

# 2021 WildWise Yukon Electric Fence Support Program Report

Prepared by the Centre for Human-Wildlife Conflict Solutions

November 20th, 2021

## **Executive Summary**

### Deliverables

* The Electric Fence Support Program had a successful second year with **16 electric fence projects completed**, 24 total site visits, and many more expressions of interest.
* Participants had the option to order materials themselves or to order materials through the contractor’s bulk orders. **Fence materials were the only cost incurred by participants**.
  + 15 of the 16 participants chose to order materials through our contractor.
* Participants had diverse reasons for participating in the program.
  + One had received an order from the Conservation Officers to protect his attractants;
  + **Four participants** partook in the program **after an incident with wildlife on their property;**
  + At least ten participants felt it was their civic duty to protect their attractants for the sake of local wildlife, their neighbours, their livestock, and their other assets.
* At least 25% of participants had the program recommended to them by someone else.
* **100% of program participants expressed satisfaction** with the process and said that they would recommend the program to others.

### Operations

* Funding for an assistant to the contractor was obtained too late; instead, the contractor was assisted occasionally by WildWise Yukon’s Outreach Coordinator.
* Participants expressed extremely high satisfaction with their experience with the contractor.
* Though capacity was higher in 2021, the total number of fences built was limited by participants’ schedules and ability to organize their own projects.

### Recommendations

* Consider **allowing past participants to schedule maintenance visits** so their electric fences stay in good order.
* Consider changing the structure of the program to keep participants accountable, such as a down deposit.

## 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.



Figure 1. This electric fence was designed to protect the participant's meat cache.

Historical human-wildlife conflict data show that many bear issues are related to producer attractants such as hens, compost, or crops. The Electric Fence Support Program was initiated in an effort to reduce human-bear conflicts caused by producer attractants in the Whitehorse area. Growing local food is important for the producers, their clients, our local economy, and northern food security; yet the expansion of food production inevitably attracts bears in the area. **WildWise Yukon aims to support both local food producers and local wildlife, and believes this program promotes more harmonious cohabitation.**

### Summary of the Electric Fence Support Program

The Electric Fence Support Program aims to develop a proactive approach for the benefit of both the food producer and the human-bear system within a 100km radius of Whitehorse. The contractor helps participants with crops, livestock, or other attractants with site, materials planning, and installation of fencing strong enough to deter wildlife. The program also aims 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 helps 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 Energy, Mines and Resources.

### Acknowledgements

We are thankful for contributions from three funders. Financial support was contributed by Yukon Government through Environment Yukon and Energy Mines and Resources, and by the Yukon Fish and Wildlife Enhancement Trust. We are also thankful to the Yukon Agricultural Association for their ongoing support and for recommending our program to their network.

The program’s successful first year in 2020 garnered enough public interest that WildWise already had a list of potential participants in early 2021. As such, there was no need to have another public meeting. Additional participants expressed interest as the season progressed; new participants were reaching out as late as October. WildWise Yukon orchestrated the funding, 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**: Participants express interest. The contractor conducts an on-site inspection of their properties to assess their specific project. These inspections include a discussion about the type of attractants 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.

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. This requires a small amount of preparation work from the participants, such as setting up their fence posts before the contractor arrived.

## Review of 2021 individual fencing projects

Planning for a bigger fencing season in the program’s second year, WildWise increased capacity (contractor hours, part-time assistant to the contractor) so that up to 24 fences may be built. However, due to inconsistent interest or follow-up from participants, only 16 individual projects went through the installation phase. The contractor conducted 24 site visits total.

All but one of the 16 participants taking part in the program sourced their materials from the contractor, an option which simplifies the process for many who may be unfamiliar with electric fences. This also produces a more consistent result. The cost of labour was covered by WildWise Yukon, and the cost of materials varied on the size of the fence and the terrain on which it was built. Figure 2 shows the self-reported cost of each fence based only on materials (excluding any rebate) of 12 of this year’s participants. Most respondents reported their costs at between $300-500, and 83% reported their costs as less than $1000.

The livestock present or proposed at the above sites included poultry (13), pigs (2), and other livestock (1). Other attractants participants wanted to protect included compost (6), garbage (1), a meat cache (1), garden beds (4), and bees/beehives (3).

In addition to the 16 completed projects, the contractor also conducted eight additional site visits, but these fences were never completed either due to lack of time, funds, or interests on the behalf of the participants. The contractor was also in contact with several other interested members of the public who did not follow up on either phase of the process.

