

BEST MANAGEMENT PRACTICES

Chapter 14: Converting Conservation Reserve Program (CRP) Land to Row Crop Production



C. Gregg Carlson (Gregg.Carlson@sdstate.edu) Cheryl L. Reese (Cheryl.Reese@sdstate.edu)

High crop prices are encouraging producers to convert land enrolled in the conservation reserve program (CRP) to crop production (Fig. 14.1). A multitude of challenges must be overcome when converting CRP fields to row crop production (Table 14.1). The purpose of this chapter is to discuss key hurdles encountered when converting CRP to row crops.



Figure 14.1. Converting CRP land to cropland.



Table 14.1. Techniques to minimize problems converting CRP to row cropped ground.

- 1. Scout the field and develop detailed plans.
- 2. Start weed control early if possible.
- 3. Keep FSA and NRCS informed.
- 4. Determine fertilizer requirements by soil sampling.
- 5. Consider using a starter fertilizer.

- 6. Control rodents.
- 7. Use treated seed. (Chapter 8)
- 8. Use soybean rhizobia inoculants. (Chapter 23)
- 9. Find a mentor who is experienced with the problem.
- 10. Track changes in rodents, weeds, and soil nutrients for several years.

CRP was created as part of the 1985 Food Security Act, enacted with the primary goal of removing highly erodible land (HEL) and other environmentally sensitive land from crop production. Because of the vulnerable nature of these soils, these fields should be farmed using no-till (or at least minimum till) farming practices. No-till has the potential of maintaining the quality soil structure that the CRP land typically develops over the length of the contract. If the land is HEL, consultation with Natural Resources Conservation Service (NRCS) is needed to assure that the field remains in compliance with federal law, rules, and regulations.

If you want to take land out of CRP contracts before it expires you will be required to pay back all of the money plus interest to the Federal government. In addition, you will need to pay 25% of one year's payment for liquidated damages. <u>http://thebeginningfarmer.blogspot.com/2008/03/taking-land-out-of-crp.html</u>

Most CRP land has received minimal management during the length of the CRP contract. Bringing this land back into row crop production will be similar to breaking out the prairie landscapes that the homesteaders experienced over 100 years ago. The homesteaders faced incredible hardships. They had to break through dense sods to plant their crops, they had to grow crops that had a minimum water requirement and low yield potential, and they had to carry water from streams to water their crops.

Even though we have similar problems, today's farmers have high yielding cultivars that have been designed to withstand drought, pest problems, and pesticides. The question is how to sustainably grow row crops in CRP lands. When CRP land is brought back into to production, it is important to scout the land before anything is done. During scouting it is not unusual to find extensive rodent activity, weeds, brush, trees, a high concentration of insects, and sod. It is important to point out that if weeds and rodents are a problem, solutions can be implemented with written approval from the NRCS.

Challenges

Excess biomass

Planning is necessary when returning CRP land to row crop production. The difficulty results from trying to balance the maintenance of benefits obtained during CRP with the need to prepare the land to seeding. Excess biomass can be managed by burning, haying, tillage, and converting the land into a pasture. <u>http://gage.unl.edu/crpconversionofcropland</u>

Rodent activity

There are CRP fields that are extremely rough. After the CRP contract expires but before planting, it may be necessary to roll the field or perhaps go over it with a light disking. The most effective treatment to eliminate or reduce rodent populations is to moldboard plow the field, but this may not be feasible if the field has been designated as HEL. Information on rodent control is available at <u>http://www.uwyo.edu/plantsciences/wyopest/trainingmanuals/smaniman.pdf</u>.

Weeds (Additional information is available in Chapters 30, 31, 33, and 34)

When the field is scouted, an inventory of the weed types densities should be created. Based on this survey an action plan can be created. Various chemical options to control different species are available at <u>https://extension.sdstate.edu/category/weeds-invasive-plants</u> and <u>http://www.extension.colostate.edu/SEA/</u> Cropping/CRP%20press%20release.pdf.

