

An aerial satellite-style map of a river valley. The river is dark and winds through the center. The surrounding land is a mix of green (vegetation) and tan/brown (bare earth or urban areas). A semi-transparent white box with a thin black border is centered over the map, containing the title text. The DigitalGlobe logo is visible in the bottom right corner of the map area.

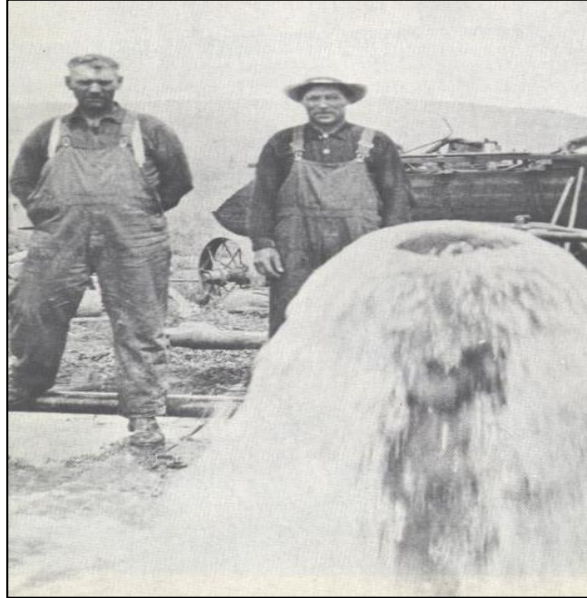
The Road Ahead: Fertilizer, Carbon Caps, and Helping Northwest Farm Families Succeed

**Presented by Alex McGregor
Washington State Potato Conference
January 28, 2009**

Good morning, Washington State Potato industry friends!

Some thoughts on a time of where teamwork among all of us in agriculture is urgently needed, a time of opportunity with some challenges...

We've come a long ways as Northwest farm families since the first artesian irrigation well at our ranch, 1908



We have a lot of people to educate—in Washington, D.C., in Olympia and among our neighbors unfamiliar with agriculture. And we've got a great story to tell.

On my own place—where Franklin, Adams, and Whitman county borders meet, and everywhere across the Columbia Basin, a land once desolate has become a leader in producing foodstuffs for a hungry world.

The Blessing of Aridity (1899) “The land which the casual traveler, speaking out of the splendid depths of his ignorance and prejudice, condemns as ‘worthless’ and ‘fit only to hold the earth together’ is in reality rich and durable beyond the most favored districts in the humid regions.”

“The miracle of irrigation”

My grandfather and three great-uncles bought a failed irrigation project, designed to use the waters of the Palouse River to irrigate 400,000 acres of the Columbia Basin. Flumes on both sides of the canyon—one day they'd wash out the railroad tracks on one side, the next day the state highway on the other.

Artesian wells provided us the first reliable water source—we irrigated 4,000 acres of apples in addition to raising dry land wheat and range sheep.

We've made great strides forward as stewards of the land....

In wise use of applied chemistry---

"The apples showed too much arsenic to be reassuring. But if the sorters wipe each one we will get by" McGregor Land & Livestock 1926

--a world of formaldehyde and lead arsenate

And, with water, far less dust than the "Dirty Thirties"

"We had dust storms that would last for three days. Dad and Mom bought a new Chevy in Nepal. On the way home they got in the dust storm and got lost out in fields for hours and hours—ruined the engine on the car before they got back. We would go out and find mice blind from the dust and sand all over the fields and chickens buried in the dust. You could walk over the fence in many places—the dust was that deep." Elmer Pfaff

Pulling Together, Farm Families Have Produced Dramatic Results....

During the lifetimes of veteran farmers, farm families have:

----increased yields 250%

----reduced waterborne soil erosion 85%

----reduced dust 600%

----reduced field burning 2200%

It's the biggest achievement of any generation of farmers in the last 10,000 years....

It's Time to Build Some Relationships and to Strengthen Others

---A 44th, the 111th, and 50 new faces...

---Some "centrists"

--- some familiar faces

---and an active environmental agenda...

I've been active speaking and working with members of Congress on behalf of farm families for thirty years now and I believe that our efforts in '09 are more critical than ever....

President Obama---

Signs are that he may be a good listener. The wheat and corn associations point out his staff has shown genuine interest in hearing the views of American farmers.

