|  |  |  |
| --- | --- | --- |
| Producer A Year 1  2009 | no-till per acre costs | Conventional per acre costs |
| Spray | $5.75 | $5.75 |
| Chisel with spikes |  | $7 |
| Chisel with spikes |  | $7 |
| Disk |  | $10 |
| Chisel with sweeps |  | $7 |
| Seed | $11 | $11 |
| Re-seed | $11 |  |
| Broadleaf herbicide application | $5.75 | $5.75 |
| Total cost per acre  Year 1 | $33.50 | $53.50 |
| Harvested | ½ ton hay barley @ $45/ton or $22.50/acre | 2 ¾ tons hay barley @ $45/ton or $123.75 per acre |
| Income or loss Year 1 | ($11.00) | $70.25 |
| Producer A Year 2  2010 | no-till per acre costs | Conventional per acre costs |
| Chisel with sweeps |  | $7 |
| Disk |  | $10 |
| Harrow |  | $4 |
| Broadcast Seed | $5 | $5 |
| Harrow twice | $8 | $8 |
| Total Cost per acre  Year 2 | $13 | $34 |
| Harvested | 1 ton alfalfa @ $80/ton or $80/acre | 1 ton alfalfa @ $80/ton or $80 per acre |
| Income or loss Year 2 | $67.00 | $46.00 |
| Producer A Year 3  2011 | no-till per acre costs | Conventional per acre costs |
| Harvested | 2.75 tons alfalfa @ $80/ton or $220/acre | 2.75 tons alfalfa @ $80/ton or $220/acre |
| Income or loss Year 3 | $220.00 | $220.00 |
| Income or loss  Over 3 year period | $276.00 \* | $336.25 |

Costs on this table include, machinery expense, labor, fuels, costs not included are; seed, chemical, irrigation, fertilizer or hay harvesting costs.

\*although no-till showed a positive income over the three year period, if Producer A had relied on the hay production from this trial for feeding his cattle on year 1, the impact to his ranch operation would have been negative with the purchase of outside hay.

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| --- | --- | --- |
| Producer B Year 1  2009 | no-till per acre costs | Conventional per acre costs |
| Spray Roundup | $6 | $6 |
| Disk |  | $10 |
| Disk + Plow |  | $16 |
| Drill |  | $11 |
| Roller |  | $4 |
| Drill + roller | $13 |  |
| Broadleaf herbicide application | $5.75 | $5.75 |
| Total cost | $24.75 | $52.75 |
| Harvested | 2 ton @ $45/ton or $90/acre | 2 ton @ $45/ton or $90/acre |
| Income or loss Year 1 | $65.25 | $37.25 |
| Producer B Year 2  2010 | no-till per acre costs | Conventional per acre costs |
| Spray Roundup | $6 | $6 |
| Disk |  | $10 |
| Disk + Plow |  | $16 |
| Drill |  | $11 |
| Roller |  | $4 |
| Drill + roller | $13 |  |
| Broadleaf herbicide application | $5.75 | $5.75 |
| Total cost | $24.75 | $52.75 |
| Harvested | 2 ton @ $45/ton or $90/acre | 2 ton @ $45/ton or $90/acre |
| Income or loss year 2 | $65.25 | $37.25 |
| Producer B Year 3  2011 | no-till per acre costs | Conventional per acre costs |
| Spray Roundup |  |  |
| Disk |  | $10 |
| Disk + Plow |  | $16 |
| Drill |  | $11 |
| Roller |  | $4 |
| Drill + roller | $13 |  |
| Broadleaf herbicide application |  |  |
| Total cost | $13 | $41 |
| Harvested | 2.2 tons alf/grass @ $80/ton or $176/acre | 2.4 tons alf/grass @ $80/ton or $192 |
| Income or loss Year 3 | $163.00 | $151.00 |
| Income or loss over 3 year period | $293.50 | $225.50 |

Costs on this table include, machinery expense, labor, fuels, costs not included are; seed, chemical, irrigation, fertilizer or hay harvesting costs.

Producer B was profitable in both situations, with no-till requiring less cost and less time. In springtime labor can be the most limiting factor on Montana farms and ranches.

|  |  |  |
| --- | --- | --- |
| **Fuel consumption on a per acre basis during 3 year period. Harvest fuel consumption excluded.** | | |
|  | Producer A | Producer B |
| No-Till | 3.1 gallons | 3.9 gallons |
| Conventional | 11.7 gallons | 8.4 gallons |
| fuel savings | 73% | 53% |