

Native Prairie  
Perennial - Low Input

|                               |            | Quantity | Unit | Price /Unit | Yr 1   | Yr 2  | Yr 3  | Yr 4  | Yr 5  | Yr 6  | Yr 7  | Yr 8  | Yr 9  | Yr 10 | Total    | Present Value | Annualized PV<br>(compare to corn yearly cost) |
|-------------------------------|------------|----------|------|-------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|---------------|--|
| <b>REVENUE SOURCE</b>         |            |          |      |             |        |       |       |       |       |       |       |       |       |       |          |               |  |
| Biomass                       | 2.1 ton    |          |      | \$60.00     | 0      | 1     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     |          |               |  |
| Revenue Stream                |            |          |      |             | \$0    | \$64  | \$128 | \$128 | \$128 | \$128 | \$128 | \$128 | \$128 | \$128 | \$1,092  | \$811         | \$141  |
| <b>SELECT CASH EXPENSES</b>   |            |          |      |             |        |       |       |       |       |       |       |       |       |       |          |               |  |
| Seed                          | Mix        | 8 PLS lb |      | \$65.00     | \$488  | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$488    | \$464         | \$63   |
| <b>Fertilizer<sup>1</sup></b> |            |          |      |             |        |       |       |       |       |       |       |       |       |       |          |               |  |
| Nitrogen                      | 0 lbs      |          |      | \$0.46      | \$0    | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0      | \$0           | \$0  |
| P <sub>2</sub> O <sub>5</sub> | 0 lbs/ton  |          |      | \$0.62      | \$0    | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0      | \$0           | \$0  |
| K <sub>2</sub> O              | 0 lbs/ton  |          |      | \$0.63      | \$0    | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0      | \$0           | \$0  |
| <b>Pest Control</b>           |            |          |      |             |        |       |       |       |       |       |       |       |       |       |          |               |  |
| WSG spray                     | 1 acre     |          |      | \$13.74     | \$27   | \$14  | \$0   | \$14  | \$0   | \$14  | \$0   | \$14  | \$0   | \$14  | \$96     | \$78          | \$12   |
| <b>Machine Costs</b>          |            |          |      |             |        |       |       |       |       |       |       |       |       |       |          |               |  |
| Chisel Plow                   | 1 acre     |          |      | \$14.17     | \$14   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$14     | \$13          | \$2  |
| Soil Finish                   | 1 acre     |          |      | \$11.10     | \$11   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$11     | \$11          | \$1  |
| Grass Seeder, broadcast       | 1 acre     |          |      | \$9.00      | \$9    | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0   | \$9      | \$9           | \$1  |
| Sprayer                       | 2 acre     |          |      | \$5.60      | \$11   | \$6   | \$0   | \$6   | \$0   | \$6   | \$0   | \$6   | \$0   | \$6   | \$39     | \$32          | \$5  |
| <b>Post-harvest</b>           |            |          |      |             |        |       |       |       |       |       |       |       |       |       |          |               |  |
| Mower-condition (16')         | 1 acre     |          |      | \$13.50     | \$0    | \$7   | \$14  | \$14  | \$14  | \$14  | \$14  | \$14  | \$14  | \$14  | \$115    | \$85          | \$15   |
| Raking - Hay 9ft              | 1 acre     |          |      | \$6.00      | \$0    | \$3   | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$51     | \$38          | \$7  |
| Baling - lg round             | 2.85 bale  |          |      | \$8.35      | \$0    | \$12  | \$24  | \$24  | \$24  | \$24  | \$24  | \$24  | \$24  | \$24  | \$203    | \$151         | \$26   |
| Bale-to-storage               | 2.85 bale  |          |      | \$3.10      | \$0    | \$4   | \$9   | \$9   | \$9   | \$9   | \$9   | \$9   | \$9   | \$9   | \$75     | \$56          | \$10   |
| Trucking                      | 2.14 ton   |          |      | \$3.00      | \$0    | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$6   | \$58     | \$43          | \$7  |
| Marketing                     | 128.46     |          |      | 3.50%       | \$0    | \$2   | \$4   | \$4   | \$4   | \$4   | \$4   | \$4   | \$4   | \$4   | \$38     | \$28          | \$5  |
| <b>TOTAL CASH EXPENSES</b>    |            |          |      |             | -\$560 | -\$54 | -\$63 | -\$82 | -\$63 | -\$82 | -\$63 | -\$82 | -\$63 | -\$82 | -\$1,197 | -\$1,008      | -\$155   |
| <b>REV ABOVE EXPENSES</b>     |            |          |      |             | -\$560 | \$10  | \$65  | \$46  | \$65  | \$46  | \$65  | \$46  | \$65  | \$46  | -\$105   | -\$197        | -\$14  |
| Labor                         | hours/acre |          |      |             | 0.71   | 2.20  | 1.91  | 2.20  | 1.91  | 2.20  | 1.91  | 2.20  | 1.91  | 2.20  |          |               |  |

Calculation Assumptions:

|                        |      |
|------------------------|------|
| Interest Rate          | 5%   |
| Years of Production    | 10   |
| (1+i) <sup>n</sup> - 1 | 0.63 |
| i(1+i) <sup>n</sup>    | 0.08 |



Extension Bulletin E-3084, Profitability of Converting to Biofuel Crop:  
Web: <http://bioenergy.msu.edu/economics/index.shtml>