



ELECTRIC FENCE SUPPORT PROGRAM REPORT



2020



Background

WildWise Yukon (WWY), and its umbrella organization, The Centre for Human-Wildlife Conflict Solutions (CHWCS), is a community driven, non-profit society established in 2012. WildWise Yukon's mission is to reduce the number of human-wildlife conflicts in the Yukon through research, education and public outreach programs. This is accomplished by working with the public, governments and other organizations to promote a safe living environment for wildlife and people.

In 2018 WWY compiled human-wildlife conflict occurrence reports into a database for Environment Yukon, including documentation of the attractants involved in conflicts calls investigated by Conservation Officers. We are now working on reducing conflict that arises due to each of these attractants. Chickens were identified as the attractant in several cases. Additionally, the City of Whitehorse is in the final stages of development of an Urban Food Strategy which encourages local, small scale food production. We anticipate an increase in chicken-raising operations and, therefore, potential for human-bear conflict within the Whitehorse City Limits. To address this, WWY piloted a Bear Safe Egg Producer Program in 2018, funded by the Yukon Fish & Wildlife Enhancement Trust (hereafter, "the Trust"). The program which aimed to support a small number of egg producers to install electric fencing. Interest in the program was low and the reasons identified were a perceived lack of need, low level of appreciation of the benefits of electric fencing, and low confidence in installation and operation of an electric fence.



Summary

In late winter, 2020, the Centre for Human-Wildlife Conflict Solutions (WildWise Yukon) hired a contractor to assist with the delivery of an Electric Fencing Support Program. The program aimed to develop a proactive approach for the benefit of both the food producer and the human-bear system, within a 100km radius of Whitehorse. Building on the egg producer program, the contractor helped egg and meat producers with site and materials planning and installation of fencing which meets the criteria developed during the egg producer program. The criteria were developed, using current best practices, to ensure strong deterrence of bears and other wildlife. The program also aimed to teach participants how to use and maintain their fence in good condition, troubleshoot common errors and maintenance issues and test the fence regularly. Last, the contractor helped applicants with commercial operations to apply for funding support through the Canadian Agricultural Partnership program (Wildlife Damage Prevention Fund), administered through the Agriculture Branch of EMR. Over 30 individuals expressed interest in the program. In total, 16 projects were completed in 2020 and several others have materials and are prepared for installation in 2021.

Acknowledgements

We are thankful for contributions from three funders. Financial support was contributed by Yukon Government, through Environment Yukon and EMR, and by the Trust. The Yukon Agricultural Association contributed in-kind support by providing a meeting space for a kick-off information session and helping with recruitment through their membership.

The initial public meeting was held in March 2020, to gauge public interest, explain the design of the program and provide an opportunity for individuals to express their interest in participating in the program. At that time, the target was for up to ten projects to be completed between ground thaw and freeze-up. WildWise organized the funding and information session, was

the point of contact for participants, managed the expressions of interest to participate in the program, provided the contractor with a list of interested participants and support throughout the season, and conducted a follow-up evaluation.

The program was designed to be delivered in two phases:

Phase 1: contact with participants and on-site inspection of their properties to assess their specific project. These inspections included a discussion about the type of livestock that would be protected, the building(s) that would be involved, the wildlife species that were to be excluded by the use of electric fencing and the types of fencing materials available and recommended to be used.

Additional discussion during these assessments also included topics such as:

- Basic animal husbandry
- Infrastructure design and construction
- General farm fencing advice (i.e. non electric improvements) for livestock protection, such as mesh fencing to discourage digging, stronger mesh to enclose livestock and exclude wildlife, solid roofing or netting to protect from aerial predators.

Early in the program the contractor recognized that participant costs would be minimized by bulk ordering electric fence materials. The contractor worked with Margo Supplies, a Canadian supplier with extensive Yukon experience and provided participants with a materials list and quote for their project. This approach created efficiency for the contractor, allowed for additional installation hours within the project budget and assisted participants with applications for funding support. Lastly, this ensured that the contractor was working with good quality materials and delivering a high-quality result. Participants who joined late in the season were not able to tap into these advantages. Some supplied fencing materials obtained from other sources.

Phase 2: installation of the electric fencing, as determined during the initial site visits in consultation with the project participants.

Review of Individual Fencing Projects

Of the 16 completed fencing projects, eleven individuals took advantage of the bulk materials order. The remaining five supplied their own materials from various sources. While the bulk ordered materials were preferred for their familiarity, the contractor was ultimately able to work effectively with all of the supplied materials.

The Livestock present or proposed at the above sites included poultry (13 locations), pigs (1), sheep/goats (2), rabbits (1) and a fruit orchard. There was an additional application for fencing around a meat cache, which could not be completed during the field season.

