

Ann

**Roger Patterson**

**From:** Steve Chick [steve.chick@ne.usda.gov]  
**Sent:** Friday, September 12, 2003 10:28 AM  
**To:** 'fridaymessage2@ne.usda.gov'  
**Subject:** FW: Friday Message

Agree?

September 12, 2003

-----Original Message-----

**From:** Steve Chick  
**Sent:** Friday, September 12, 2003 10:27 AM  
**To:** 'fridaymessage1@ne.usda.gov'  
**Subject:** Friday Message September 12, 2003

To: All Employees & Conservation Partners

There is a lot to report on as we approach the end of the fiscal year. There has probably never been a busier end to a fiscal year then what our employees are facing right now. Below are the items you might find of interest this week.

1. EQIP Will Have A Significant Impact Water Conservation In The Republican River Basin
2. Impact of Trees Along The Republican River
3. Paul Jasa - A No-Till Genius
4. Soil Quality Aspects Of No-Till Should Sell Itself
5. Buck and Duck Watershed Project Takes A Big Step Forward
6. USDA Announces Draft National Framework For Animal Agricultural Conservation
7. Farming Beyond the Farm Bill: Opportunities for Enhancing Profitability Hosted by Congressman Tom Osborne
8. Karen Ott's Weekly Update

1. EQIP Will Have A Significant Impact Water Conservation In The Republican River Basin

The Ground and Surface Water Program component of EQIP in the Republican River Basin for just the current fiscal year will result in tremendous water conservation. 110 new Ground and Surface Water Program contracts are being finalized. 28 of those contracts include a commitment to convert from irrigated to dryland cropland on 794 acres resulting in potential water conservation of 2747 acre-feet annually. System improvements will include 59 new center pivots on 6347 acres, 7 subsurface drip systems on 356 acres, 12 surge valve systems on 1285 acres and 79 existing high pressure pivot systems converted to low pressure on 10,398 acres. The potential water conservation associated with these system improvements is 20,032 acre-feet per year. So, the total potential water conservation benefits of EQIP in contracts approved in FY03 for the Republican River Basin will be 22,779 acre-feet per year. That is significant.

3 days ago

I don't buy this. Looks like only the 794 acres going to dryland will result in no water use.

2. Impact of Trees Along The Republican River - It is common knowledge that few trees existed along the Republican River corridor before man's influence on the river system. I have long suspected that trees are another significant component of the water shortages in the Republican Basin. Recently I received a copy of a thesis paper written by Michaela Johnson in 2001. The title of the paper is "Historical Change In Woody Riparian Vegetation In The Republican River Basin And Impact On Evapotranspiration."

In that study Ms. Johnson determined that the average woody vegetation increase by 1,153% from the predevelopment period of 1937-1938 to development period of 1993-1998.

That tremendous increase in woody vegetation results in a significant increase in evapotranspiration of the trees utilizing groundwater. As I have said many times I am not encouraging clearing of the riparian tree corridor, but my background in forestry and wildlife management tells me that a better managed timber would result in fewer trees of higher timber quality, improved wildlife habitat, less water used and the potential economic gain of another industry. I am excited that the Southwest Nebraska RC&D Council is looking at timber management as an alternative agricultural income source that could result in improved wildlife habitat and less water use by the resource.

3. Paul Jasa - A No-Till Genius - This week I had the pleasure of attending a soil quality field day on the UNL Roger's Farm 10 miles east of Lincoln. The farm is operated as a research and demonstration farm by the UNL Department of Biological Systems Engineering cooperating with many other University departments and USDA agencies. Cooperative Extension Engineer Paul Jasa leads the no-till and conservation research on the farm. Paul is well known in Nebraska as the leading authority in Nebraska on no-till planting equipment and tillage systems.

Paul received both his B.S. and M.S. degrees in Agricultural Engineering from the University of Nebraska. He has been working tillage systems and planting equipment since 1978 and is renowned throughout the Midwest for his knowledge.

Nebraska and NRCS have recently entered into a cooperative agreement with Cooperative Extension for Paul Jasa and an NRCS employee (to be named) to team up to conduct no-till workshops and seminars around Nebraska. The intent of the agreement is to provide no-till educational opportunities for NRCS, Extension, NRDs, other partners, and most importantly producers, to increase the likelihood for producer success when implementing no-till. The coordination of scheduling this team should be done through NRCS State Agronomist Tim Schaaf, so we do not burden the team with that responsibility. Tim is also the NRCS contact for specific no-till related questions. He can be reached at the York NRCS office at 402-362-5700.

