Craig Lang
President
The Prairie Strategy Group
> February, 17-19, 2014
> Omaha, Nebraska
> 20 million acres by 2020 is an achievable goal.
> Every farmer should experiment with some cover crops.

Cover Crops and Soil Health
No Cover Crop
Our experience........Cover Crops make sense!

» WHY?

» They provide more diversity in agriculture.
» Create greater value for farm and community.
» Protect our soils in harsh weather.
» Protect water from nutrient run off.
» Provide our dairy animals with a valuable feed source.
» Provides fall pasture late into the fall.
» Improving soil tilth.
» Allow for double cropping on our farm.
» Provides our family with a more productive future.
» Helps guarantee our kids will have a more productive farm.
Cover Crops can provide an immediate solution

Farmers are being asked to feed and energize a hungry world by maximizing production on every available acre. I say this makes our task difficult...but not impossible.

Award-winning filmmaker Ken Burns’ project, “The Dust Bowl,” premiered on PBS November of 2012. This environmental tragedy was termed by PBS to be “the worst man made disaster in American history.” Although the film focused on stories of generations past, many parallels exist between the circumstances that led to the Dust Bowl of the 1930’s and today. Mankind should never allow this kind of disaster to ever reoccur.

U.S. farmers should set the example for farmers around the world

Are you.....and are we?
World Population: 1950-2050

Source: U.S. Census Bureau, International Data Base, June 2011 Update.
Where is the Population?

Nairobi, Kenya
WE can’t feed the world with continued soil loss
Nairobi, Kenya
1250 calories/day
India...1.3 Billion
» Wet Markets

» Ocean Shipping

China Another Billion +++
Cover Crops are easy

A valuable feed
Protects our soils
Easy to handle
Winter and weather hardy
Protects our water
Relatively inexpensive
Can be fall and winter grazed
There are many grasses to choose from
Proven success

Enhance the following crops
80 to 90% relative feed value
<table>
<thead>
<tr>
<th>Product</th>
<th>Triticale (7 - N7 TS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>67.00%</td>
</tr>
<tr>
<td>Dry Matter</td>
<td>32.12%</td>
</tr>
<tr>
<td>pH</td>
<td>4.15</td>
</tr>
<tr>
<td>Crude Protein</td>
<td>11.53%</td>
</tr>
<tr>
<td>ADF</td>
<td>41.70%</td>
</tr>
<tr>
<td>aNDF (w/ Na2SO3)</td>
<td>60.61%</td>
</tr>
<tr>
<td>Lignin (Sulfuric Acid)</td>
<td>5.90%</td>
</tr>
<tr>
<td>Lignin</td>
<td>0.25%</td>
</tr>
<tr>
<td>AD-ICP</td>
<td>0.71%</td>
</tr>
<tr>
<td>ND-ICP est (w/ Na2SO3)</td>
<td>1.84%</td>
</tr>
<tr>
<td>Protein Sol.</td>
<td>73.72%</td>
</tr>
<tr>
<td>Starch</td>
<td>0.29%</td>
</tr>
<tr>
<td>Fat (ER)</td>
<td>3.79%</td>
</tr>
<tr>
<td>Ash</td>
<td>11.12%</td>
</tr>
<tr>
<td>Calcium</td>
<td>0.31%</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.38%</td>
</tr>
<tr>
<td>Magnesium</td>
<td>0.13%</td>
</tr>
<tr>
<td>Potassium</td>
<td>2.67%</td>
</tr>
<tr>
<td>Sulfur</td>
<td>0.18%</td>
</tr>
<tr>
<td>Sugar (ESC)</td>
<td>0.23%</td>
</tr>
<tr>
<td>TDN 1x - OARDC %</td>
<td>56.46%</td>
</tr>
<tr>
<td>Adjusted Crude Protein %</td>
<td>11.53%</td>
</tr>
<tr>
<td>NPC</td>
<td>13.62%</td>
</tr>
<tr>
<td>Net 1x - OARDC Mcal/cwt</td>
<td>57.42</td>
</tr>
<tr>
<td>Net 1x - ADF Mcal/cwt</td>
<td>65.02</td>
</tr>
<tr>
<td>Neg - OARDC Mcal/cwt</td>
<td>29.49</td>
</tr>
<tr>
<td>Nem - OARDC Mcal/cwt</td>
<td>55.14</td>
</tr>
</tbody>
</table>
» They aid soil fertility.
» They protect the soil and water.
» They aid in soil sustainability.
» They are valuable feed sources
» They allow us to double crop
» They are easily planted and harvested
» They aid to feeding and possibly energizing the world.
» They are easily adapted to any farming practice.

Cover crops make sense!
Triticale and deep till radish

Early October......2012
Green as early as mid March makes winter seem shorter.

April 2013

Spring 2013
4 inches of rain early April
» Because it makes a difference........
» Protect our soil from wind and rain
» Helps build soil fertility
» Adds value to the soil structure
» Provides as natural herbicide
» Can serve as a deep tillage
» Valuable feed for forage
» Allows farmers to grow a second crop
February 1st after 3 inches of snow