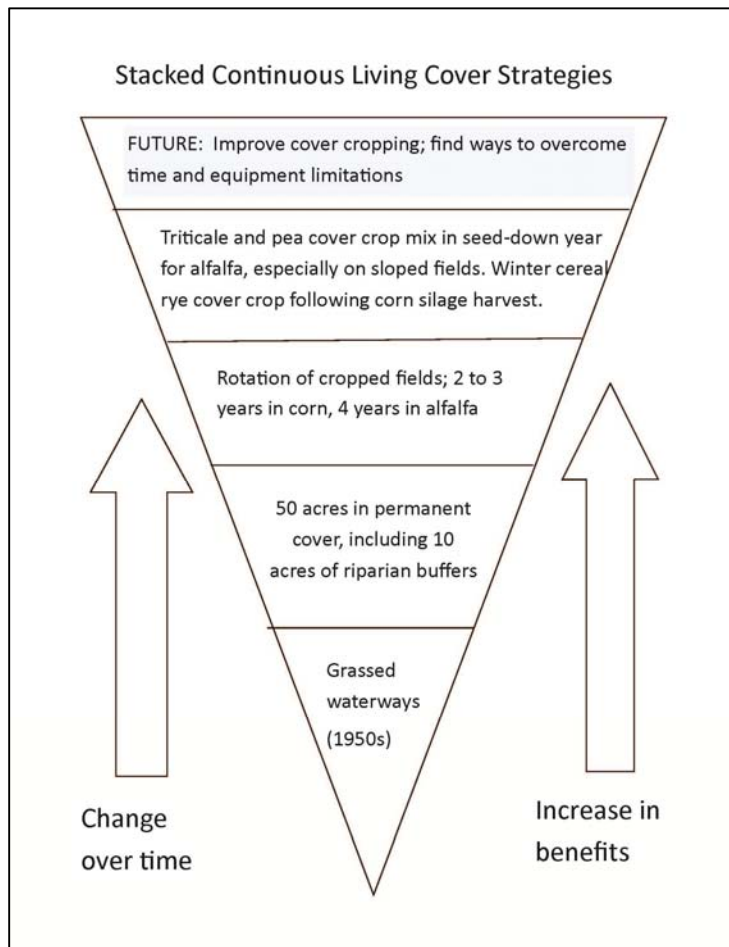


Ted and Gretchen Johnson



Summer 2015
Continuous Living Cover Series



Ted and Gretchen Johnson have a 310-cow dairy operation on 900 acres near Star Prairie, WI. A stream runs through their property and they are very conscious of the importance of their role in minimizing runoff from their sloping fields. About 200 to 250 acres of their flattest land is in continuous corn. They practice a six- or seven-year rotation on their moderately sloping fields: four years in alfalfa, then two to three years in corn. They do not raise any soybeans because corn and alfalfa are what they need for their dairy herd.

The cows do not graze. The Johnsons use some of the areas that are in permanent cover as a dry lot for the cows, but their focus is on corn and hay production to support their milking herd.

Stacked continuous living cover practices: Grassed waterways were established by Ted's father in the 1950s under a contract with the Soil Conservation Service, the predecessor to today's NRCS. Those waterways are still in place. Strip cropping was discontinued because of a need to consolidate fields for custom harvest. Wide buffer areas protect the stream and those are not in a contract; they are cut for hay. Steep hillsides are in permanent cover. Most of the fields have some slope and are on a long rotation of alfalfa for four years and corn for two or three years. Cover crops are used in the alfalfa establishment year on sloping fields, to protect soil. A winter cereal rye cover crop is used following corn silage.

Fifty of their acres are in permanent cover. These include their steepest slopes, some small and odd-shaped fields that are difficult to farm with their equipment, and their streambank (riparian) buffers. Ted estimates that they have 10 acres in those riparian buffers. The buffers are quite wide. Fifty feet is the minimum width at any point, and many of the buffer areas are closer to 200 feet. Ted thinks that 50 feet is barely sufficient as a riparian buffer. His buffers are not under a CRP, EQIP, or other program contract. He cuts them twice a year for hay or haylage. He notes that they also benefit the ease of his farming operation; he uses the buffer areas in some cases to square off fields for easier equipment travel and turning.

