

A contour buffer strip protecting highly erodible land in Iowa.



Photo: Jason Johnson Iowa NRCS

CONSERVATION COMMUNICATORS GUIDE: NON-CROPPED ACRES

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On most farm operations, there are acres actively cultivated for crop production and other acres that are non-cropped. These non-cropped acres aren't used to produce crops. Instead, they might lie fallow; contain a set-aside or timber; be placed under a conservation practice such as buffers, native grass or waterways; or feature a combination of those uses. Farmers managing acres for crop production often prioritize productivity and profitability. Yet non-cropped acres can also benefit farm operations by reducing environmental impact and providing ecosystem services.

Each U.S. cropland acre holds potential- yield potential, revenue potential, conservation

potential. Yet too often, the first two factors overshadow the third. This contributes to an inaccurate narrative that farmers, the environment and society can only benefit from actively cropped acres.

This Conservation Communicators Guide: Non-Cropped Acres offers a more expansive perspective. These insights can frame a more holistic narrative, empowering conservationists who work with farmers to articulate the many benefits of natural resource stewardship from both acres actively planted to crops and non-cropped acres. Using this approach, producers can derive the greatest benefit from every cropland acre, even those not actively cropped.

NON-CROPPED ACRES IN THE U.S.

There are 349 million cropland acres across the U.S., according to a 2017 report from USDA's National Agricultural Statistics Service (NASS). The application of conservation agriculture practices on those acres and adjacent ones can help farmers unlock each type of potential across all acres in a farm operation, including

environmental outcomes such as:

- reducing soil erosion
- maintaining or enhancing soil quality
- improving water quality
- managing the quantity of water available for irrigation
- provide food and cover for wildlife and pollinators

Often, the acres best positioned to be taken out of production and used as a conservation mechanism

As the adage goes: "Farm the best, leave the rest."

are less productive than others. Although farming those acres might increase overall farm yield, there isn't a guarantee it will improve overall profitability. An alternative approach to improve profitability can be converting marginal acres to ecosystem services through conservation and away from production.

As the adage goes: "Farm the best, leave the rest."

UNDERSTANDING THE IMPORTANCE OF NON-CROPPED ACRES

Recent research conducted by Trust In Food, in collaboration with Syngenta, collected insights from over 300 farmers representing 813,195 acres of total cropland on their conservation farming techniques. Collectively, these farmers manage nearly 80,000 acres (~10% of the total) that are non-cropped — meaning not planted



Dave Budeau's Wetland Reserve Easement - Marion County, Oregon



Improving Monarch Habitat on E4 Ranch

■ INTENTIONALLY IDLE

■ As part of a farmer's crop rotation schedule, intentionally sequencing cultivated acres and idle acres as a strategic part of crop rotation management can increase soil fertility, crop yield and soil nutrients, improve soil structure, reduce soil erosion, lower concentrations of pests and disease, and more. If implemented properly, the financial benefits of this sequencing of acres in and out of production are usually recognized in reduced fertilizer and pesticide inputs as well as improved yields on subsequent crops. This practice of Conservation Crop Rotation was implemented by 78% of

farmers in recent research by Trust in Food and Syngenta corroborating the finding of ~10% of total acres being non-cropped.

■ Acres can also categorize as intentionally idle when cultivated as grassland^{iv}.

■ IDLE BY NECESSITY

■ The decision to leave acres out of production can be due to several reasons, such as limited production potential, excess moisture, highly erodible land designations, varying topography or soil types, proximity to waterways or sensitive land, and more. However, acres left idle out of necessity still have the potential to deliver economic and environmental benefits.

to row crops and used for fallow, set-aside, conservation, buffers etc. This figure matches the USDA's Economic Research Services findings of about 349 million total cropland acres in the U.S., 39 million of which (~11% of the total) were non-cropped.

Idle or non-cropped are acres of cropland on which no crops were planted. Generally speaking, there are two main categories of non-cropped acres: those intentionally left idle as part of a plan and those left idle out of necessity because they are not well suited for cultivation.

Each acre of cropland has potential and just because each acre might not be as productive as others does not mean those acres cannot provide direct farmer benefits.

