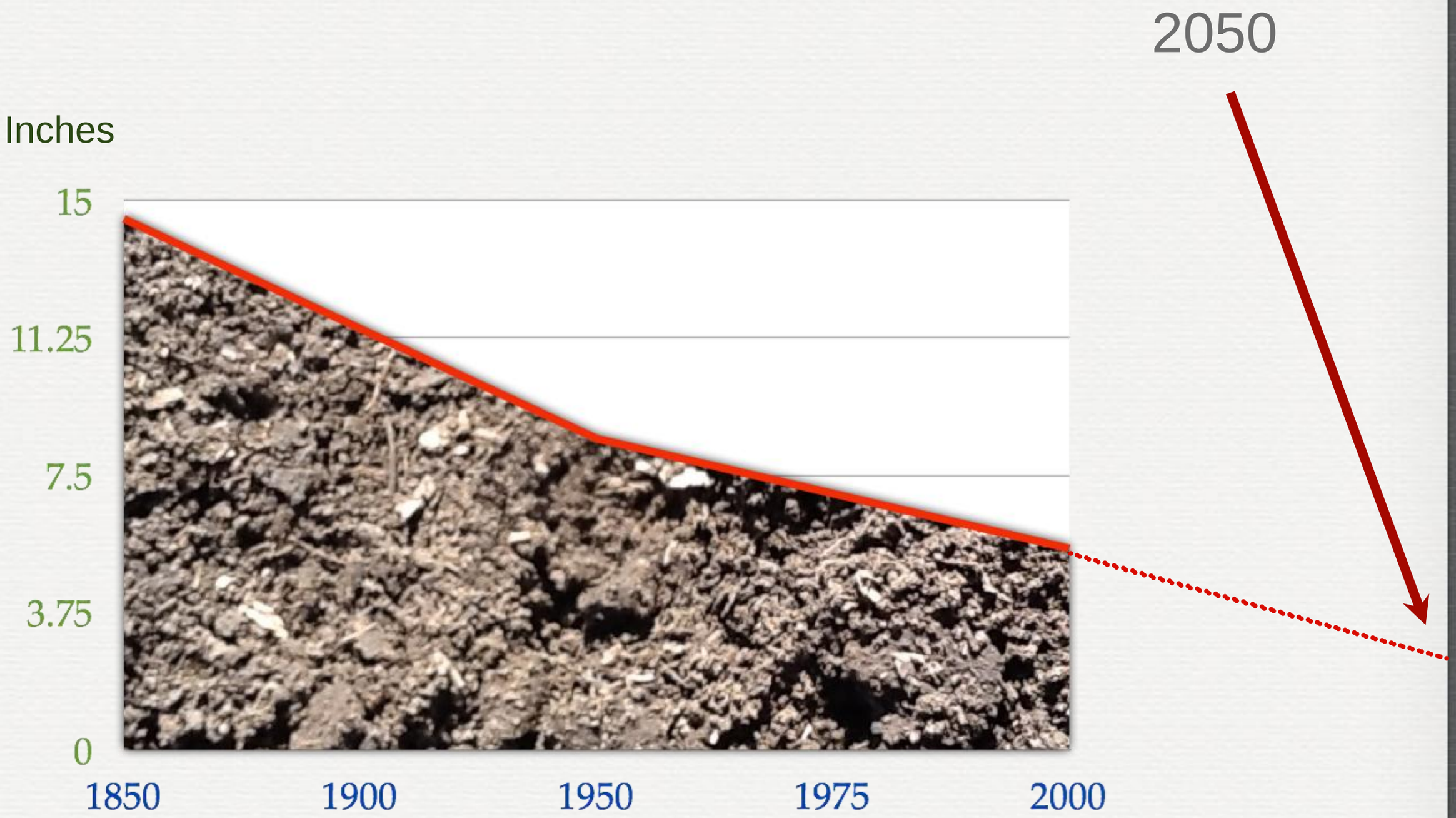
Chris Teachout


14"
To see rich land eaten
continual cultivation
best soil, is enough to
My grandfather, watch
of the voiceless land,
process reach an acute
to take to heart the
CENTRAL
REFRIGERATED SERVICE, INC.
1850


5.5"
GARA LOAM

Top Soil Lost over Time



Woods End® Laboratories INCORPORATED

Innovative Soil Biology and Nutrient Testing since 1975

290 Belgrade Road
P.O. Box 297
Mount Vernon, ME 04352
207 293 2457
for more information:
lab@woodsend.org

Lab Test Version: 3.1

Soil Nutrient & Health Premium Test

For:

Chris Teachout
Teachout Harvest
1653 400 Ave
Shenandoah, IA 51601

Lab ID: 9325.0 **Acct No:** 2890

Sample: **Soil: Home West**

Sample Received: 4/8/2015
Report Date: 4/29/2015
Crop Intended: Corn-200

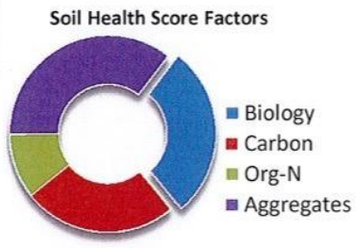
QAQC: LeB

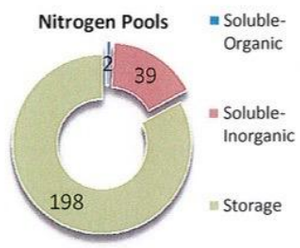
Measured Factors	Symbol	UNITS	Level Found	Rating
All Soluble N (Org-N + NO3-N + NH4-N)		ppm	41	MH
Nitrate Only	NO_3-N	ppm	39	MH
Soluble Exudate Carbon	C_{org}	C-ppm	471	M
SLAN *Humus Amino-N*	NH_2-N	N-ppm	198	M
Phosphorus (P)	P	ppm	34	M
Potassium (K)	K	ppm	194	MH
Calcium	Ca	ppm	600	L
Extr. Aluminum	Al	ppm	590	H

Soil Health Score (updated 10-15-2014)	17.9	MH
Soluble C:N Ratio	11.5	ML
Solvita CO_2-Burst	52.3	M
Microbially Active Carbon- "MAC"	11%	L
Soil Wettability & CO_2 Moisture g g^{-1}	Fast 0.48	H
Aggregate Stability	66%	H

Calculated Availability

Nitrogen (N-min+Avail)	lb/a	143	H
likelihood of N-response?	*probability:*	Moderately unlikely	
Phosphorus P_2O_5	lb/a	155	M
Potassium K_2O	lb/a	466	MH





Indicators

Potential acidity (Fe+Al)	ppm	969	H
P-Acid-Saturation Index	P/(Al + Fe)	3.5	OK
Calcium Saturation	Ca/(Fe+Al)	62%	L

Nutrient Calculations, Value as $/acre available

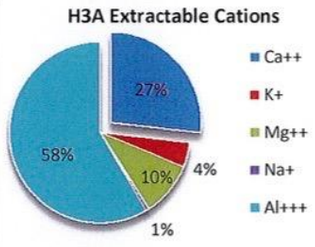
$N + P_2O_5 + K_2O$ / acre $ 334

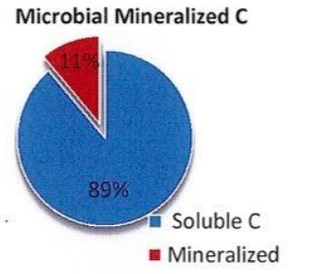
Nutrient Requirements		Nitrogen	Phosphate	Potash
Corn-200	lbs/acre	57	None	none
(assumed total nutrient requirement)		200	100	150
Limestone Requirement	lbs/acre	4327	Check Magnesium	

Cover Crop Recommendations

>Based on Soil Health Score of: **17.9**

Mix Recommended: 10% Legume 90% Grass/Non-Legume





Optional Tests (included with Premiun Soil Test)

Soil Organic Matter	LOI %	5.6	MH
Basal CO_2-C	ppm	18	MH
Effective CEC**	cmol/kg	11.2	-

pH in Water	5.48	L
Magnesium (lb/a)	264	OK
Sodium lb/a	28	OK

USDA Climate Zone Used for this report: 5b

Ratings: VL=Very Low, L=Low, M=Moderate, MH=Medium High, H=High, VH=Very High

* **H3A ARS-Haney Extract** ***Effective CEC = H3A extracted. Al+Ca+Mg+K+Na; optional SOM by LOI @360° C**

Methods: Soil Health Tool, USDA-ARS Temple TX; *Soil Test Procedures for the NE USA Bulletin #493; VT Aluminum Index*

