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Leading Edge

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No-till
On The Plains

New Frontiers

by Matt Hagny

On the western prairie province of Alberta, a plucky set makes a go out of grain farming. While “direct seeding” (no-till planting a crop without a separate tillage pass) is fairly common, only the more adventurous have adopted continuous no-till with narrow knife openers. Extremely rare is the person running disc openers on their drill, since the climate is so cool that soil warming is a persistent challenge, and residue decomposition very slow.



A third-generation farmer near Lethbridge, AB, savvy Rod Lanier shifted to low-disturbance disc openers five years ago: “It’s working great,” he reports. Lately he’s added a Shelbourne stripper head, with synergistic effects: “There’s a beautiful fit between a stripper head and a disc-opener drill.” The reason, he says, is “dramatically less hairpinning,” since all the stubble is standing at seeding time (which is almost always the case in their cool climate—the straw is slow to rot off at the soil surface). Lanier harvests all his wheat, field

peas, and safflower with the stripper head.

Late spring frost worse in high-residue conditions? Not necessarily, says Rod. He cites research from Reduced Tillage Linkages (the Albertan ‘direct seeding’ organization) showing smaller temperature fluctuations in high residue than in black soil, due to the insulating effect of the stubble. Indeed, the Albertan experiences with frost damage are so contradictory in comparing disc openers versus shanks (knives, etc.) that a person could be forgiven for concluding there is no pattern at all.



Photo by Rod Lanier.

Lanier enjoying a good wheat harvest in Alberta.

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