ENGAGING WITH FARMERS ON NON-CROPPED ACRES

By taking a holistic approach focused on efficiency and impact,

communicators can engage with farmers around their non-cropped land to build an understanding of the impact of committing those acres toward a conservation purpose and the value they can provide to the farmer.

Here are three steps to take in engaging farmers on non-cropped acres:

STEP ONE:

1 IDENTIFY FARMER'S PRIORITIES

The key to successful stakeholder engagement is to understand their needs first and make recommendations based on those needs second. Every farming operation and farmer is different. When engaging with farmers on their non-cropped acres, it is important to establish their priorities in the beginning to tailor the engagement to their unique needs.

■ **Identify farm plans and goals over the next 3, 5 and 10-plus years.** This establishes a timeline of needs. Many easements and some conservation programs for retired land require long-term contracts and might not fit a farmer's needs in the short term.

■ **Establish a range of expected revenue per acre.** Farmers tend to know what they need to earn per acre to break even and to make profit. These insights can help conservationists make recommendations about programs that might suit them best. For example, financial data can be used to identify acres that might be best placed under easement or acres where a cost-share program can help finance buffer areas.

■ **Talk about whether the farmer owns the land or rents it.** If the farmer is renting their cropland, they will likely need to involve the landowner in discussions around conservation practice options for the land's marginal acres.

■ **Assess the characteristics of marginal acres.** What are the less-productive acres like? Too wet? Highly erodible? Adjacent to a streambank? Does the farmer want to fully stop production on the acres in return for an annual conservation rent payment? Do they want to improve upon the acres by adopting conservation practices and receiving cost-share support or technical assistance? Answers to these questions will help communicators identify the best conservation practice options for the farmer.

■ **Inquire about any special interests.** Is the farmer a hunter? Do they have an interest in reducing the environmental footprint or participating in ecosystems service markets? Are they a birdwatcher? Conservation planning on non-cropped acres can provide benefits outside of filtration and soil health improvements. Communicators can use these insights to provide targeted help, such as through development of wildlife and pollinator habitat, establishment of wildlife corridors or participation in ecosystem service markets.

STEP TWO:

2 DISCUSS THE BENEFITS

The potential of cropped acres is usually calculated based on the price farmers receive for their crop and their cost of production. The benefits of non-cropped acres

might not be as obvious especially short-term but are very real. Some of the potential of non-cropped acres includes:

- ✓ Economic gain from financial and technical assistance from participation in federal conservation programs offered by USDA
 - ✓ Operational efficiency and cost savings from reductions in fuel, labor, time and inputs
 - ✓ Enhancement of wildlife and pollinator habitat
 - ✓ Retention of in-field nutrients
 - ✓ Manage plant pests (weeds, insects and diseases)
 - ✓ Filtration of runoff after severe weather events, keeping more sediment and nutrients in the field and out of adjacent waterways
 - ✓ Crop protection from windbreaks
 - ✓ Reduction in soil erosion
 - ✓ Carbon capture and storage
- While all these benefits might not be blatantly economic, each present an opportunity to optimize well-managed farm operations while meeting multiple objectives associated with profitability, productivity and positive environmental outcomes.

STEP THREE:

3 PROVIDE OPTIONS

There are several options depending on a farmer's unique needs and situation for what to do with their marginal land they wish to transition into a conservation practice. Here are some of the options available to farmers who want to improve upon their conservation ag practice implementation rate or receive an economic return on acres retired out of production:

Conservation Stewardship Program (CSP)

Administering organization	USDA's Natural Resource Conservation Service
What is it?	CSP helps farmers build upon their existing conservation efforts while fortifying their whole farm operation. CSP operates on five-year contracts.
What are the benefits?	Farmers can receive payments for qualified acres where conservation practices have already been established and to implement additional conservation practices.

CSP works well for farmers who:

- Have successfully implemented conservation practices on their farm.
- Are interested in expanding their conservation practices.
- Are interested in five-plus-year conservation goals for their farm.

Conservation Reserve Program (CRP)

Administering organization	USDA's Farm Service Agency
What is it?	CRP provides an annual rental payment to farmers for the removal of environmentally sensitive land from production and establishment of conservation practices such as grassed waterways, erosion control structures, and buffers. These contracts are legally binding and are 10 to 15 years in length.
What are the benefits?	Farmers in CRP receive annual rental payments on enrolled acres as well as time to establish conservation practices on sensitive lands.