My experience: Obama's agricultural advisory committee---When I brought up issues of agricultural research, trade, rivers and transportation, they listened and asked attentive questions...

Kiplinger Ag Report—In Obama farmers have a good friend in D.C. He has long supported agribusiness and biofuels." Truth is, nobody knows for sure. No point in waiting or in being pessimistic.

We're starting with a clean slate with a new administration concerned about feeding the world and we'd best be getting at the business of telling our story.

Some key people we've worked with before....

Familiar faces: Tom Harkin and Collin Peterson (agriculture)

Kent Conrad (D-N.D.) and Thad Cochran (R-Miss) (budget)

Max Baucus (D-Mt) and Chuck Grassley (R-Ia.) (finance)

Two "centrists" at Agriculture and Interior

"A big sigh of relief" Tom Vilsack (Agriculture);Ken Salazar (Interior)

Significant changes in the House of Representatives

--from moderate committee chairs to more strident ones...

Henry Waxman replaces John Dingall (energy and commerce)

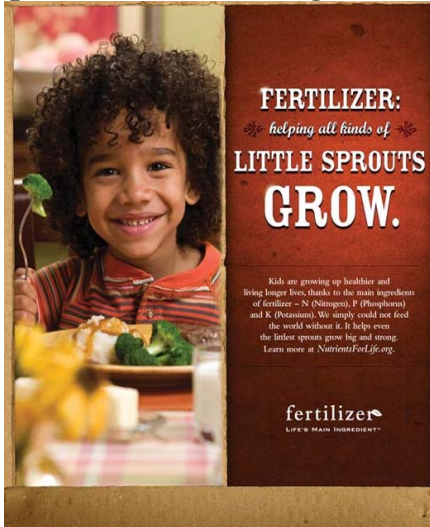
Ed Markey (Mass.) pulls rank to head (air quality)

An active environmental agenda

Some aggressive leadership, with scientific credentials, on environmental issues

Lisa Jackson (EPA) and Carol Browner, ombudsman, on environment and warming

Keep the Focus on Feeding the World



As growers, as agribusiness, as scientists....

Every second we have 3 new mouths to feed

Every 2.5 seconds we lose an acre of farm ground

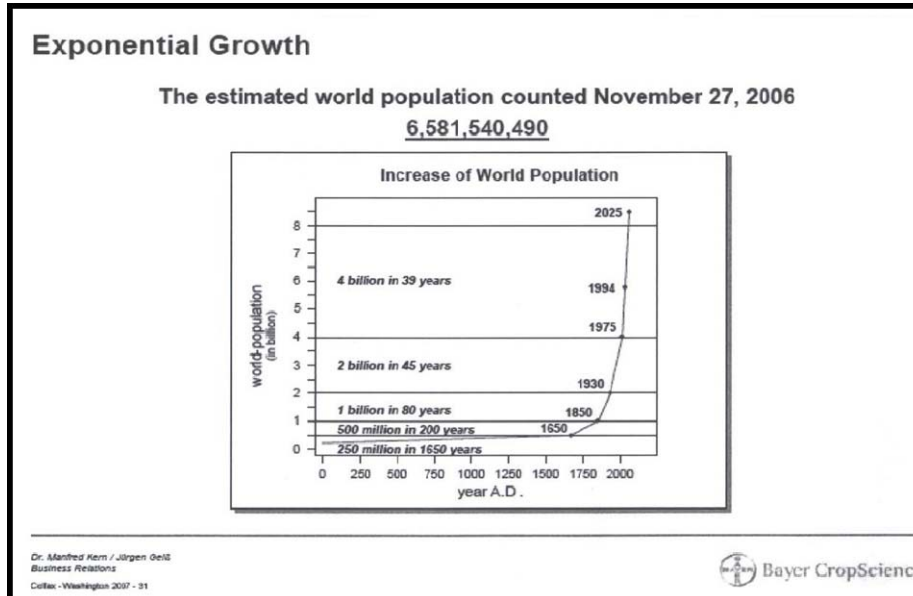
Agriculture has often been taken for granted in the past—we've all had to explain why research is vital, why we must keep learning and advancing...

A new awareness is starting to reach urban America....

We must double food production worldwide during the working careers of young farmers...

We need to produce as much food between now and 2040 as we've produced in the last 10,000 years...

Exponential population growth—an issue that crossed the rural/ urban barrier and concerns all Americans, or should...



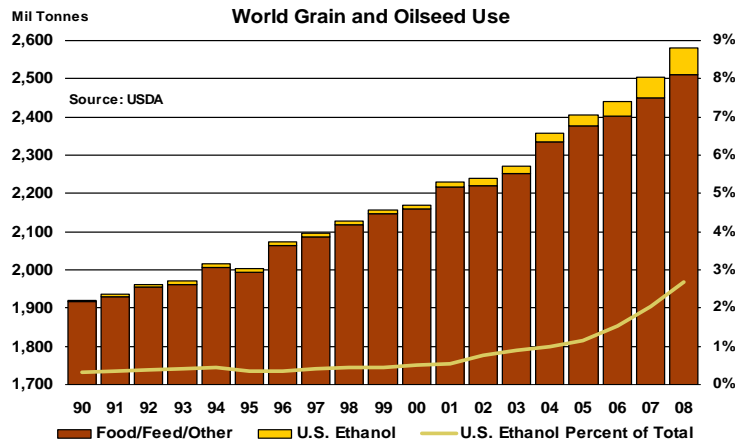
To critics who claimed Tom Vilsack was unfit to be Secretary of Agriculture because he had close ties with mainstream agriculture and the biofuels industry ---automatically an enemy of “sustainable” and “organic” agriculture?

Sen. George McGovern, Director of World Food Program

“The primary goal of agriculture is to feed ourselves and those around the globe who lack America’s productive resources. America’s farmers have become so efficient that 1 percent of the population can feed an entire country and much of the world. One of the downsides of this efficiency is that consumers have forgotten where our food comes from and what it takes to get our bounty into supermarkets. We all want a safe and inexpensive food supply. Even with the recent food price inflation Americans still spend only 10 percent of their disposable income on food, the lowest in the world. A case can be made that our entire consumer economy is fueled by cheap food. There would not be as many cell phones or other conveniences if Americans had to spend 20 percent or more of their disposable income on food. We need to get beyond ideology and depend more on science. We need to develop a new understanding of agriculture based on our larger goals if we are to craft a long-term food and farm policy that works.

Agriculture has a responsibility to help care for the environment. But let’s stick to science and avoid an ideological debate about agricultural practices.”

Demand for foodstuffs has soared...



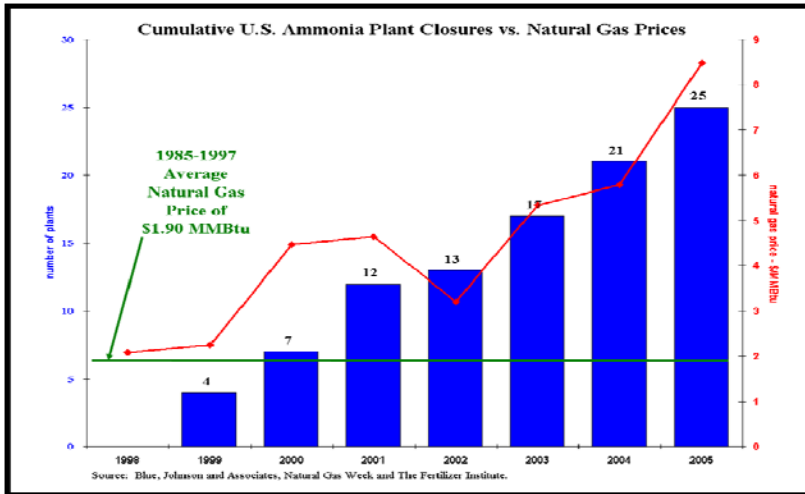
Global demand for food has doubled from a 1.3% increase every year to 2.6%
The 500 million metric ton challenge—that is the 20% increase in food production that must occur by 2020...
The '07-'08 food crop: The first time demand outstripped supply without disastrous crops somewhere in the world...
 That's why there was a huge demand for fertilizers.

**As demand for food escalated, so did fertilizer prices....
 + 268% between 2000 and mid-year 2008**



“Fertilizer producers were clearly reacting to record commodity prices and priced their products accordingly.” Farm Bureau
 --runaway inflation—painful for growers and hated by those of us growers rely upon to serve them

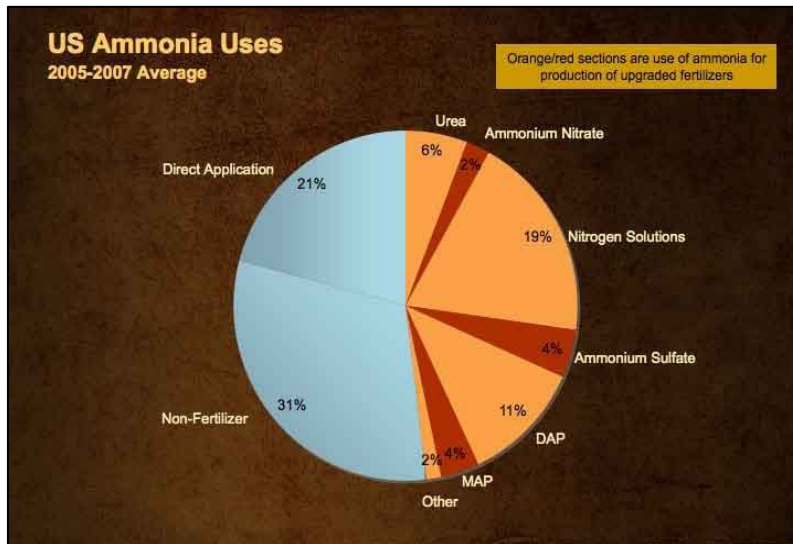
Domestic fertilizer production has been in a freefall even as demand has risen..



---escalating natural gas prices= 25 NH₃ production plant closures
Domestic nitrogen production once filled 85% of U.S. needs, now 45%. Domestic phosphate production fell 30%
 Leaves us vulnerable as never before

Here’s why NH₃ is critical

It’s the feedstock to make all nitrogen solutions, urea, phosphates (to a lesser degree), industrial products also.

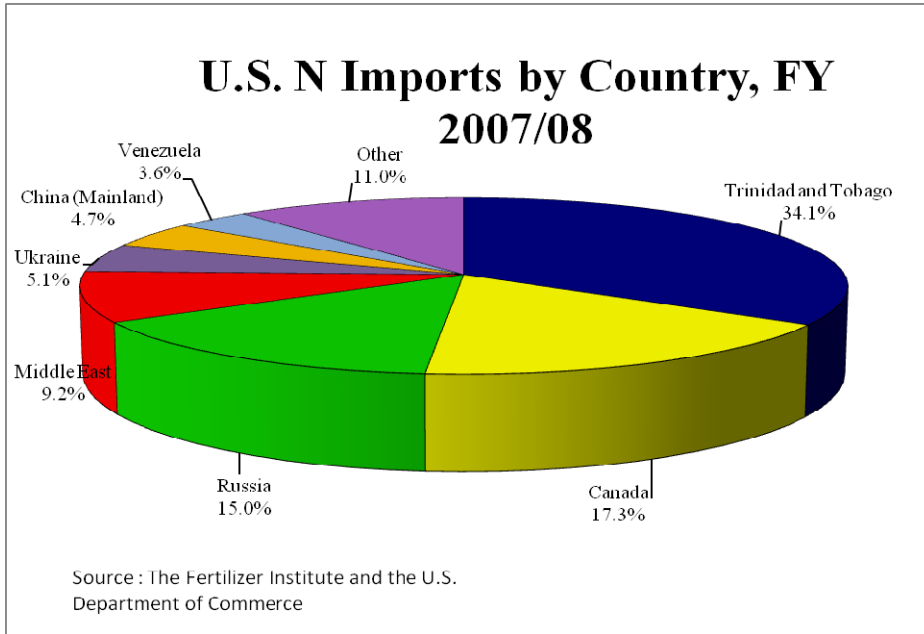


21% direct applied, 19% nitrogen solutions/ 6% for urea/ 15% MAP and DAP

We’ve fought to keep railroad lobby from being relieved of common carrier duties—would have meant that all NH₃ would have had to have been trucked from ocean ports.

Here's where nitrogen comes from these days....

Main exporters to us: Trinidad and Tobago, Canada, Russia
China—world's largest urea exporter---in 2007 put a 135% tariff on shipments overseas of urea and phosphate.



And the world of potash....

Major exporters are: Canada 39%, Russia 20%, Belarus 16%, Germany 11%,
Israel 7.5%, US 0.5%

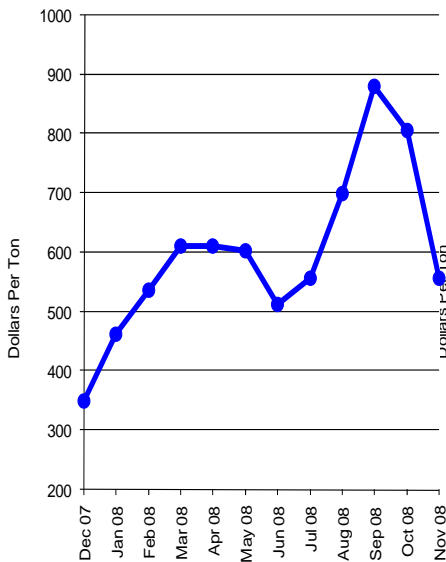


When world demand faltered, fertilizer prices fell like a stone...

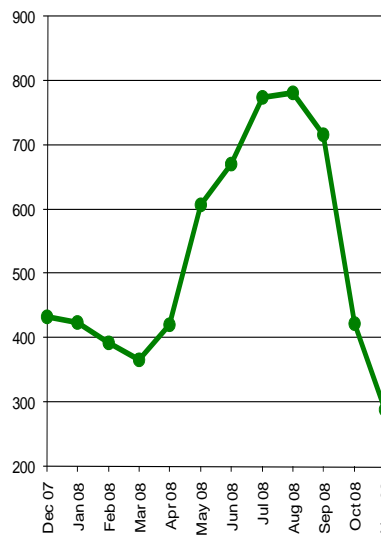
Gulf Coast prices of NH3 and urea

Production shut down or slowed in Trinidad, Canada, Ukraine, Italy, Romania, Estonia, Libya, Turkey, Hungary. Urea in Ukraine halted by pipeline squabble with Russia.

U.S. Ammonia Price, f.o.b. Gulf Coast



U.S. Urea Price, f.o.b. Gulf Coast

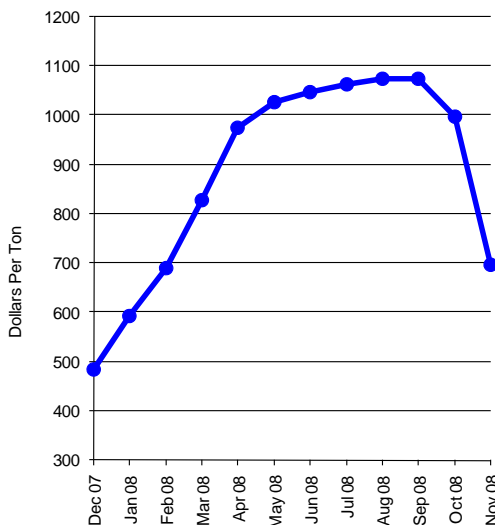


Phosphate followed, not potash.

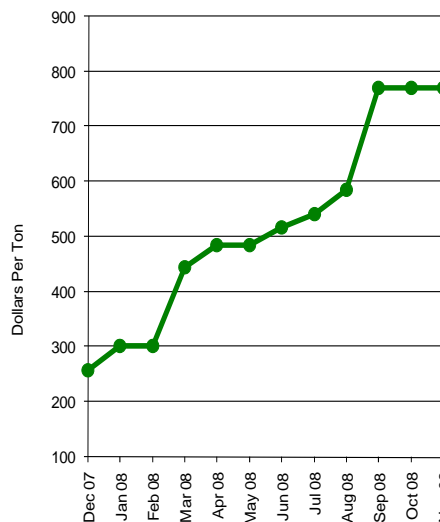
Limited supplies. Potash from Canada, Germany, Russia.

Phosphate—Morocco, Russia, Tunisia, Lithuania, USA

U.S. DAP Price, f.o.b. Central Florida



Potash Price, f.o.b. Saskatchewan, Can.



