

# Adoption of Switchgrass Production for Biofuels Survey Results

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CenUSA Outreach and Extension educators conducted an educational session on switchgrass production at the 2013 ICM Conference in December. The audience included producers and farm managers. Participants (n=67) were surveyed about their perceptions regarding the drivers and barriers to switchgrass production and its feasibility.

## ***Perceptions regarding Drivers:***

- 56.7% indicated “enterprise diversification strategy” would influence their decisions with moderate to strong likelihood; 25% were neutral; 18.3% indicated low to very low likelihood of being influenced.
- 46% indicated having a “conservation/habitat provision” would influence their decisions with moderate to strong likelihood; 36% were neutral; 18% indicated low to very low likelihood.
- 42.6% indicated “getting ahead of environmental regulations” would influence their decisions with moderate to strong likelihood; 21.3% were neutral; 36.1% indicated low to very low likelihood.
- 35% indicated the “opportunity to reduce nutrient usage” would influence their decisions with moderate to strong likelihood; 43.3% were neutral; 21.7% indicated low to very low likelihood.
- 65.6% indicated “emerging market opportunities” would influence their decisions with moderate to strong likelihood; 14.8% were neutral; 19.6% indicated low to very low likelihood.
- 46.7% indicated a “longer term crop rotation strategy” would influence their decisions with moderate to strong likelihood; 25% were neutral; 28.3% indicated low to very low likelihood.

## ***Perceptions regarding Barriers:***

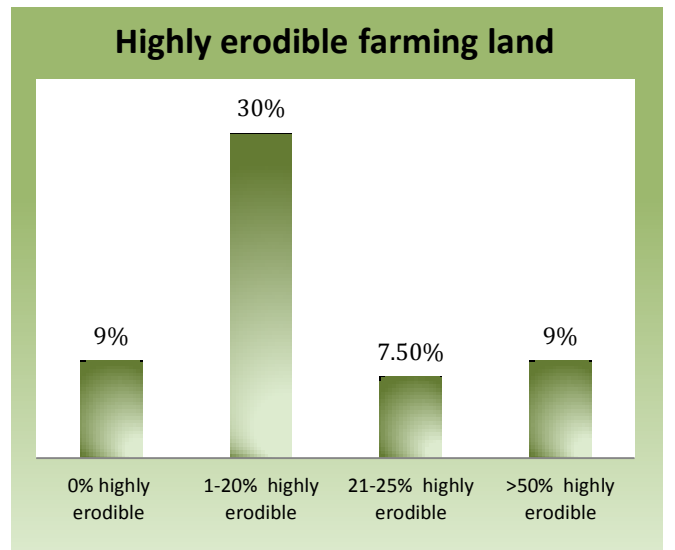
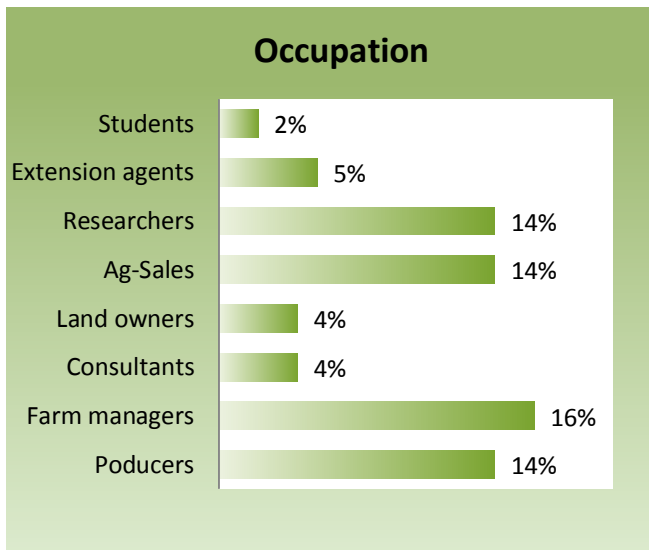
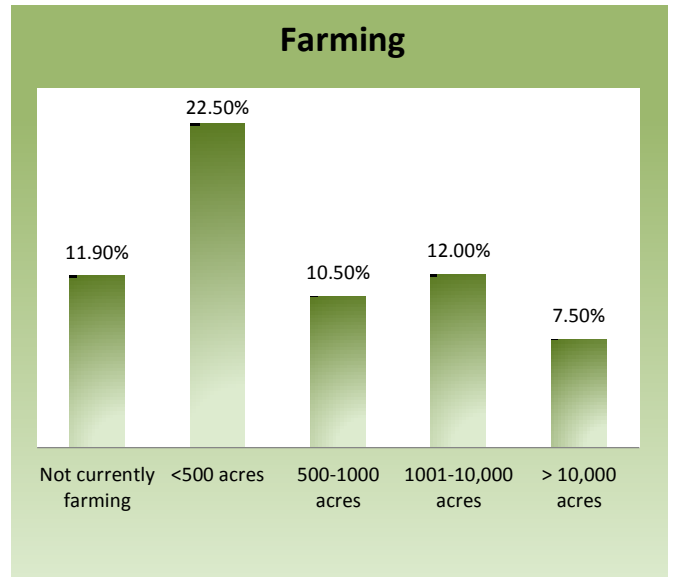
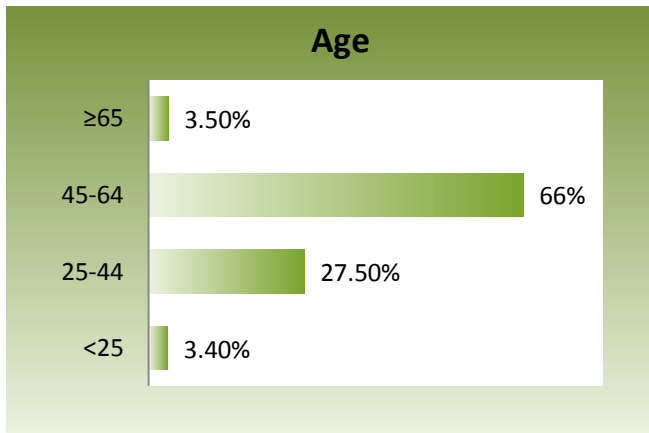
- 34.4% indicated “requires learning/adjusting to new production technologies” would influence their decisions with moderate to strong likelihood; 31.2% were neutral; 34.4% indicated low to very low likelihood.
- 61.3% respondents indicated “additional machinery requirements/capital expenditures” would influence their decisions with moderate to strong likelihood;