CRP works well for farmers who:

- Are interested in annual payments for land out of production.
- Can afford to retire land out of production for 10 to 15 years.
- Wish to establish conservation practices long term.
- Anticipate a gap of time between the current farmer retiring and the next generation taking over the farm business.

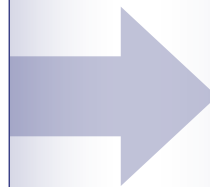


Environmental Quality Incentives Program (EQIP)

Administering organization	USDA's Natural Resource Conservation Service (NRCS)
What is it?	EQIP provides financial and technical assistance for farmers looking to initiate conservation practices on their operation. Farmers can apply for EQIP any time, if approved for participation, farmers will receive financial assistance for implementing a practice in the form of cost-share, with NRCS covering a significant portion of the cost associated with implementation.
What are the benefits?	Farmer benefits from EQIP are cost saving as the NRCS will share the cost of implementation with a farmer and the amount of land under conservation practices increases while the farmer continues to actively farm while improving their overall farm efficiency.

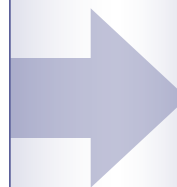
EQIP works well for farmers who:

- Are actively farming and have some marginal acres.
- Are looking to improve their conservation ag practices in the next one to three years.
- Wish to share the cost of implementation.
- Are interested in improving the overall efficiency of their operation.



