

FACTSHEET

Gateway to Grazing: Impacts of Cost-Share on Grazing Metrics, Farmer Learning and Economic Impact

Practical Farmers of Iowa has run cost-share programs for over a decade, and specifically to support grazing operations since 2022. Practical Farmers' initial grazing cost-share program focused on temporary grazing supplies. Access to those supplies enabled enrolled farmers to more effectively and efficiently manage grazing. Participants reported that they increased the days and acres grazed, saved money on stored feeds and, in some cases, were able to scale significantly.

Inspired by the remarkable growth in certain operations, Practical Farmers designed a follow-up program to support smaller-scale, beginning and limited-resource farmers who are focusing on smaller livestock with quicker generation intervals or shorter time to market. Improving grazing management – in particular, allowing for greater stocking rates – means that farmers with limited access to land or money can scale their operations while protecting and enhancing soil and forage resources.

This second program spanned the growing seasons of 2024 and 2025, with 39 beginning farmers enrolled. Of these, 35 farmers responded to a follow-up survey, though not all farmers completed every question or section. One farmer was unable to procure livestock during the grant period, so their response is not included in the grazing metrics section.

Grazing Management Outcomes

Participants were asked to track some grazing management metrics: rotation frequency, the number

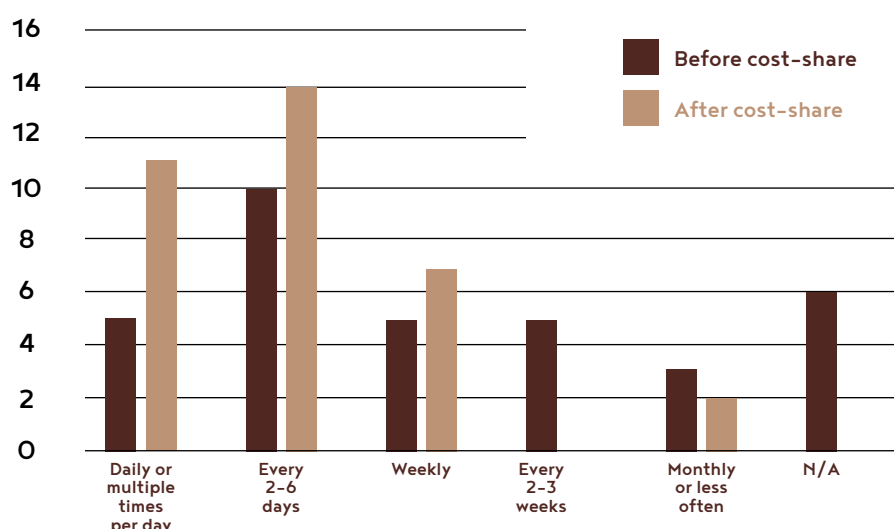
of times pastures were grazed during the season and the duration of rest periods between grazing events. Participants reported their rotation frequency before adding the infrastructure and again afterwards (Figure A). Table 1 shows the changes between individual frequencies.

While there is no single best rotation frequency, nor single definition of “managed,” “prescribed” or “regenerative” grazing, it is generally accepted that rotating more often is good practice. It prevents plants from being regrazed during the regrowth period and encourages more uniform grazing and manure distribution. Survey responses show desirable outcomes: no continuous grazing or grazing without rotations after the addition of infrastructure; 35% of participants increasing their rotation frequency; and 74% of participants rotating weekly or more often.



PFI's grazing cost-share supported the purchase of chicken tractors and electric netting, which enabled farmers to raise more animals with greater safety and security, while allowing them access to pasture for their wellbeing.

Figure A. Describe the frequency you moved your animals.



N/A indicates either this was their first year grazing, or they grazed continuously before the program.

Table 1. Change in rotation frequency after cost-share.

Comparison between individual responses from before and after the grazing infrastructure: Did rotation frequency increase, decrease or remain the same?	
Increase	12
Decrease	2
No change	17
N/A (first year grazing)	3
Total responses	34

Table 2. Change in pasture rest period after cost-share.

Did the new infrastructure change your pastures' rest periods?	
Pastures had longer rest periods	20
Pastures had shorter rest periods	0
Hard to say – some rest periods were longer, some were shorter	4
No change – rest periods were about the same as normal	4
Not applicable (either this was their first year grazing, or they grazed continuously before the program)	6
Total responses	34

Generally, as rotation frequency increases, so do rest periods between grazing events on the same pasture. Longer rest periods are also generally considered an indicator of good grazing management, as it means plants have adequate time to recover leaf area and root mass. Most participants (59%) reported that pastures did indeed have longer rest periods, and none reported shorter rest periods (Table 2). The balance of respondents were either rotationally grazing for the first time, did not change rest periods or found that it varied between pastures.