4. Soil Quality Aspects Of No-Till Should Sell Itself - Franklin Roosevelt said, "The nation that destroys its soil, destroys itself." There is no doubt in my mind that if alive today President Roosevelt would be promoting soil quality, soil health, no-till and carbon sequestration and probably would have Paul Jasa among his cabinet of top advisors. Below is why I say that.

Can you imagine rolling cropland fields that have not had any runoff in the past four years? It would be easy to say that is because of the drought, but we had a rain event in Lincoln last September that left cars floating in the streets, yet on the Sharpsburg sloping crop fields of the Rogers farm there was no runoff. University researchers installed flumes and catchment basins four years ago to study the runoff quantity and content from the no-till fields on the farm, but there has been one remarkable problem -- water has not run off.

Paul Jasa and his Cooperative Extension cohorts have been doing no-till continuously on much of the Rogers Farm since 1981. This has included rotations of soybeans-wheat-soybeans-grain sorghum and grain sorghum-soybeans. They also have a field where they have run continuous no-till soybeans for 12 years. The soil structure improvement in these fields has been so incredible that runoff has been a non-event. I have included four pictures from this site to document the soil quality improvements on the farm.

The first picture is of no-till guru Paul Jasa in a soil pit under one of the long term no-till plots. If you look closely you can see the root development. Actually roots could be seen all the way to the bottom of this pit. Within 10 feet of this pit Paul dug a similar pit that is under a disk tilled field plot. Very evident in that pit is the compaction of the wheel

track from tillage equipment and the roots are growing more laterally away from the compacted areas.

The second picture is really remarkable. These are two clods of soil, one taken from each pit again keep in mind these pits are only 10 feet apart. The one on the left side of the picture came from the no-till and the clod on the right side of the picture came from the disk till plot. Notice the structure and visible pores in the no-till clod and an earthworm sticking out of the clod. The disk till clod has no structure, no pores and is basically a brick of soil. We repeatedly picked up clods of soil and every time they had these same characteristics from their respective pits.

The third picture is on the same clod from the no-till pit, but it shows the structure a little better and clearly shows the earthworm.

The fourth picture shows the protective bed of wheat stubble that is controlling erosion, adsorbing rainfall, controlling weeds and building organic matter under the soybean crop. This is a remarkable bed of wheat stubble still on the surface considering it is now September.

I could go on and on here, but my best recommendation regarding no-till is that you get to one of the No-till Team's workshops once they are scheduled and see the remarkable data Paul has on the long term benefits of no-till. I want to close with a summary of the traits of a healthy soil all of which will develop with long term no-till. Consider these: abundant vertical and horizontal root development; pungent, sweet, earthy odor of the soil; soil crumbles easy; many earthworm or root channels evident; many signs of insects, worms and fungi; mellow, crumbly easy to work soil; rain soaks into soil quickly; no visible soil movement and heavy, greater than 40% ground cover. All of these soil quality traits are what carbon sequestration buyers will be paying for as that market develops, but more importantly these are the traits of a healthy soil that will assure producers the maximum productivity capacity of their soil and serve as an insurance policy during years of drought.

Franklin Roosevelt would certainly be excited to know that we have the recipe to assure that this nation will not only avoid destroying the soil, but will assure that we build the soil to its greatest capacity of production.

5. Buck and Duck Watershed Project Takes A Big Step Forward - I am very pleased to announce that the "Finding of No Significant Impact for Buck and Duck Watershed" in Nemaha County has been posted in the Federal Register for comment. This watershed project has so much potential to be a boost to the economy and quality of life for the area around Peru, Nebraska that I can hardly wait for the day when construction will begin. Our watershed planning design staff is making steady progress on this project. The Nemaha NRD and NRCS are sharing in a cooperative agreement to complete the geological investigation for this project, which will be the next big hurdle towards completion of the design.

These twin structures will have many significant benefits. The Buck Creek dam will capture runoff from 4595 acres, while the Duck Creek dam will receive drainage from 4096 acres. The significant agricultural benefit will be to improve drainage on 6000 acres of Missouri River prime farm land below the dams. Water quality will be enhanced by decreasing concentrations of phosphorus and sediment from reaching downstream waters. It is projected that sedimentation will be reduced by 76% or 20,700 tons annually. Buck Creek Dam will be designed strictly for flood control, but will still hold a 45 acre pool of water. Duck Creek Dam will be designed as a recreational structure with a 49 acre permanent pool. Fish habitat will be designed by the Nebraska Game & Parks Commission. It is projected that this recreational lake will result in nearly 10,000 public recreational visits annually.