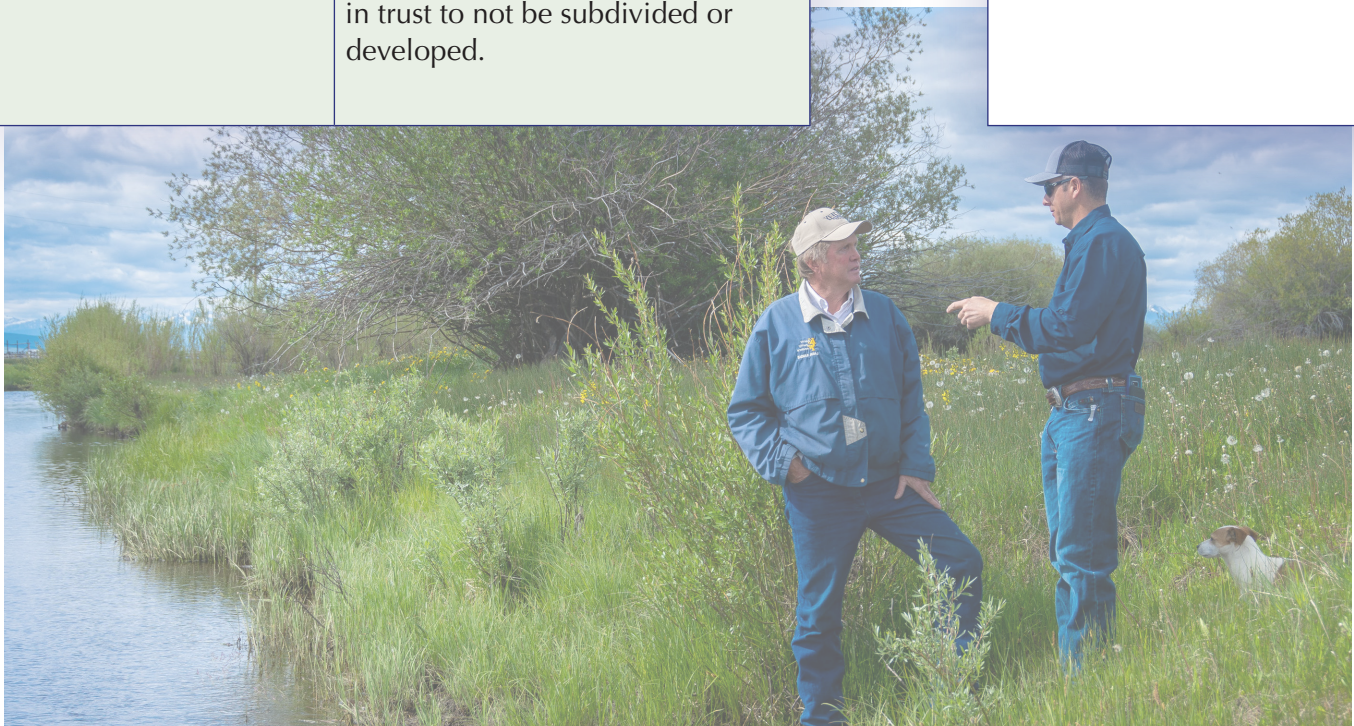
Conservation and Wildlife Easements

<p>Administering organization</p>	<p>Commonly, land trust organizations are the holders of conservation easements and a quick internet search can identify the land trust organizations that operate in the landowner's county, state or region.</p>
<p>What is it?</p>	<p>An easement involves voluntarily selling or donating land rights to protect land's conservation values and provide public benefit such as water quality improvement, land preservation, wildlife habitat and outdoor recreation while providing an economic return to the owner. When agreeing to a conservation easement, the landowner still owns the property, but the easement agreement restricts the landowner's rights, such as the right to develop or divide their land, while under the contract.</p>
<p>What are the benefits?</p>	<p>Easement agreements monetarily incentivize the permanent retirement of land. Farmers and landowners receive annual payments while the land is held in trust to not be subdivided or developed.</p>

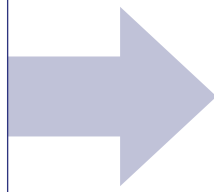


Conservation and wildlife easements work well for farmers who:

- Have life-long conservation goals for their land.
- Are willing to permanently retire land out of production.
- Wish to continue to own the land and receive annual payments.
- Are interested in retiring their land from production to improve and/or provide ecosystems services through an easement agreement.
- Want to contribute to the restoration and conservation of wildlife and pollinator habitat.



Carbon and Ecosystem Service Market Participation	
Administering organization	Various organizations are working out farmer participation in carbon and ecosystem service markets.
What is it?	Carbon market participation incentivizes farmers to implement conservation ag practices on their farm that mitigate negative environmental consequences in exchange for a supplemental payment. Researchers, organizations and policy makers are working to ensure farmer participation in carbon or ecosystem service markets make sense for the farmer and provide a proven, positive environmental impact through the capturing and storing of carbon on farmlands.
What are the benefits?	Farmers can actively farm while receiving payments for carbon capture and other ecosystem services.



- Carbon market participation works well for farmers who:**
- Have undisturbed marginal acres.
 - Wish to receive a payment for the carbon capture potential of their non-cropped acres.
 - Have an interest in reducing greenhouse gas emissions.
 - Want to participate in an emerging market.
 - Growers who wish to receive payment for water quality or quantity improvements.

NON-CROPPED ACRES CAN PAY

Whether from USDA, state agencies or conservation nonprofits, money and technical assistance are available to farmers to convert marginal cropland acres out of production and into conservation. Even after land is taken out of production, several of those programs allow farmers to continue earning income from those acres. Once communicators understand

a farmer's needs and interests, they can identify the best programs and other tools for the operation.

Because many conservation payment programs require substantial amounts of paperwork, as a communicator you can consider making yourself available to help them through the application process. This ensures the application is submitted correctly and establishes a relationship with the farmer.

This report is intended to help conservationists support farmers in recognizing the full economic, social, and environmental potential of non-cropped acres. Even more than that, it can contribute to the development of relationships between conservationists and farmers, creating an environment in which the adoption of conservation practices can be accelerated.

For more information on the resources above and additional resources related to conservation agriculture, visit: farmers.gov agweb.com/acam

ⁱ <https://www.fsa.usda.gov/programs-and-services/conservation-programs/>

ⁱⁱ Coppess, J. "The Conservation Question, Part 1: An Introduction." farmdoc daily (9): 195, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, October 17, 2019

ⁱⁱⁱ Valcu-Lisman, A., Kling, C., & Gassman, P. (2016). *The Optimality of Using Marginal Land for Bioenergy Crops: Tradeoffs between Food, Fuel, and Environmental Services. Agricultural and Resource Economics Review*, 45(2), 217-245. doi:10.1017/age.2016.20

^{iv} <https://www.ers.usda.gov/data-products/major-land-uses/glossary/#idle>