CLIMATE CHANGE ADAPTATION PROGRAM

A Guide to On-Farm Demonstration Research

Case Study 4

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A Guide to On-Farm Demonstration Research

How to Plan, Prepare, and Conduct Your Own On-Farm Trials

Disclaimer:

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B.C. FORAGE COUNCIL

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CASE STUDY

Even Inconclusive Forage Trial Findings Offer Benefits

Jon Solecki decided to test the establishment and productivity of five new-to-him perennial grasses in hopes of finding at least one that would remain nutritious into fall in his growing conditions.

"A human lifetime is so short: you're almost at the end of it before you get anything figured out. Knowledge is a small, incremental thing that develops through a whole bunch of people contributing. I don't think my little part in that is going to change the world but I do see it as important that I contribute something."

– Jon Solecki

Because winter feeding is his largest annual cost, Burns Lake, BC rancher Jon Solecki dreams of extending his grazing season. However, in his harsh, northern climate, the feed value of the forages he routinely grows drops to near zero by mid-fall. In 2015, he decided to test the establishment and productivity of five new-to-him perennial grasses in hopes of finding at least one that would remain nutritious into fall in his growing conditions. Further, he decide to study whether the acres he uses annually to overwinter his cattle, which thereby receive many months' worth of passively spread manure, might enhance his trial forages' success.

Solecki conducted his on-farm study in a single field, half of which he'd used annually as an overwintering area for his cattle herd. On each half, he seeded five 60 by 700 foot strips at 20 lbs/ac to one of creeping red fescue, crested wheatgrass, Russian wildrye, western wheatgrass, and meadow brome. He then hoped to analyze forage establishment, quality and yield over two years.

CASE STUDY, *continued*
EVEN INCONCLUSIVE FORAGE TRIAL FINDINGS OFFER BENEFITS

Creeping red fescue held it's crude protein content high enough to support a lactating cow in the late summer through fall; and, showed a strong response to the passive fertilization. The relative feed values of fescue also reflect potential as a winter forage species.

Unfortunately, heavy weed pressure and uneven establishment resulted in frustratingly inconclusive findings. While the forage values appear to be promising, the heavy weed pressure prevented successful establishment and subsequent yield measurements. Thus, Solecki's results provide only half of the story.

Despite the less than stellar conclusions, the project was worth the effort. As he points out, finding out what doesn't work is almost as useful as finding out what does work. Second, as in any long-term trial, it is likely that results will become clearer over time. The effort invested in this trial may prove an important stepping stone to future questions and answers.

Equally importantly, Solecki believes research is a responsibility that extends beyond himself.

"There's really a lack of knowledge about the particular area I ranch in. Since no one else is able to make good recommendations, it's my responsibility to do some of the legwork to find out the answers."

Would Solecki consider doing another on-farm trial?

"Absolutely," he says. "We all need to keep learning."