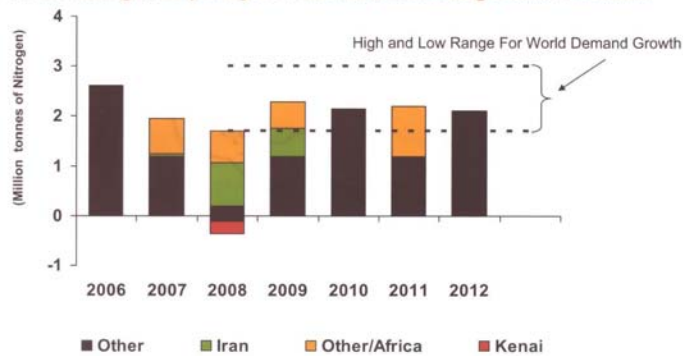
Nutrients will be more affordable this spring!

- predicting the “bottom” can be a game of very high stakes poker even for colleagues of mine who are immersed in that world full time...
- “Global prices for fertilizer are expected to be significantly lower in '09 than in the previous year, driven by a fall in demand and the global financial crisis [Rabobank]”
- some more production will be coming on line next few years—

New production will help some....

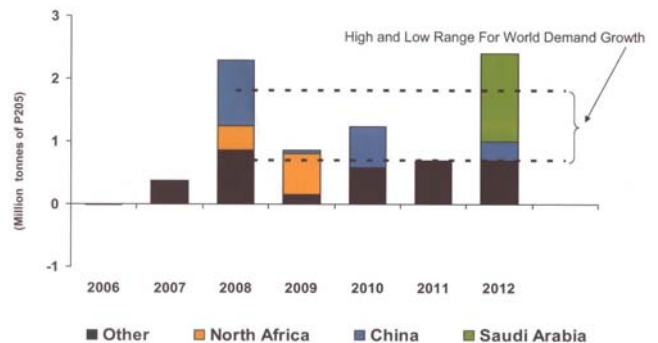
Global Nitrogen Capacity Additions (excl. China)

- Limited capacity nitrogen additions in 2008-2012
- World nitrogen capacity of 142 mmt, excluding China 102 mmt

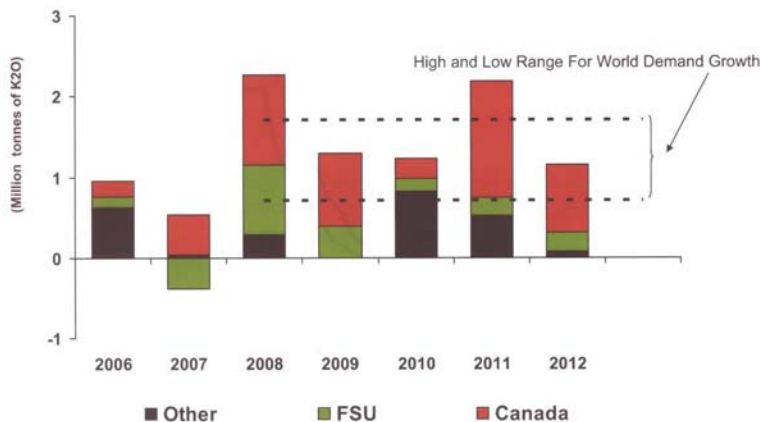


Note: Excludes Chinese capacity additions, nutrient tonnes

Global Phosphate Capacity Additions



Global Potash Capacity Additions



As a business that serves potato growers out in the field....

We take advantage of our independence and our strength to buy as well as we can and pass along the savings.

We invest in growers' futures and ours, with equipment, facilities, most of all dedicated long-term people with a passion for agriculture....

We need to work together

---as growers, as crop advisers, as scientists, as suppliers of products

----To help manage risks and help farm families succeed in ever more complex times...

As a senior bank executive put it recently: *Farmers and those who serve them must be more proactive in planning and in developing 'what if' action plans and cropping ideas for this year, next year, and the years beyond. Teamwork and trusted partners are essential tools for success in a fast changing agricultural world.*

A major issue for the energy intensive potato world...

Greenhouse gases and carbon caps and trades.....

"The Western Climate Initiative" with a focus on "*the largest emitting sectors including forestry, agriculture, cement, iron, aluminum, energy and transportation.*"

"Reversing the damage done by global warming is the great environmental challenge of the 21st century." Arnold Schwarzenegger.

----Greenhouse gases in your truck fleet – now a focus of the Washington Dept of Ecology.

----Do steers emit more methane when grass fed or on grain? Environmental activists unfamiliar with agriculture have claimed cattle on feed emit methane – grass fed ones don't. Untrue – pseudo-scientific baloney.

Some potential for offsets—and they will be worth fighting for. But we mustn't get all wrapped up in them—in California they were pulled off the table...

