**Cover Crop-Saga**

During the past few months of reading several articles and publications concerning “Cover Crops”, begins to recall several thoughts and farm management practices of days gone by. These were from the rural area where I grew up. The more things change the more they stay the same, comes to mind.

Many years ago during the 1950’s and 60’s all farmers that I knew seeded cover crops (green manure crops) following harvest of field crops. The land or soil very seldom remained bare (uncovered) during a non-growing season mainly winter. Winter was a time we received lots of rain and snow. The cover crops conserved soil, reduced erosion and improved fertility when plowed down or under in the spring as farmers prepared for a new cropping season.

As farmers had more tractor power crop acreage grew larger and harvest and storage of crops required more time and labor. Due to labor and time shortage farmers gradually moved away from seeding cover crops. The only soil cover was winter weeds and crop residue.

Another piece of the puzzle that became a game changing time was the use of crop pesticides and commercial fertilizers. These products reduced field work time and allowed one farmer to grow crops on larger acreage. The first weed control pesticides I remember were 2, 4-D, Atrazine and princep. The rates or amounts of these pesticides applied for crop weed control often restricted cover crop germination. These pesticides required more time to break down or degrade. Thus, there is a reduction for seeding cover crops. The only soil erosion was again winter weeds and residue.

The next piece of the cover crop puzzle, I remember, was conservation tillage during the 1970’s. These practices included No-till, Minimum-till, and strip-till that allowed farmers to grow crops on land with existing grass cover. The existing grassland crops encouraged a return of cover crops to a limited degree. However, these tillage practices allowed more grassland to be converted to grain crops such as corn, soybeans, milo and wheat.

Anew crop pesticide was “paraquat” (now gramoxone) which allowed the grassland cover crops to be “burned down” (stop the grass growth) and planted to grain crops. The new conservation tillage practices allowed soil to remain covered longer following planting of crops. Our grain crops were yielding more bushels per acre, leaving more crop residue to cover the soil. Several farmers began to seed cover crops but not to the extent previously.

Everyone allowed themselves to be caught up in the goal to increase production, growing larger acreage of crops assisted by larger equipment. Fence row to fence row farming was the going idea and farmers had less time and labor to seed cover crops. The conservation tillage permitted farmers to reduce soil losses and improve soil structure. However, the return to seeding cover crops had not occurred.

Soil conservation during 1985 became a national goal as farms were loosing highly productive soils (erosion) at an alarming rate. CRP land a “conservation reserve program” became a goal of the United States Department of Agriculture. The program returned million of acres from crop production to grassland. Also more conservation tillage practices were being used on farms. Soil erosion was reduced by increased crop residue and cover crops, through rotation, were beginning to return.

We now have many acres of cover crops- wheat, cereal rye, rye, turnips, radishes, vetch and clover- being seeded following crop harvest. The conservation tillage allows many of these cover crops to remain on the soil as other crops are grown. Cover crops reduce and control soil erosion; reduce and control water run-off and increase soil fertility through organic matter. Cover Crops are making their come back and improving crop production in the process.

Today farmers have crop varieties available that are more suited for conservation tillage. The higher yielding crops produce more residue for  the land by adding organic matter; improving soil fertility; reducing erosion and water run-off; reducing soil compaction; reducing use of crop pesticides for weed, insect and disease control while improving soil structure.

The cover crop cycle has returned and farmers are establishing more cover crops acreage following grain crops all across America.

These are my observations over the years of being involved in Agriculture. The statement by John Ikerd said it all: T’weren’t the things I didn’t know that done me in, but T’were the things I new and didn’t do, so we don’t need to be taught, just reminded.