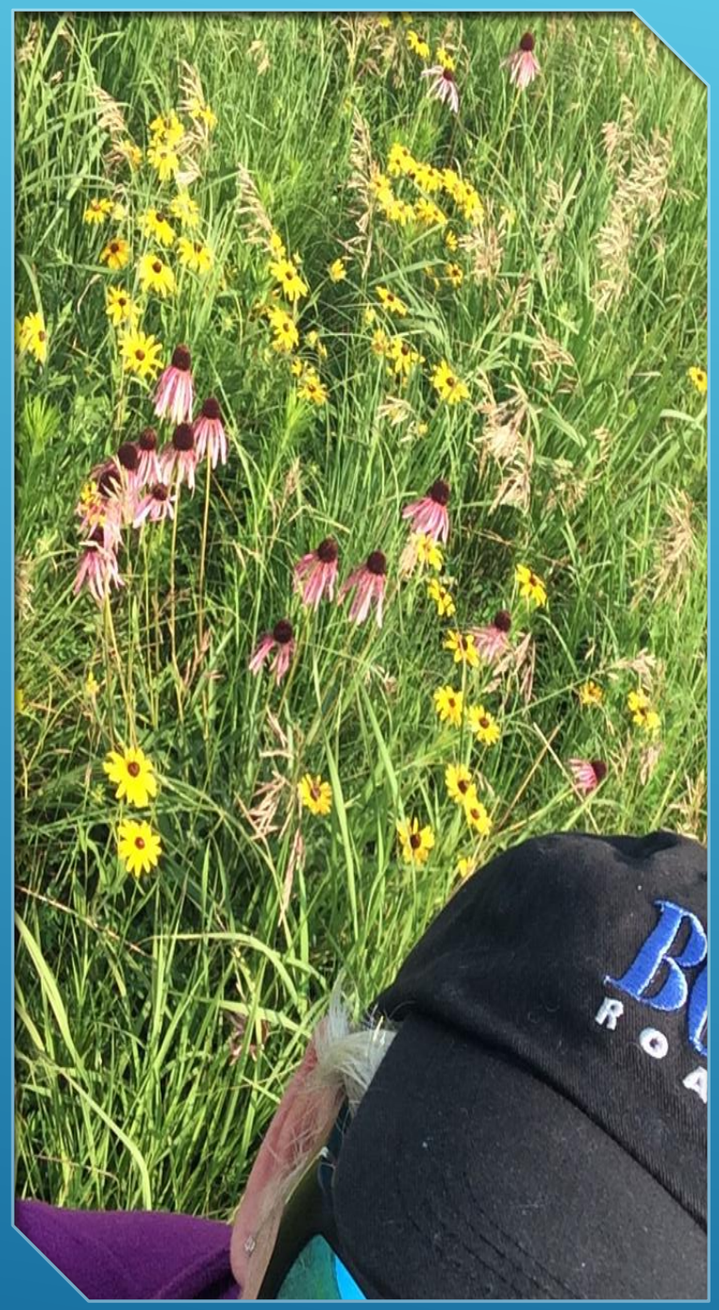
RIVER STORIES IN THE RACCOON RIVER WATERSHED

Prairie Skye Productions

Chris.Henning.50059@gmail.com

Cooper, Greene County, Iowa

515.370.2436



A PRAIRIE SELFIE …

Conservation and Cover Crops on a (sometimes) conventional farm

Crop Sharing, bio-diversity, wildlife habitat, food production, alternative crops and (if I have to) CORN and SOYBEANS …

