMS



FOUR SEASONS OF LOUISIANA

NORTH LOUISIANA

DOVE

DUCK

DEER

TURKEY

SOUTH LOUISIANA

CRAB

CRAWFISH

SHRIMP

OYSTER

ATVs CAN BE USED FOR MORE THAN
JUST HUNTING





And with prices going up we must make
or save a \$ wherever we can



Would you like
some cheese
to go with
that whine????



DON'T GET LOST IN THE CROWD

CONSULTING

If you are not a part of the solution,
there is good money to be made in
prolonging the problem.



You've got to know your priorities

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