An additional six individuals signed up for the program but did not complete their projects. Five of them received a site visit and participated in the bulk order but did not follow through with the installation of a fence. The sixth individual is planning for construction and installation of an electric fence in 2021. Three of these deferred projects involve chicken coops/run, one is proposed for a small fruit orchard and poultry, another is to secure both a poultry operation and bee hives, and one will enclose a 15-acre parcel of land for mixed farming of swine, poultry and perhaps goats in the future.

Six participants who the contractor conducted site visits/consultations with, were individuals who had existing electric fencing or were in the process of installing electric fencing themselves. Five of these individuals had poultry while the sixth planned to enclose both poultry and swine.

There were five additional inquiries about the program from individuals who identified a need for electric fencing and who did not follow through with the program.

Self-identifying a rationale for keeping livestock was not a requirement of this program, however, the contractors' anecdotal observations categorize most of the projects as hobby farms and approximately six of the projects as having a commercial element to their operations.

Contractor Observations and Recommendations

Over all the program went very well and far exceeded the initial number of ten projects contemplated for this past season. This became possible when funds from the Trust, initially allocated for WildWise's visitor education program, were reallocated due to the COVID 19 pandemic. It could also be a reflection of emerging enthusiasm from livestock producers to protect their investments and wildlife with electric fencing as they hear more stories from peers who have had conflicts with wildlife. Electric fencing is a new approach for many applicants, and the technical support provided in this program facilitated both interest and adoption. These supports may also have been the needed component to move the needle for people who were already interested in electric fencing but could not complete the project because they lacked the confidence, the time, or the financial support.

Although many of the project participants went ahead with the purchase of electric fence materials without the assistance of external funding available through the Yukon Agriculture Branch, it was clear that a number of the larger and involved projects relied on this assistance and likely would not have proceeded without it.

Organizing the bulk ordering of electric fence materials greatly simplified and streamlined the process of obtaining the fencing materials and provided the following advantages:

- Saved the participants and contractor time and confusion that researching and purchasing materials from different suppliers would involve.
- Provided the participants an opportunity to pay a competitive price for the materials required for their projects.
- Saved the contractor time when doing the installations by using familiar materials
- Reduced waste from over purchasing materials (leftovers were used on subsequent projects)

Farmers are busy throughout the spring, summer and fall. Flexibility on the part of the contractor to schedule site visit consultations and fence installations is a key requirement for this program to operate efficiently and effectively. Additionally, advertising over the winter months gives participants a chance to think through their project and budget and join the program in an aware and organized manner. The need for early planning became apparent as the 'late' joiners struggled to organize their equipment and set aside time for participation. These additional projects created a degree of uncertainty for the contractor and some were, eventually, not possible in this season. As such, we recommend that program funding is secured early enough to permit initial advertising and information sessions in March 2021..

The contractor's time would be used more efficiently in 2021 if applicants were required to commit to an installation schedule. This would allow the contractor to manage workload more efficiently and respond to later season inquiries with greater certainty about capacity

Last, it is evident that this program provides a means of contact with commercial and hobby farmers. During the course of the site visits and installations, the contractor was able to investigate the full scale of operations and discuss issues related to animal care and farming practices. This should be of interest to the Agriculture Branch, in particular, which strives to connect with the agricultural community but which does not always have an invitation to conduct site visits. The Agriculture Branch's investment and participation in this program is crucial.

WildWise Yukon Observations and Recommendations

We are impressed with the outcome of this project. We set out to test the level of support needed to move the needle on the use of electric fencing, hoping to attract participants with a variety of applications. We received over 30 expressions of interest and completed twice as many projects as we anticipated at the beginning of the season. Our recommendations for a 2021 program are:

1. Hire the same contractor **and** an apprentice to increase the capacity and ensure the demand can be met. Note: Kevin Bowers has expressed interest in taking the contract on again in 2021.
2. Increase the level of funding by 30% to accommodate an apprentice wage and additional projects. We recommend that funding for this program be allocated on an ongoing basis, or until participation indicates a lesser need. (See appendix A: 2020 Program Expenses).

3. Offer a tiered electric fence installation training for partner organizations (Kwanlin Dūn land guardians, EMR inspectors etc.) to increase capacity within the community to a) communicate the need for electric fencing, b) install electric fencing in areas outside of Whitehorse and c) inspect and report effectively on the use of electric fencing when it is mandated as a means of mitigating human-wildlife conflict
4. Add a mid-winter follow-up site visit to inspect & troubleshoot maintenance issues
5. Advertise as early in the winter as possible to allow participants to plan ahead and budget accordingly and to allow the contractor to arrange their schedule with a higher degree of certainty.