Grazing Metrics

Participants reported the days, acres and livestock types grazed for three scenarios: the actual metrics from the year infrastructure was added; their best estimates of what that year would have been like without the infrastructure; and actuals for the prior year.

Using these scenarios allowed comparison of true

before-and-after changes. It also enabled those studying the data to suggest reasons for the changes observed – for instance, if changes were due to the infrastructure, were part of the farmer's plans or perhaps were a consequence of weather conditions or forage growth. Since not all participants answered all questions (especially the estimate for the current year had there been no cost-share), the same analysis is also shown for only those respondents who answered all three sections.

Results showed that participants were able to graze more days with the cost-share – around 70 extra days per farm compared with estimates of days they'd have grazed that season without the cost-share. Compared with the prior year, participants reported they were able to graze an additional 80 days per farm (Table 3). Extending the grazing season greatly reduces the need for purchase of stored feeds and likely saved the farmers money.

Table 3. Days of grazing under three scenarios: year infrastructure was added, estimates of that year without infrastructure and prior year.

	Actual – with cost-share	Days grazed Estimate – without cost-share	Prior year
Total across all responses	6,626	3,218	2,787
Average per respondent	195	124	111
Responses	34	26	25
Total for farms responding to all items	4,818	3,038	2,787
Average per respondent	193	122	111
Responses	25	25	25

Table 4. Acres grazed under three scenarios: year infrastructure was added, estimates of that year without infrastructure and prior year.

	Perennial pasture grazed (ac)			Cover crops grazed (ac)			Timber or brush grazed (ac)		
	Actual – with cost-share	Estimate without cost-share	Prior year	Actual – with cost-share	Estimate without cost-share	Prior year	Actual – with cost-share	Estimate without cost-share	Prior year
Total across all responses	1,076	939	996	223	48	49	297	136	134
Average per respondent	35	41	32	20	6	5	17	11	8
Responses	31	23	31	11	8	11	17	12	17
Total for farms responding to all items	918	939	940	192	48	48	237	136	116
Average per respondent	40	41	41	24	6	6	20	11	10
Responses	23	23	23	8	8	8	12	12	12

Farmers grazed more acres following the addition of cost-share-supported infrastructure, but not in all categories (Table 4). Notably, one respondent significantly changed acreage following the addition of infrastructure. This person reported grazing 100 fewer acres of perennial pasture but grazing an extra 50 acres of timber or brush. The participant also reported that without the infrastructure, those changes would not have occurred. This result drives the slightly lower perennial pasture acreage following cost-share compared with the prior year, and the current year without cost-share. However, the acres of cover crops and timber or brush increased following infrastructure.

Across farms responding to all categories: 1,347 acres were grazed the year infrastructure was added, 1,123 acres were estimated to be grazed if infrastructure had not been added and 1,104 acres had been grazed the year prior. Infrastructure allowed about 200 additional acres to be grazed, an increase of roughly 20%.

Livestock Metrics

Herd or flock sizes were greater in the year with infrastructure than either the prior year or the estimate of the current year if no infrastructure were added (Table 5). Based on the responses of participants who responded to all three scenarios, farmers grazed a total of 4,312 animals with infrastructure compared with 3,434 animals the year prior and an estimated 3,032 animals if no infrastructure had been added.

These results suggest that not only did the infrastructure allow expansion, but farmers may have decreased herd or flock size had it not been available. The infrastructure increased the grazing herd size by approximately 25% compared to the year prior, and by 42% compared to estimates without infrastructure. In comments, some participants noted that they purchased additional animals; others simply retained more females rather than selling them due to insufficient forage availability.

Table 5. Herd or flock size under three scenarios: year infrastructure was added, estimates of that year without infrastructure and prior year.

	Cattle – beef			Cattle – dairy		
	Actual – with cost-share	Estimate without cost-share	Prior year	Actual – with cost-share	Estimate without cost-share	Prior year
Total across all responses	263	200	221	13	6	6
Average per respondent	20	25	17	4	3	3
Responses	13	8	13	3	2	2
Total for farms responding to all items	216	200	190	6	6	6
Average per respondent	27	25	24	3	3	3
Responses	8	8	8	2	2	2

	Sheep			Goats			Swine		
	Actual – with cost-share	Estimate without cost-share	Prior year	Actual – with cost-share	Estimate without cost-share	Prior year	Actual – with cost-share	Estimate without cost-share	Prior year
Total across all responses	541	365	405	473	264	235	41	23	29
Average per respondent	42	37	31	39	26	21	8	12	6
Responses	13	10	13	12	10	11	5	2	5
Total for farms responding to all items	463	365	348	372	258	181	32	23	14
Average per respondent	46	37	35	41	29	20	16	12	7
Responses	10	10	10	9	9	9	2	2	2

	Poultry – eggs			Poultry – meat		
	Actual – with cost-share	Estimate without cost-share	Prior year	Actual – with cost-share	Estimate without cost-share	Prior year
Total across all responses	998	585	719	2,520	1,595	2,175
Average per respondent	71	65	55	148	114	145
Responses	14	9	13	17	14	15
Total for farms responding to all items	883	585	520	2,340	1,595	2,175
Average per respondent	98	65	58	167	114	155
Responses	9	9	9	14	14	14

Economic Impacts

Participants were asked about the economic impacts of the program and the infrastructure (Table 6). No participants reported a negative impact, though some found neither a benefit nor a downside. In comments, some participants noted increased costs (such as purchasing additional animals, or increased feed purchases for winter) that show how even the opportunity and ability to expand grazing access or herd size does not equal an instant economic win.

Table 6. Impact of PFI grazing cost-share program on finances

How did the grazing infrastructure and changes you implemented impact your farm's financial situation?	
Extremely positively	11
Very positively	5
Somewhat positively	14
Positively	3
Neither positively nor negatively	2
Total responses	35

Participants were asked to estimate how long they expected the infrastructure to last (in years). The estimated lifespan was 10.8 years, based on the average of 25 responses. While each subsequent year might not involve such drastic changes as the first, participants do expect the benefits to endure.

Participants were also asked to share a single number that represented the total financial benefit of the infrastructure in the first year. This could include savings in purchased feed, sales from additional animals that could be raised and so on. Responses ranged from as low as \$300 to as much as \$12,000. Overall, 18 respondents reported a total benefit of \$62,993, or an average benefit of \$3,500 each. In comments, one participant noted that they doubled the number of broilers they raised because of the infrastructure. This increase boosted their cash revenue while decreasing per-animal costs because at that scale, they could buy chicks and feed in bulk.

In addition to quantitative evaluation, participants were asked to describe other benefits. These responses, which highlight a range of qualitative experiences, were hard to turn into metrics:

With the new tractors we were able to see the differences in soil that had been grazed by the birds compared to where they hadn't been yet.

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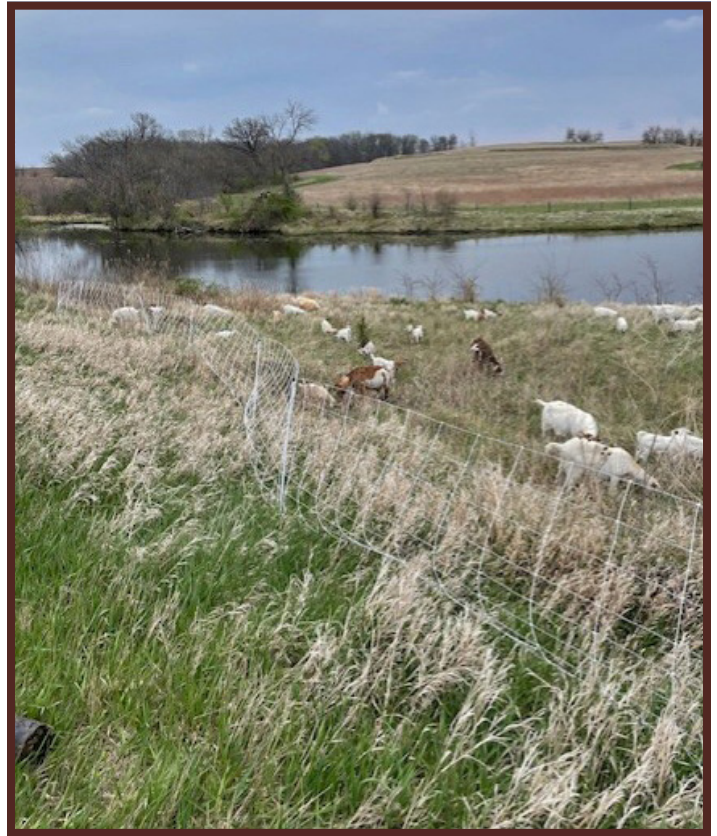
I was in amazement of how healthy, fast growing and clean the market broilers were that were raised on the pasture. I have raised broilers for many years and honestly did not believe that it would impact them as much as it did. For instance, I still had birds from the same hatch that I raised in the barn at the same time. They had to be treated for coccidiosis and probably averaged a pound less at harvest weight. Just an overall better bird was on pasture.

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Labor during spring season was less as animals were out on pasture more early in the season.

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I saw an improvement in animal health since they had a wider range to graze. They were also able to graze taller



The grazing cost-share supported purchase of portable electric netting and solar energizers, allowing goats to be rotated on areas otherwise difficult to enclose, such as steep terrain near pond edges.

forage and the worm load was decreased.

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With the increase in goat impact we have seen a marked increase in bobwhite quail population along with a myriad of other songbirds.

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This was an extremely rewarding project for me. Having been new to raising sheep, I was able to be out in the pasture with them more. Through the frequent fencing moves, I was able to observe their behavior, forage tendencies, and improve handling capabilities. I have been able to share what I have learned with other people. I want a flock that doesn't require me to feed them grain, this has significantly helped me worked towards that goal.

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I was also able to separate my flock into groups based on age/nutritional requirements which resulted in healthier and more efficient animals.

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Being able to rotate meant that my paddocks had more recovery time! It's amazing how different they look this year compared to previous.

Overall Program Evaluation and Learning Outcomes

Participants were asked about the program itself, including timelines, usefulness of resources and their assessment of knowledge gained and changes to their farm system. All farmers were required to check in with PFI staff about their intended use of funds and plans for grazing, and had the opportunity to engage in more formal grazing planning if needed. Many farmers had plans in mind already and needed little technical assistance; others required more engagement. Participants found the consults useful, though not all reported learning new information (Table 7).

Participants indicated that the program positively impacted their grazing management and that they intended to continue with changes they made. The program also helped farmers work towards achieving farm financial goals (Table 8).



Electric netting creates secure but easy-to-move paddock divisions for small ruminants, allowing cost-share recipients to rotate animals. This supports forage quantity and quality, efficient land use, and reduces parasite risk for the animals.

Table 7. Farmer learning outcomes from consultation and overall program.

Please use the following scale to evaluate the usefulness of the grazing consultation.		How would you rate your overall change in knowledge from this program?	
Very useful	12	Very large change	3
Useful	10	Large change	6
Moderately useful	3	Moderate change	13
Somewhat useful	2	Some change	2
Not useful	0	No change	3
Total responses	27	Total responses	27

Table 8. Farmer assessment of impacts on changes and future plans.

Please rate your level of agreement with the following statement: "The amount of cost-share funds provided by this program allowed me to make a meaningful impact on my grazing management."		How likely are you to continue with any implemented changes to your farm or farmland management based on this program?	
Strongly agree	23	Very likely	32
Somewhat agree	4	Somewhat likely	3
Neither agree nor disagree	0	Not sure	0
Somewhat disagree	0	Somewhat unlikely	0
Strongly disagree	0	Very unlikely	0
Total responses	27	Total responses	35

Discussion, Implications, and Future Outlook

This second iteration of the grazing infrastructure cost-share program was designed to specifically assist smaller-acreage, limited resource and beginning farmers who wanted to start, scale up or improve their grazing management. The measured program goals were: 1). increasing days, acres or animals grazed by 25%; and 2) farmers reporting greater returns (either through sales of animals or increase in value of retained animals) while improving grazing management.

Using values from the year with infrastructure compared to prior year for farmers who responded to all three scenarios, these goals were met:

- 73% increase in days grazed
- 22% increase in acres grazed
- 25% increase in grazing herd or flock size
- 95% reporting positive impact on farm finances

The most significant impact was the increase in days of grazing. Extending the grazing season is an important part of reducing feed costs, which account for the majority of annual expenses for livestock. The number of grazing days increased more than acres grazed. This result suggests that it is not just access to land that limits livestock operations, but the ability to efficiently and effectively manage it. The tools, supplies and guidance farmers received through the grazing cost-share program enabled them to make better use of time, energy and land resources.

Since 2022, PFI's grazing cost-share programs have provided 79 farmers with funds and technical support to improve grazing management on over 9,000 acres. Farmers rate our programs as useful, educational and supportive of their farm operations. We hope to continue offering grazing infrastructure cost-share and are seeking consistent, long-term funding.

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