Farming as a lifestyle and a legacy

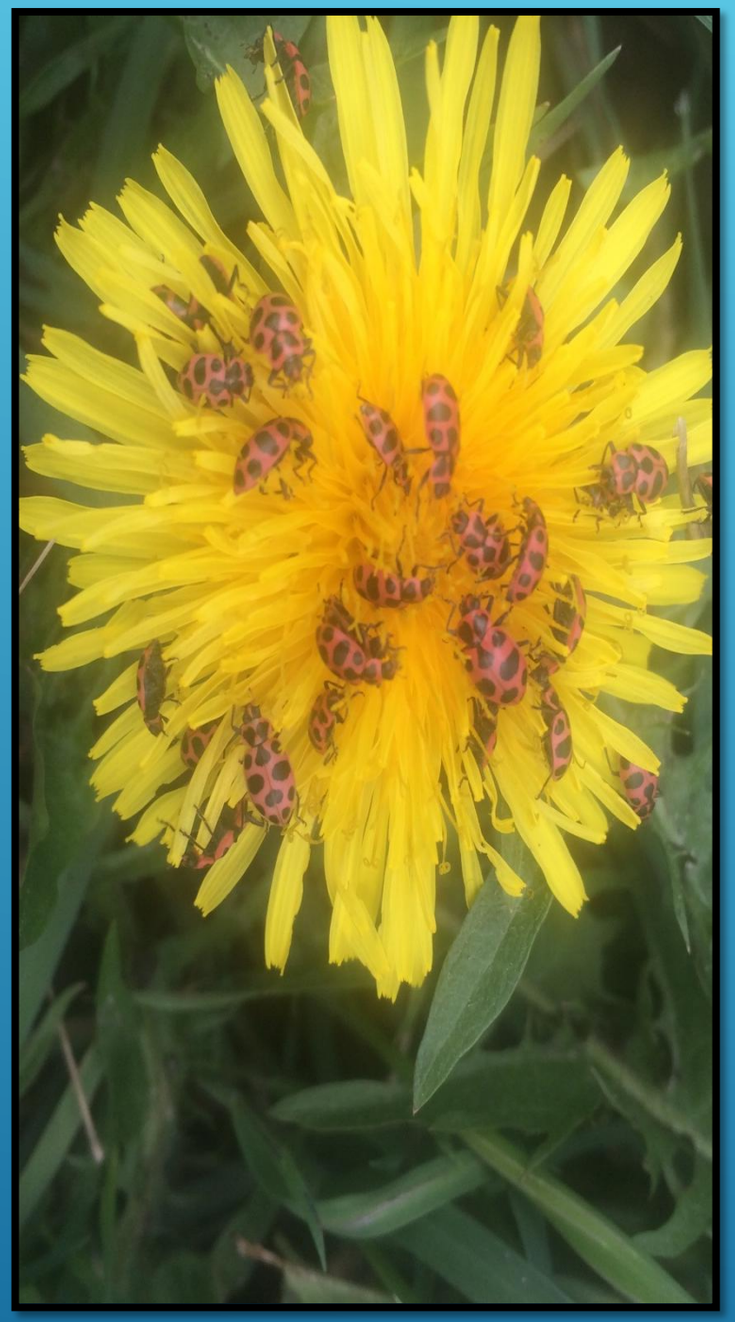
- In the years since 1992 when I moved “back home” from Des Moines to this farm and then the100-year “Flood of 1993”, I've noted our inter-dependence and how our individual actions affect our land, our neighbors near and far, and our world, in ways we don't even realize. The passage of time documented in pictures became a diary of life under the Prairie Skyes.
- "The farm” is a mile from the Raccoon River valley northeast of Cooper in Greene County. It’s a scant 3 days from Des Moines by river water flow (only an hour by car) and nearly in the center of the 28,000 acres of the Raccoon River Watershed.

WATER, WIND, SKYES AND PERSONAL CONNECTIONS

RAINBOWS AND BLUEBIRDS MORNING

A morning skye after a shower, graced by an unexpected rainbow and the nest box's new resident, an Eastern Bluebird and his mate. The bluebirds love the white clover and prairie twigs and often sun themselves on a snag branch just outside the living room window.

Changing our farming habits, putting out nesting boxes and keeping watch on the chemicals we use - efforts that are rewarded in simple beauty.



LADYBUGS AND DANDELIONS

The elusive native pollinators and spring's first food – a riot of yellow dandelions in the yard, and the "townie" in me despairs until ….

Hundreds of the blooms swarming with ladybugs are a surefire sign that health is returning to my no-chemical lawn. Quite a change in me to actually welcome the dandelions!