Energy Costs and Carbon Offset Consequences

Natural gas represents over 90% of the costs to produce feedstock nitrogen.

Earlier bill (Lieberman-Warner of 2008)—*would have increased costs to agriculture by 37% (fuel) and 50% (nitrogen).*

"Like it or not, we have a carbon based farming system. We use fuel for our tractors to make food, fuel and feed for the nation and the world." (Farm Bureau)

PETT
USA TODAY
Arlington, VA
USA



Help us explain—none of us uses nitrogen carelessly or casually....

We've become steadily more efficient—all across the broad spectrum of crops in our state. Soil testing, advanced agronomy, precise placement....

Please be aware of research already in place on nitrogen, minimizing CO₂, and using nutrients efficiently. If you'd like copies of the international fertilizer studies, let me know—a good way to combat misconceptions....

We believe growers are the best judges of their needs in the field....

“If we are not successful in building a coalition to promote the science of nutrient use efficiency, and if the whole agricultural community does not come on board, we will surely see mandated use reduction on the farm down the road.” Ford West

We need to join forces as Team Agriculture...

- 1). **To urge Congress to consider the production of foodstuffs, including the ingredients necessary to grow them, as a top national priority**
- 2). **To show energy efficiencies we've achieved in all facets of food production...**
- 3). **To avoid forcing new energy producers to use natural gas so that the 3% used to produce nitrogen, and therefore bountiful crops, remains available and affordable!**

We need to avoid government sanctioned “fuel switching”—driving energy producers away from coal to an energy source vital for producing food, natural gas. Could force more production to move overseas. It doesn't make sense, while striving for energy independence, to lose domestic production vital for agriculture.

The challenging world of buffers

Kudos to Potato Commission for promotion of sound research

--We as agriculture – from registrants to applicators –need to keep working with EPA providing practical information for final revisions...

---A buffer of 100' or more can cause serious economic dislocation for growers

We all need to pull together on this and many other issues – to be good stewards of important tools while minimizing farm losses...

We are happy to help fight the battles

One of the pluses of having been around agriculture for a long time is that you get to know the people we can call upon as farm families to help when the chips are down....

Let's tell of our progress as we take on many issues....

- Fine tuning and encouraging “Good Agricultural Practice” concepts
- Finding essential workers for our farms
- Research funding—we've won many battles in the past
- Transportation, dams, and many water issues
- CDL's, hazmats and regulations

**We, the people of agriculture, share some values that matter
McGregor sheep herders with all the essentials—shotguns, sheep dog, Scotch, 1925**



My great uncle Archie, writing from his herder's tent in 1894, described the essentials for success in agriculture—*industry, work, character, honesty and fair dealings*. Unusual values in a more crowded and litigious society... Hard for many to imagine making a living on the land. ---our field is the last bastion of family business--- powerful attributes that helps make sure many an urbanite sits up and listens when farmers speak

Like our ranch harvest crew of eighty years ago....

Some with hands on hips, some with arms folded, one with a cocked straw hat and some with big smiles—we can pitch in as a modern day crew, take on the challenges, and do pretty darned well, thank you...



We've conquered a lot of challenges over the years but often we get so busy we don't find the time to stop to build alliances across crops, state borders, with agribusiness, as we should.

--a good start—32 agricultural groups, from Columbia-Snake irrigators to cattle feeders to conservation districts---went to Olympia this winter with priorities they shared...

We're enthusiastic about what we can achieve pulling together.

“Without high yield agriculture and irrigation, millions would have starved or millions of acres of pristine land would have had to be ‘broken’ by the plow. Dedicated farm families are part of the essential process of feeding a burgeoning world population. Have a passion about what you do and you will make a difference. Norman Borlaug

“If we allow misconceptions, not science and good judgment, to dictate the future of agriculture we, as Americans, will be guilty of displaying a diminished gene frequency for common sense.”

With a “change” agenda in D.C, and some work to do in “Olympia,” too...

With many newcomers to educate.....

It is time to cast aside any pessimism or frustration

It is time for we, the people of Northwest agriculture, to pull together as never before

Please join us

The people of Northwest agriculture—potato growers, those of us who serve the potato industry, and all of us with ties to the land—in being passionate advocates for farm families and our remarkable agricultural production systems! Thanks, Friends!