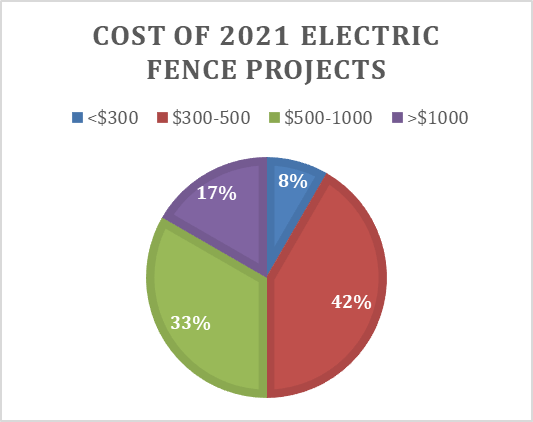


Figure 2. Reported costs of individual electric fence projects from 2021 participants in WildWise Yukon's Electric Fence Program. Most projects (42%) cost between $300-500.

Three of the fences conducted in 2021 were projects which had been initiated in 2020 but had not been completed. **The contractor noted that they expect a few projects to carry over every year in this way.**

Following recommendations from the previous year, WildWise tried to hire an assistant for the contractor, both to make the process more efficient and as a capacity-building opportunity. Unfortunately, funds for hiring the assistant only came through after the season was already underway and it was too late to use the funding. Instead, WildWise Yukon’s Outreach Coordinator assisted the contractor occasionally upon request. Due to the *ad hoc* nature of participants’ scheduling needs, the contractor concludes that the project may not be best suited for a full-time assistant.

## Contractor Observations and Recommendations

Overall, the 2021 season was a success for the program. Although the contractor’s capacity was greater than in 2020, their ability to complete projects was dictated by participants. The contractor believes that completing more than 16 fencing projects would be possible if process was more structured and participants more organized. The contractor also observed a continued enthusiasm for attractant management from both households and small businesses.

Electric fencing is a new approach for many applicants, and most lacked the technical knowledge to order materials, build the fence, and maintain it. The technical support from the contractor may have been the component needed to move the needle for people who were already interested in electric fencing but could not complete the project because they lacked the know-how, the time, or the financial support. The support of an experienced contractor throughout the process was instrumental to many participants; one third of post-project survey respondents said the contractor did most/all of the work, while two thirds worked alongside him in building their fence. For those who assisted the contractor, the initiative also provided a valuable learning opportunity.

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 allow initial advertising and information sessions in March 2022.

As noted last year, the contractor’s time would be used more efficiently in the program if applicants were required to commit to an installation schedule. This would allow the contractor to manage their workload more efficiently and respond to later-season inquiries with greater certainty about capacity.

## Conclusions and feedback

In YTG’s recent document “Cultivating our Future: 2020 Agriculture Policy,” YTG commits to “incorporate proactive approaches into wildlife management plans to reduce the interactions of wildlife such as elk, mountain goats, sheep and bears with domestic species.” WildWise believes that the Electric Fence Support Program is one such proactive approach which can help agricultural land users cohabit with wildlife. The program directly supports the policy’s overarching goals to develop and protect agricultural land, and to promote resilient and sustainable agriculture. The Agriculture Branch’s support is crucial to this project, and we hope that the Branch sees this work as mutually beneficial.

The 2021 electric fencing season produced satisfactory outcomes. Several participants from this year had had the program recommended to them by others, and a poll of the 2020 participants revealed that they were still highly satisfied with their fences. Several of the **2020 participants said via the survey that they would benefit from a maintenance visit** from the contractor in the next season or two – we believe that this would be important to make sure the positive effects of the work persist. All participants from the 2021 season, either in person or through our survey, expressed total satisfaction in the process. Our recommendations for a 2022 program are:

1. Hire the same contractor **and** provide part-time hours for the Outreach Coordinator to increase the capacity and ensure the demand can be met. Note: Kevin Bowers has expressed interest in taking the contract on again in 2022.
2. **Add a follow-up site visit to past fence projects inspect & troubleshoot maintenance issues.**
3. Increase the level of funding by 20% to accommodate additional projects and maintenance visits. We recommend that funding for this program be allocated on an ongoing basis, or until participation indicates a lesser need. (See appendix A: 2021 Program Expenses).
4. Offer a tiered electric fence installation training for partner organizations (Kwanlin Dün 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.
   1. Note: This contact was initiated in 2021 but did not occur due to lack of availability of land guardians.
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 2021 Participants

We conducted a follow up evaluation survey with the 2021 participants using Google Forms platform. At the time of this report, of the 16, we have received 12 responses. The following recommendations are in response to the evaluations.