Survey of 2020 Participants

We conducted a follow up evaluation survey with the 2020 participants using SurveyMonkey software. At the time of this report, of the 16, we have received ten responses. The following recommendations are in response to the evaluations.

1. All participants expressed satisfaction with their newly installed electric fence (see notes below).
2. Some participants identified attractants that remain unsecured on their property, including chicken coop (1), compost piles (4), garbage (1), garden beds (5) and BBQ/smoker/meat/cache/fish gutting station (2). Future programs will encourage participants to consider using electric fencing in a way that secures all attractants during the initial design phase.
3. 80% of participants reported that their overall costs were similar to or less than they had expected. All reported being satisfied with their costs and one commented that they had no prior awareness of what the costs would be. We recommend providing the reported costs from this evaluation as a guideline for future participants.
4. 60% of respondents applied for assistance from the Wildlife Damage Prevention Fund. This may be an indicator of need, and also of a barrier when this program is not available. We recommend strengthening the partnership between WWY and EMR so that this program can continue to support agriculture and reduce human-wildlife conflict. This may be achieved through a longer term commitment to funding, directed advertising to farmers through the Agriculture Branch's outreach materials and referrals to the program.
5. 60% of respondents reported that the contractor did most or all of the work installing the fence. We have heard from a number of participants directly that they either did not have the time or did not have the confidence to help with installation. One participant noted that, while they had read the available material and watched a number of instructional videos, they would have installed the fence incorrectly without the support. This is further evidence that, despite our collective attempts to provide good instruction (YG's Reducing Wildlife Conflict with Electric Fencing: A Beginner's Guide, & yearly technique workshops co-hosted with Conservation Officers and EMR) this program has satisfied a targeted need.
6. 50% of respondents report that they have not tested their fence since installation. While the contractor supplied fence testers and instruction on how to use them, it should be noted that many people will not, probably for various reasons including forgetfulness, over-confidence and misplacement of the equipment. Additionally, some participants report they have carried out some maintenance work such as wire tightening, since installation. Follow-up inquires and site visits may further support optimal use and performance of the fences and important reminders about the importance of ongoing testing.

Participant Recommendations

"Make it as widespread as possible. The financial support from CAP combined with the contractor's expertise and support is a total win for all parties."

"I think it would be beneficial for a check in to see if the fence was functioning properly several months after installation."

"My only concern was that the fence installer came directly from his farm to set up our fence and this may not be the best biosecurity practice (spreading diseases between farms)."

"[Kevin] was so polite and this was the best government program I've been involved with for years."

Participant reviews

"Kevin was great to work with. I had no understanding of electric fence installation and he explained as we went through to hook up the power, the grounding and the wires for gates etc. I was able to install the infrastructure after speaking with Kevin. I did not, however, have the knowledge for the actual electric install and connection"

"It was quite easy. I didn't have to fill out forms, make an application, etc."

"The upfront support, the check-ins, the support ordering supplies for us from the contractor was awesome - especially at our busiest time of the season. It was also motivating to have the contractor support us with fence installation. It kind of made it happen, actually."

"It was very helpful to have Kevin's advice and expertise in the design, material acquisition and installation. Thank you so much. We are very grateful to rely on expert opinion."

"I was very happy with the program. The fence installer was knowledgeable and had good ideas. I was pleasantly surprised by how inexpensive the fence was and appreciated having an expert to install it for me". - Shannon Meekins

"We appreciated the expertise of Kevin Bowers. The fence worked and no bears invaded the raspberry patch this summer. It gave us a feeling of peace". - Gail and Michael Craigen

"Kevin was very helpful and did great work. The program access through WildWise was easy to access and straightforward. Having the CO's pass on the information was helpful."

"The contractor was knowledgeable, as were any other members of the WildWise team, or AG branch. They answered our questions both quickly and thoroughly. We are happy with the program as we wouldn't have been able to afford this on our own."

"I had no idea about the process of installing a electrical fence this help wonderfully, great program"

"I had no idea what I was doing. The online videos only get you so far. We would have installed this completely wrong. Thank God for this program."

Last words

Of considerable note: two participants report witnessing wildlife testing the fence and being deterred and an additional participant reported that this was the first season in many years that her berry patch had not been ransacked by bears. It works!

Appendix A: 2020 Program Expenses

	YFWETF	YG-EY	YG-EMR	TOTAL
Coordination	1203.05		1500	2703.05
Project Contractor	4170	3034		7204.98
Advertising and Promotions	49.16	250		299.16
Catering or events		92.35		92.35
Car Rental/Mileage	788.93	167.4		956.33
TOTAL	\$7,711.14	\$3543.75	\$1500.00	\$ 12,755.87
Contribution	60%	28%	12%	