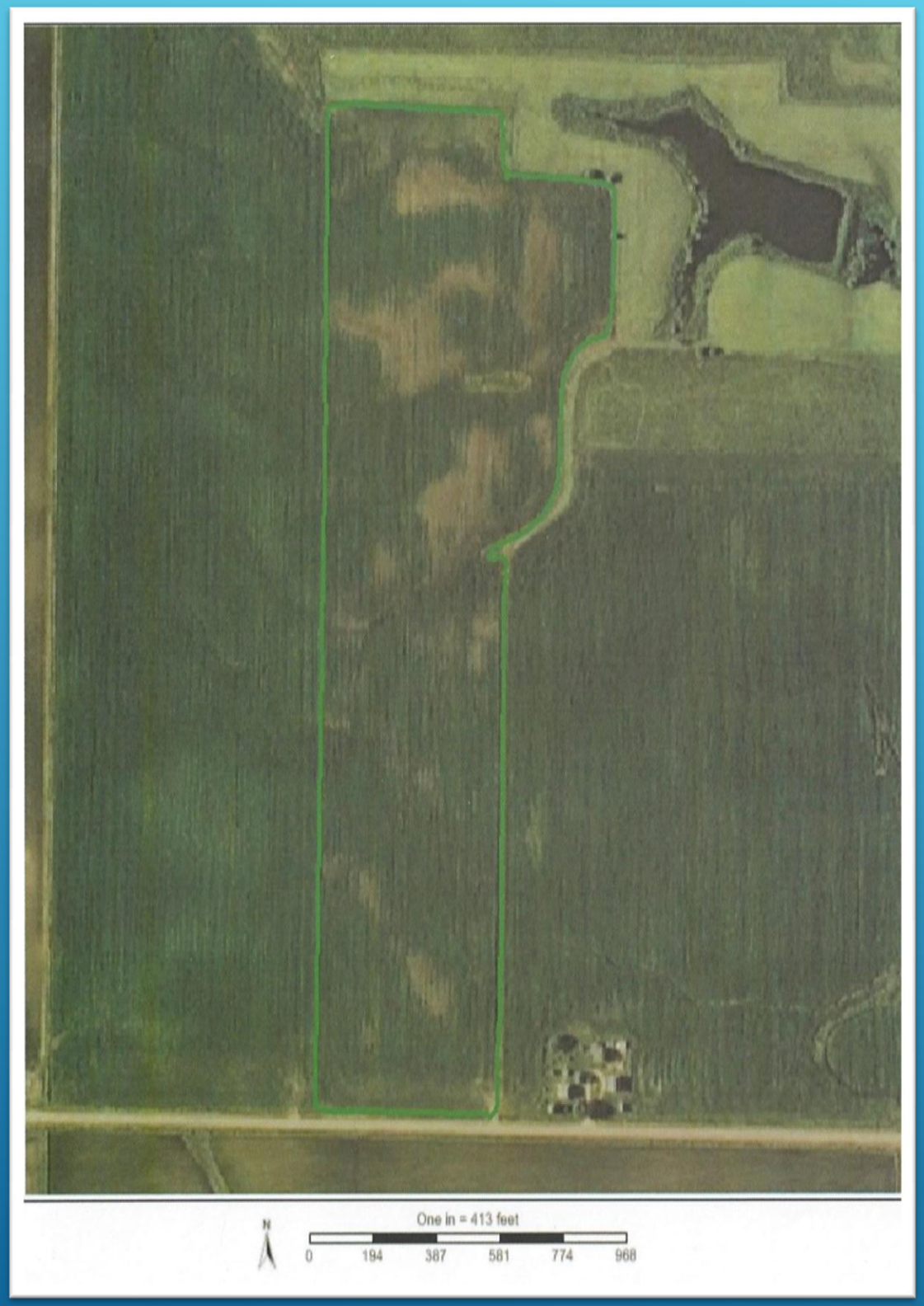
THE ORIGINAL PRAIRIE SKYES

Acquired in 1992, 145 rolling acres with all but the19 acres of timber land and creeks in production. The BEST crop was cockleburs!! Corn yields barely topped 100 bushels an acre; the bean yields in the low 30's.

Erosion had cut gullies deep enough to lose the John Deere 4230; side-hill seeps and wetlands grew snake grass and weeds. The flood of 1993 ripped big chunks out of creek banks and carried topsoil from the neighboring fields downstream to the Raccoon River.

FOUR CREEKS CUT GULLIES THAT DEEPEN WITH EVERY PASSING YEAR

The first tile was dug in by hand in 1915. Assuming a depth of 6 feet gives us an estimate how much soil has been lost in 102 years. The creek bottoms are littered with these 16" clay tiles on the silty sand layer of creeks that flow through this quarter-section. Snowmelt, runoff from the neighbors' fields, and plentiful rain keep them running year-round. Prairie buffer strips along the creek banks act like sponges, slow the waters and capture the soil and chemical particles. Ever so slowly, prairies help mend the erosion.

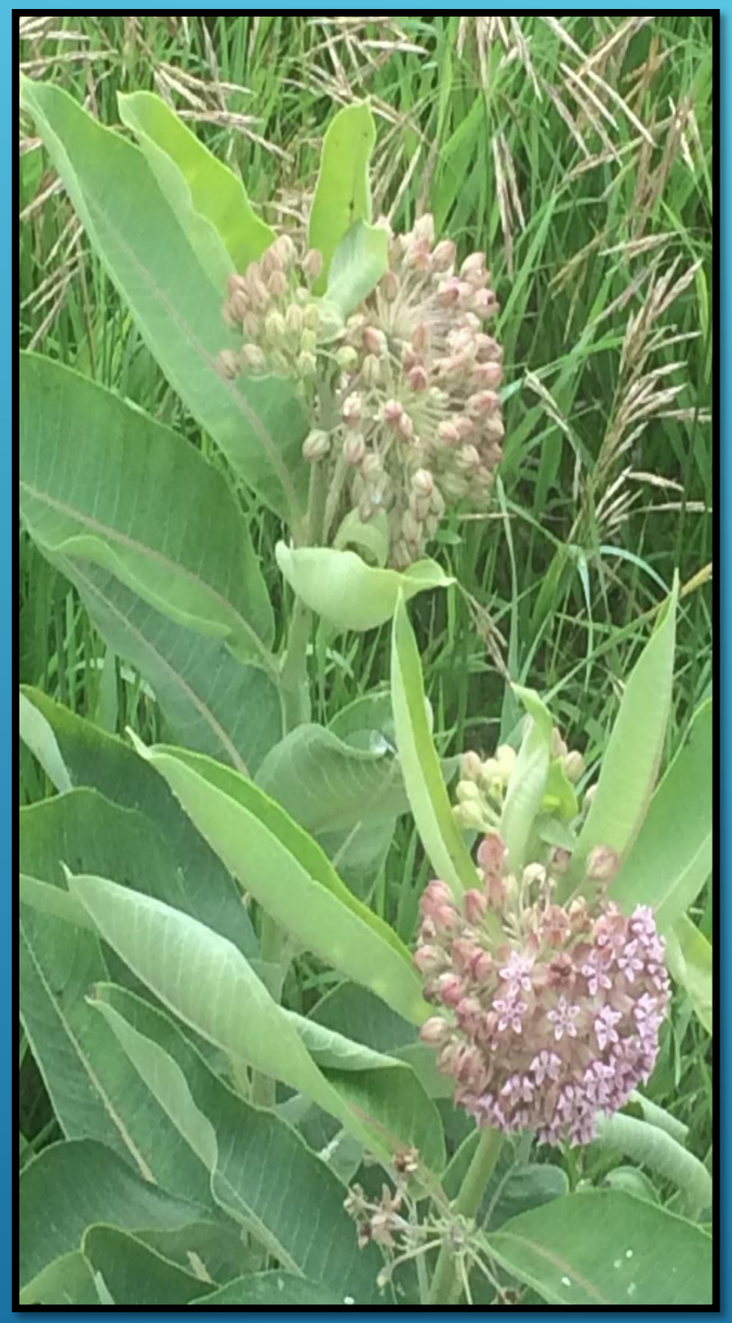


THE POND FARM

33.81 Acres in corn and bean rotation since 2010, 16 acre pond surrounded with prairie and clover hay, with a 6 acre CRP Wildlife Habitat on the land north and south of the pond.

Cover crops since 2011, organic matter now averages 3.6 with a low of 2.3 and a high of 4.9. 2015 corn yield averaged 185/bu/acre. 2016 non-GMO bean yield disappointing - below average .

Very little weed pressure, although foxtail continues to be annoying.

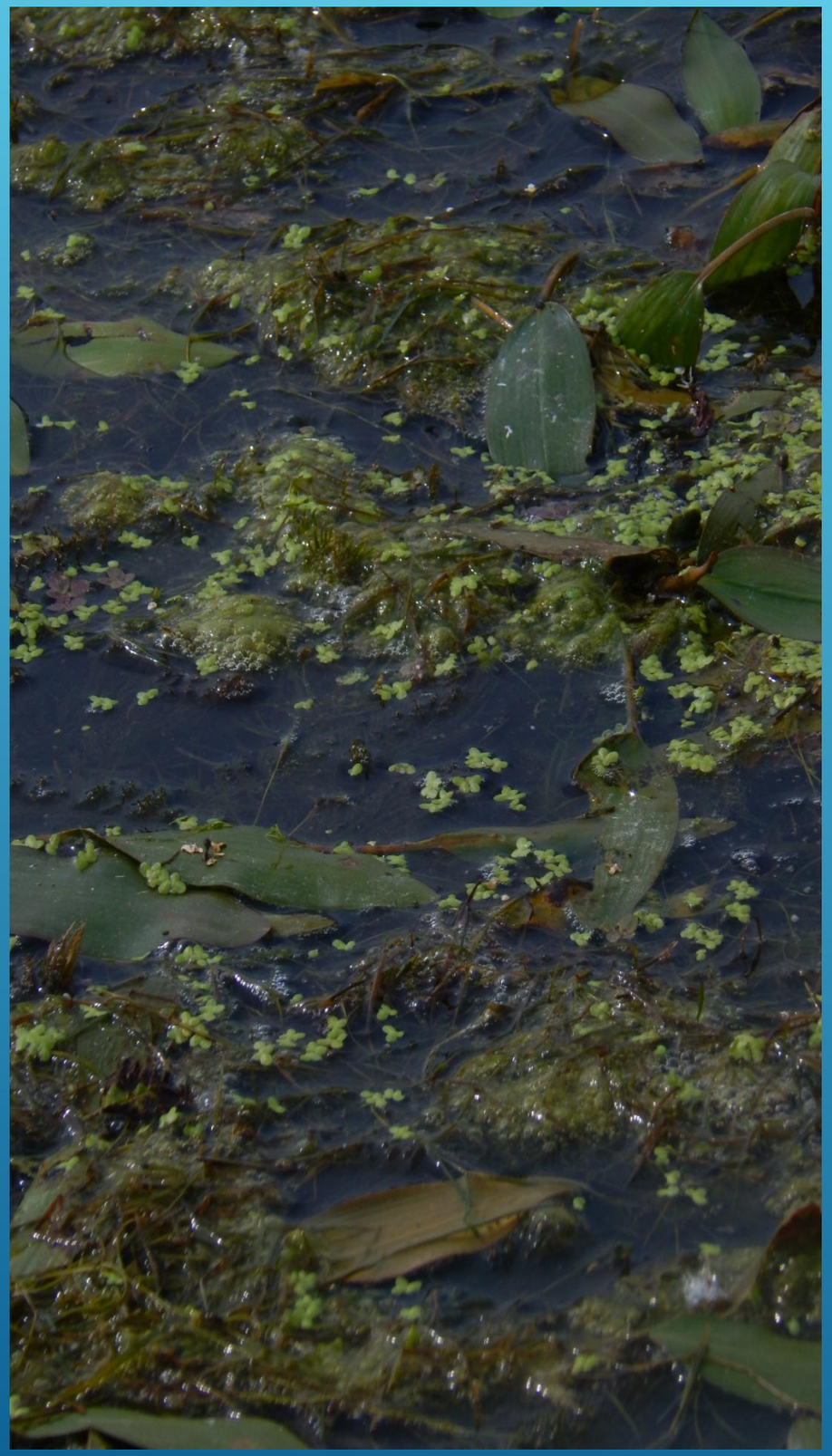


WALKING BEANS AND MONARCH MILKWEEDS

Perfumed blooms bring the Monarchs in. Each female lays one egg on one plant, then flies off in search for another plant and lays another egg. The process is repeated over and over. With any luck, several females will visit this luscious Common Milkweed, the only food known to sustain Monarch larvae that will build a cocoon here when she's full to bursting.

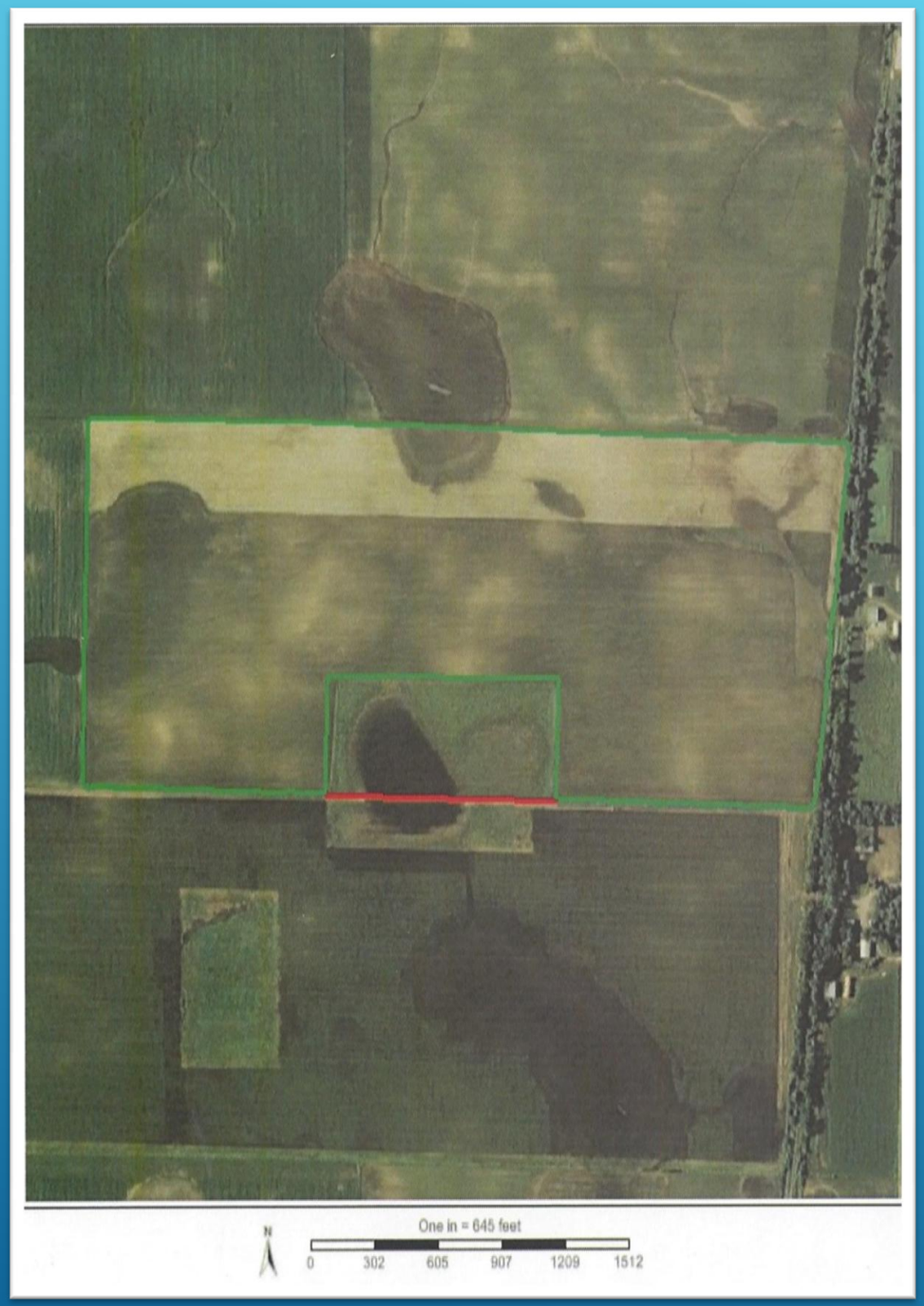
As youngsters, we pulled milkweed plants as weeds and threw them down. Today we spray Round-Up to kill them and a thousand other "weeds".