1. **All participants expressed satisfaction** with their newly installed electric fence and **all said they would gladly recommend the program to others.**
2. Some participants identified attractants that remain unsecured on their property, including compost piles (1), garbage (2), garden beds (4) and BBQ/smoker/meat/cache/fish gutting station (4). Future programs will encourage participants to consider using electric fencing in a way that secures all attractants during the initial design phase.
3. The satisfaction of participants extended to the cost; most reported that their overall costs were similar to or less than they had expected, and none said that it cost more than expected. We recommend providing the reported costs from this evaluation (see Figure 1) and the previous as a guideline for future participants.
4. Only one survey respondent applied for governmental assistance or rebate. Many expressed that they were not aware of any available assistance.
5. 25% of respondents reported that the contractor did most or all of the work installing the fence, and 75% said they built the fence alongside the contractor. One participant was building the fence themselves but wanted expert input on the process. **All participants noted that the process would have been more difficult or less effective without the help of a knowledgeable contractor**. 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. Almost half of survey respondents reported that they have not tested their fence since installation. A few of these admitted that they did not know how (“When we get zapped, we know it works!” joked one respondent). While the contractor supplied fence testers and instruction on how to use them, it should be noted that many people will not do so, probably for various reasons including forgetfulness, lack of confidence and/or misplacement of the equipment. Additionally, some participants report they have carried out some maintenance work such as wire tightening, since installation. **Follow-up inquiries and site visits would further support optimal use and performance of the fences** and important reminders about the importance of ongoing testing.

**Participant Recommendations**

“I wish we could access funding for this (as a new farm it's difficult through Ag Branch as we are not able to show any revenue yet). We want to get a larger area fenced for livestock in the spring.”

60% of participants from 2020 said they would benefit from a maintenance visit from the contractor, and many said they did not know/could not remember how to test their fence.

**Participant reviews**

"What made it work was Kevin’s services to procure all the necessary hardware. Kevin was set to help me with the installation, but because **I was served a compliance order under the Wildlife Act, with a short deadline that conflicted with my travel plans, Kevin completed the installation in my absence and satisfied the Conservation Officers’ conditions**.”

“Great program**, affordable, high quality electric fence** with instruction on how to perform regular maintenance. I feel that my bees are safe from predators and that I haven't endangered the safety of the neighborhood by having an attractant.”

“The contractor, Kevin, was absolutely great with consultation and with fence assembly. After our initial consultation, I put all fence posts in and braced them as well as constructing a gate. When Kevin arrived to string the fence line and install the zapper, he did all the fence wire attachments and I helped out with anything that I could -- charger mount, gate attachments, etc.”

“The contractor was incredibly helpful!”

“I built the fence myself then had someone come and assess it. Assurance that the fence I built was up to the standard. Some tips to make it even better.”

“The flexibility of the installer. It took a while for us to clear space and get fence-posts in. Only having to pay for materials was great. **If we had to install the fence ourselves, it would never be installed**.”

“I was satisfied with the initial face to face consultation regarding what I needed, I was happy that the contractor ordered [all the materials] and I was pleased with the outcome of the installation completed by the contractor.”

"The program helps us feel safe in are rural property and ensures our safety and the ongoing protection of wildlife.”

"Kevin is very knowledgeable and can advise for really any farming/ hobby need. He gave a clear outline of what I had to prepare and he did the rest. It was up and running as our bees arrived making it a very easy and safe venture.”

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| **Expenses Electric Fence Support Program 2021** | | | |  |
|  | Executive Director Contractor | |  |  |
|  |  | 04-01-21 | Heather Ashthorn | 2 000.00 |
|  | Project Contractor | |  |  |
|  |  | 06-10-21 | Hurst, Madison | 819.00 |
|  |  | 06-14-21 | Bowers, Kevin | 1 400.00 |
|  |  | 07-08-21 | Hurst, Madison | 1 131.00 |
|  |  | 08-18-21 | Bowers, Kevin | 1 487.50 |
|  |  | 08-18-21 | Hurst, Madison | 650.00 |
|  |  | 09-01-21 | Hurst, Madison | 910.00 |
|  |  |  | Bowers, Kevin | 1 525.70 |
|  |  |  |  | 7 923.20 |
|  | Car Rental/Mileage | |  |  |
|  |  | 05-18-21 | Bowers, Kevin | 644.41 |
|  |  | 06-14-21 | Bowers, Kevin | 547.20 |
|  |  | 08-18-21 | Bowers, Kevin | 520.40 |
|  |  |  |  | 1 712.01 |
| **TOTAL EXPENSE UP TO DECEMBER 1st 2021** | |  |  | **11 635.21** |