Local officials have described to me their vision of connecting the Duck Creek recreational site via trails to the Peru State College trail system

and the dreams of one day utilizing the site for an outdoor classroom to support ecological curriculum at the college. While we are several years away from realizing these dreams it is rewarding to see another big step being made to achieve implementation of the Buck and Duck Watershed Project.

6. USDA Announces Draft National Framework For Animal Agricultural Conservation - I am pleased to announce that the national plan for livestock and manure management has been posted in the Federal Register. The plan can be referenced at [www.nrcs.usda.gov/programs/afo](http://www.nrcs.usda.gov/programs/afo). The comment period on the plan will last for 45 days and I encourage comments. There are some remarkable statistics in the first few pages of the plan that I think you will find of interest.

7. Farming Beyond the Farm Bill: Opportunities for Enhancing Profitability Hosted by Congressman Tom Osborne - On Saturday, September 20 at the University of Nebraska Kearney Student Union there will be an outstanding program on alternative AG opportunities. An impressive slate of Nebraska speakers will share their success stories on how they have implemented alternative or additional strategies for income on AG land beyond traditional avenues. Topics include perch cooperatives, fee hunting, garlic production, vineyards, bison production and many others. No preregistration is necessary and attendance is free. For more information contact Congressman Osborne's Rural Economic Development Coordinator Lori Ferguson at 308-381-5555.

8. Karen Ott's Weekly Update - Karen shares how farm families in the Panhandle of Nebraska are potentially impacted by decisions made in WTO kinds of discussions. She also shares the dilemma of the dark side of high cattle prices.

"Today dawned partly cloudy, but as I gazed skyward; far beyond the clouds I saw black smoke billowing against a clear blue sky. I suppose it is the same for most Americans: no matter the weather, no matter the place, no matter the year, on September 11th we will always wake up in New York City.

We are trading in the long days of irrigation for the long hours of harvest. The boys began chopping corn silage Monday noon and Dale started planting winter wheat yesterday. We will start cutting our beans in the next few days. I don't know how soybeans are harvested but dry edible beans are cut, thrown into a windrow, left to dry for a few days, rodded, and then combined. The cutting can only be done when the plants are damp so it is done at nighttime and during early morning hours after heavy dew. The crop is quite vulnerable to wind, rain and hail during the drying phase. Wind can roll the straight rows into piles, fracturing the pods in the process, dumping the drying beans onto the ground, and making the zigg-zaggy rows almost impossible to combine. Countless hours are spent by farmers in the panhandle walking the fields, forking wind-tossed beans into a straight row. Rain can cause the beans to discolor and hail beats the pods open and drives the beans into the mud. Unfortunately the farmers north of the river experienced such a hail storm two nights ago. It wounds the soul to work like a dog all summer just to watch mother nature steal your crop out from under your nose just a day or so from harvest.

All eyes here are on Cancun Mexico as the World Trade Organization meets and negotiators decide the fate of farmers' world wide. Articles in recent farm magazines haven't given us much hope in the way of help from expanded trade agreements. As a news release from the American Corn Growers Association says, "even if the difficult task of negotiating the elimination of global farm subsidies is completed, family-based agriculture will continue to spiral downward as a result of continued low commodity prices."

Aimed directly at the heart of rural America NAFTA and GATT are seen by many small family farmers and ranchers as opposite sides of a dagger that has been deeply embedded in the back of agriculture by U.S. trade policy. Every new agreement twists it deeper; its aim is deadly and America's fields and farms are running red with our blood.

There is a bright spot on the horizon. Cattle prices have done more than skyrocket they have shot over the moon. The Canadian embargo is the primary reason for the spike in prices. The continuing drought in cattle country is also a contributing factor. Reduced numbers of mamas equals reduced yearlings equals higher prices.

Unfortunately, the high prices pose a problem for us. We usually buy from 200 to 300 yearlings at this time of year to supplement our own calves in the feedlots but this year we are afraid that by the time they are ready to sell, the border will open, Canadian cattle will flood the market, prices will drop and we will be left with enormous losses. Area bankers are also facing some difficult decisions. Do they lend money to buy cattle or don't they?

We are stuck between a rock and a hard place. If we don't feed our hay and corn we will be forced to sell them at depressed prices. If we feed as many cattle as in the past we could end up so deep in debt we will never see the sun again.

This is a great life, but it's a lousy living."

Have a great weekend. Go Huskers!!

Steve Chick  
State Conservationist