When scouting the field, a GPS should be used to identify the coordinates of serious weed problems. These areas may require targeted activities. If corrective management is needed, it is possible that noxious weeds can be managed prior to the termination of the contract. Control of noxious weeds is required by South Dakota statute. Begin the process by reviewing your CRP contract and determining the release date. Ideally, you would like to initiate a comprehensive weed control program years before the expiration of the CRP contract or at least in the fall of the final year of the CRP contract. However, prior to expiration of the CRP contract, all management must be coordinated with (and obtain written approval for your proposed management) your local Farm Service Agency (FSA) county committee and FSA personnel, and get technical assistance from the NRCS. If you receive written approval before the contract expiration or if the contract has expired, a comprehensive vegetative control program should be initiated.

Be advised that cool-season grasses may require a different control program than warm-season grasses and broadleaf weeds, brush, and even small trees. A troublesome noxious weed often found in large patches is Canada thistle (*Cirsium arvense*). There are several options for controlling this weed, although it may take several treatments before acceptable control is obtained. Another example, if the field contains trees and shrubs that are cut, the stumps should be treated with Tordon[®] (*picloram*) shortly after cutting. However, if immediately going into soybean production, areas treated with Tordon[®] will be injured for the minimum of one and up to five seasons, depending on rate, soil type, and climate conditions. A comprehensive CRP weed control document is available at <u>https://extension.sdstate.edu/category/weeds-invasive-plants</u> or <u>http://www.extension.colostate.edu/SEA/Cropping/CRP%20press%20release.pdf</u>.

Insects (Additional information is available in Chapters 35, 36, and 37)

During scouting, the extent and types of insects in the field should be noted. High populations of seed corn maggots, grubs, wireworms, cutworm, stalk borer, and armyworms have been reported in CRP ground. Soybeans planted into CRP ground should be treated with a seed treatment insecticide (Chapter 8).

Disease (Additional information is available in Chapters 57, 58, 59, and 60)

Soil fungi that cause early-season diseases in soybeans can survive for long periods in the soil even in the absence of soybean crops. A fungicide seed treatment is advised. Planting should be delayed until soil temperatures are above 55°F to avoid damping-off and seedling blight. Many grasses present in the CRP may harbor diseases that row crops are susceptible to. For example, wheat is sensitive to take-all, a root and crown rot disease, that is harbored by brome and wheat grass. If diseases are a possibility, consider modifying your rotation. <u>http://gage.unl.edu/crpconversionofcropland</u>

Soil fertility (Additional information is available in Chapters 20, 21, 22, 23, 25, and 26)

Soil sample to ensure that phosphorous and potassium levels are adequate. Fertilize according to SDSU recommendations based upon soil samples. It's likely that many soil nutrients may be in the low to medium categories. Since it is also likely that many years have passed since soybeans were last planted, it is advisable to use soybean rhizobia inoculants. It may also have been several years since fertilizer was applied, so consider using a starter fertilizer to increase early season plant growth. Rebuilding the soil nutrient levels may take many years.

References and additional information

- Blocksome, C.E., K.L. Herbel, R.D. Jones, and V.H. Fick. 2008. Decisions concerning expiring CRP contracts. MF-2827. Kansas State University. Available at <u>http://www.ksre.ksu.edu/library/lvstk2/</u> <u>mf2827.pdf</u>
- USDA-FSA, Conservation Reserve Program. Available at <u>http://www.fsa.usda.gov/FSA/webapp?area=hom</u> <u>e&subject=copr&topic=crp</u>

Acknowledgements

Funding for developing this chapter was provided by the South Dakota Soybean Research and Promotion Council, USDA-AFRI, and South Dakota 2010 research program.

Carlson, C.G., and C.L. Reese. 2013. Converting Conservation Reserve Program (CRP) land to row crop production. In Clay, D.E., C.G. Carlson, S.A. Clay, L. Wagner, D. Deneke, and C. Hay (eds). iGrow Soybeans: Best Management Practices for Soybean Production. South Dakota State University, SDSU Extension, Brookings, SD.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www. ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

- mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410;
- (2) fax: (202) 690-7442; or
- (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture.