

ASSESSING THE EFFECTIVENESS OF AN ALBERTA-BASED AGRI-ENVIRONMENTAL EXTENSION PROGRAM

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1. The Problem

Governments and non-governmental organizations have developed and implemented a variety of programs to encourage farmers to adopt stewardship actions. However, uptake of these actions does not always meet targeted levels, resulting in the under-provision of environmental benefits. Here, we evaluate the efficacy of an extension service, the Natural Advantage Program (NAP), in encouraging Alberta producers to adopt stewardship actions and access related forms of assistance, including high-value assistance offered by the National Farm Stewardship Program.



natural advantage:
THE ON-FARM WILDLIFE AND BIODIVERSITY PLANNING SERVICE

“Cadillac” Extension Program

Response to low uptake of NFSP funding for wildlife habitat & biodiversity BMPs

2007-2009

on-farm assessment | Recommends actions & assistance | **248** participants | Education to produce behaviour change

~\$500K

Did it succeed?

Logos: Agriculture and Agri-Food Canada, Ducks Unlimited Canada, The Alberta Environmental Farm Plan Company Progressive Stewardship

2. Our Research

Research Questions

1. To what extent did NAP participants implement actions and access forms of assistance recommended by the NAP?
2. Did NAP participants implement more actions and access more assistance than producers who did not receive the NAP service?
3. What factors contributed to participating producers’ decisions to adopt actions and access assistance?

Research Methods

- Surveyed all NAP participants who agreed to be contacted (215/248).
- Analyzed survey responses from 150 participants (70%), including 40 who signed up for, but did not receive, the NAP service in 2009.
- Estimated two econometric models to identify factors linked to adoption.

3. Completion of Recommended Actions

As Table 1 shows, NAP recipients were most likely to complete small-scale actions.

Table 1. 2007-2008 respondents’ completion rates of actions recommended by the NAP.

Action Type	Stated Completion Rate (%)	Total Recommendations Made (#)
Small operational changes	81.3	75
Haying/grazing adjustments	74.4	82
Install remote watering	70.0	60
Increase buffer area	63.3	60
Fence critical/sensitive habitat	56.7	127
Restore wetlands	45.0	20
Add vegetation (excludes buffers)	42.9	77
Plant new crop	23.5	81
Sign conservation easement	23.1	26
Coursework, nest boxes & bank stabilization	20.6	73
Total	52.3	681

4. Access of Referred Sources of Assistance

Respondents were most likely to access free information relating to environmental management. Attempts were not made to access the majority of referrals (Table 2).

Table 2. 2007-2008 respondents’ access rates of assistance referred by the NAP.

Organization (Number of Programs Referred)	Successful (%)	Unsuccessful (%)	Did not try (%)	Total Referred (#)
Canada-Alberta Farm Stewardship Program (9)	15.1	8.6	64.0	139
Ducks Unlimited Canada (8)	9.3	6.0	77.3	150
Prairie Farm Rehabilitation Administration (2)	36.3	7.2	52.2	69
Organizations Offering Conservation Easements (3)	0.0	0.0	100.0	8
Organizations Offering Informational Assistance (7)	78.4	14.8	5.7	88
Total (29)	28.4	8.8	56.4	454

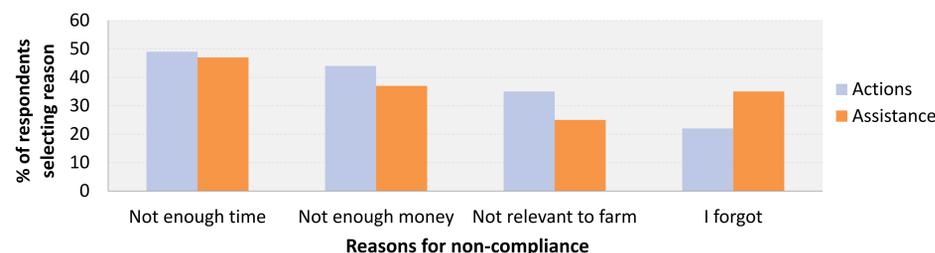
5. Outcomes with and without NAP Participation

Compared to 2009 respondents, who did not receive the service due to its early termination, 2007-2008 respondents were significantly more likely to:

- Implement actions relating to **small operational changes, haying and grazing adjustments, remote watering, buffers, and fencing of critical or sensitive habitat.**
- **Access assistance** to help implement actions.

6. Reasons for Non-Compliance with Recommendations

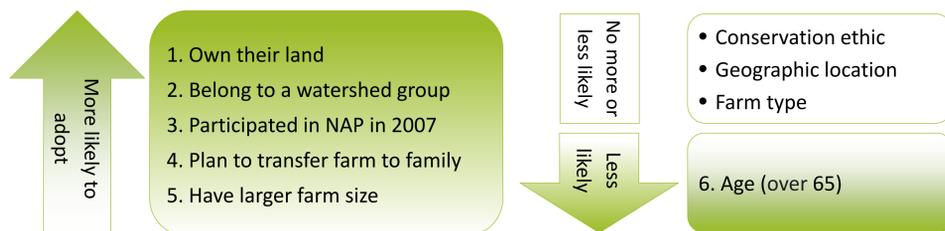
Figure 1. Most frequently selected reasons for non-compliance with recommended actions and assistance by 2007-2008 respondents.



7. Factors Related to Action Completion

Some types of individuals were more likely to adopt actions than others (Figure 2).

Figure 2. Impact of farm- and personal-level characteristics on the likelihood of a 2007-2008 participant adopting any action.



8. Summary of Findings (F) & Policy Implications (P)

- F1** Participants did adopt more actions and access more assistance than non-participants, but uptake of the large-scale actions and significant sources of assistance that the NAP was designed primarily to promote was low.
- P1** Targeting the extension approach to the type of practice being promoted may prove more successful and cost-effective than a blanket approach.
- F2** Actions were not adopted uniformly by all types of producers.
- P2** Different extension approaches may be needed for different producer types.
- F3** Evaluation provides insight into program performance & improvement options.
- P3** Encourage evaluation, building evaluation plans into program design.

For more information:

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