How many Monarchs perish in our need for the cleanest bean field and fence row to fence row monocultures of corn and beans?



THE FARM POND TELLS ITS OWN STORY

Still plenty of work to do on water quality



BULLHEAD FARM

With 118 rolling acres on the west side and an 8 acre building site on the east of the Raccoon River Valley bike trail that stretches from Jefferson to Des Moines, the Bullhead Farm got its name from the tiling done to drain the lake and build the railroad. The story is that the bullhead fish lay gasping everywhere as the lake waters drained away.

SEPTEMBER 1, 2015 - FLYBOYS READY TO GO

A bushel and a half of cereal rye per acre, seed and service arranged through Iowa Cover Crop – entrepreneurs, farmers and neighbors. $30/acre quality seed and personal service.

RIDING THE COMBINE - HARVEST, ANNUAL REVIEW & GAB FEST

2016 corn yields on Bullhead Farm were amazing! 217 bushels average over 98 acres!
The Pond Farm & Prairie Skye didn't fare quite as well with non-GMO bean yields just over forty bushels and acre.
Cover Crops flown on mid September were evident in all fields.

PROGRESS

The Combine Ride Observation AND Soil Test Results show improvement

2010 – First crops observed and tested

2011 – 10 acre Wetland established

2011 – First cover crops on this farm

2012 – 96 acres, 173 bu/A – corn yields

2013 – Beans 66 acres, alfalfa established on 30

2014 – 66 acres, 187 bu/A – corn yields

2015 – Beans 66 acres, alfalfa on 30

major improvement to tiling under the trail

2016 – Corn on all 96 acres, 217 bu/A

COVER CROP SUCCESSES ~

More organic matter by actual soil test measures ~ increased yields ~ increased habitat and wildlife sightings ~ less runoff and less erosion ~ fewer wet spots ~ AND THE FARMER IS PLANNING ON PLANTING 160 acres on his own land!

PRAIRIE ICONS, THE WALNUTS STAND IN THE SUNSET AS SILENT TESTAMENT TO CHILDHOOD MEMORIES OF LONG AGO NEIGHBORS

DENIZENS OF THE PRAIRIE SEEM TO ASK "WHAT ARE YOU DOING HERE?"

SKYES AMAZE AND DELIGHT MY PSYCHE

An east facing picture window showcases morning sunrise in technicolor splendor – I was more interested in re-habbing an 1874 house than managing the farm … yet, here I am, 25 years later, still on vacation, right here at home!

WHERE COVER CROPS, PRAIRIE GRASS AND PRAIRIE SKYES MEET …
IS THIS HEAVEN?

SUNSETS GLOW WITH THE PROMISE OF ANOTHER SEASON WHEN JANUARY SNOWFALLS BLANKET THE FIELDS

HEADED HOME

Farming Philosophy and Photos by

Chris Henning

Prairie Skye Productions

Chris.Henning.50059@gmail.com

Cooper, Greene County, Iowa

515.370.2436

THANKS PFI

For all the support over the years!

Special gratitude to Sarah Carlson and Teresa Opheim for their expertise and encouragement.

The sign says it all!

Proud to be a member of Practical Farmers of Iowa!