Conservation Planning and Implementation

Ted and Gretchen use NRCS programs occasionally, but they also do a lot of the conservation work on their own. Ted says that they see the need to take care of the creek and the nearby lake, and they strive to make their stewardship practices sustainable on their farm without requiring NRCS funds. His hope is that the NRCS money that they don't will be used to incentivize someone else to get started in conservation practices.

The Johnsons worked with their local NRCS office to develop a Comprehensive Nutrient Management Plan (CNMP). This is a massive, 100-page document that serves as their reference guide for their yearly planning. They work with an independent agronomist to develop their yearly crop rotation management plan and yearly implementation of their Nutrient Management Plan, which they have under NRCS Practice 590. Their agronomist also keeps them on a routine of soil sampling so that they are testing every field at least once every three years. The local watershed organization has recently offered some funds to support that sampling in an effort to establish baseline phosphorus levels in the area, as part of efforts to reduce phosphorus loading into nearby Cedar Lake.

Ted notes the influence of the farmer-led council in his area, part of a larger effort to establish local farmer-led councils in the St. Croix River watershed. The farmer-led councils have credibility that state and federal agencies may not have in pushing for new practices, because farmers tend to pay attention when other farmers are promoting something. He has noticed way more acres in winter cereal rye cover crops in his area within the past four years, and thinks that is because seeding of fall cover crops was a priority of the farmer-led council. Ted was in a leadership role on that council initially, but had to step back over the past couple of years due to a family health issue. He still follows their work and approves of their efforts.

Farmer-Led Councils

For more information about the effort to establish farmer-led councils in sub-watersheds of the St. Croix River, see the Farmer-Led Councils segment in the Cultivating Leadership chapter of this manual.

Cover cropping is something that Ted does routinely on any highly erodible land (HEL) that is going back into alfalfa after corn. He uses a triticale and pea mixture seeded down with the alfalfa, then

takes the triticale and peas off for hay. He has gotten some very good tonnage yields of hay from that cover crop. On the non-HEL land, he prefers to go directly into alfalfa from corn without using the cover crop because the alfalfa gets a little more growth in its first year without the competition.

The Challenges of Cover Cropping

Ted would like to use cover crops more, especially fall-seeded winter cereal rye following corn, but finds it very challenging to match the workload on the farm to the planting windows for the rye. Right now he's using the winter rye primarily after corn chopped for silage, because he can get out there and spread manure and then seed the rye with enough time for it to germinate and get some growth before winter. He doesn't have enough window of growing time to do that after harvesting corn for grain.

Broadcasting of the seed with his manure spreader is the cheapest and easiest way for him to apply the winter cereal rye cover crop, but the falls lately have been dry, and he hasn't had good soil to seed contact when broadcasting rye over corn stubble. He has been putting down 60 lbs./acre of rye seed, and seeing very poor stands. Broadcasting of the seed into standing corn before harvest might be an option, but he isn't sure how the rye would hold up to the equipment traffic and manure that gets applied after corn harvest.

He is considering drilling in the seed, but notes that any time you look at a more specialized seeding option, the costs go up, and cost-sharing for cover cropping doesn't cover all of the costs of doing it. With fluctuating milk prices, he has to be sure that the cover crop will pay for itself. He is feeling the need for better planting options, but is hopeful that his continued experimentation and that of other farmers in his area will lead to good cover cropping solutions. Again, he points to the farmer-led councils as an important source of support for farmers in his area to work towards improved stewardship of their soil and water resources, and would like to take up a more active role in that council again in the future.

Managing Manure

Manure management is an important component of Ted and Gretchen's operation. They have 310 to 315 cows, and limited manure storage facilities, so they have to do multiple applications of manure each year. They have a number of parcels of cropland in three townships, all within a 10-mile radius of their farm, and have been working at getting manure moved out to fields within that entire radius. They have to do some spreading of manure in the spring, and township road restrictions in spring make that challenging. They spread manure each year on about 120 acres alfalfa that will be plowed down prior to planting corn. They also put manure on about 40 to 50 acres of a neighbor's field that is in a grassy hay mixture. Manure is always spread on corn stubble after harvest for either silage or grain.