17.7% were neutral; 21% indicated low to very low likelihood.

- 72.6% respondents indicated “lack of current market/concerns over development of market” would influence their decisions with moderate to strong likelihood; 9.7% were neutral; 17.7% indicated low to very low likelihood.
- 21.3% indicated a “longer term crop rotation” would influence their decisions with moderate to strong likelihood; 47.5% were neutral; 31.2% indicated low to very low likelihood.
- 43.5% indicated a “two-year crop establishment” would influence their decisions with moderate to strong likelihood; 38.7% were neutral; 17.8% indicated low to very low likelihood.
- 46.8% indicated “uncertainty of production due to leasing land” would influence their decisions with moderate to strong likelihood; 24.2% were neutral; 29% indicated low to very low likelihood.

## ***Perceptions regarding Feasibility:***

- 68.5% indicated that the returns to switchgrass production on marginal land need to be at the same level as returns to corn/beans on that same land.
- Other factors that influenced respondents’ perceptions are: 1) accessibility of market, 2) capital cost barrier, 3) policies of the Conservation Reserve Program, 4) environmental benefit & bio-diversity, and 5) soil quality & enhancement.
- 42.9% indicated they would accept a \$6 - 10 per acre revenue loss to get benefits from perennial grass production. Another 32.6% would accept a \$1-5 per acre loss. 20.4% would not be willing to accept any revenue loss.
- 63.8% indicated they were more likely to hire a custom harvest and transport if a market of harvesting and transporting perennial grasses was developed; 36.2% were more interested in cooperating or organizing a firm to harvest and transport.



In summary, “emerging market opportunities” was reported as a strongest driver that would likely influence respondents’ decisions about adopting switchgrass production. “Conservation /habitat provision”, “get ahead of environmental regulations”, and “longer term crop rotation strategy” follow as other influencers in their decisions. On the other hand, “additional machinery requirements / capital expenditures” and “lack of current market/concerns over development of market” were reported as barriers that would likely influence respondents’ decisions in adopting switchgrass

production, followed by “two year crop establishment” and “uncertainty of production due to leasing land”.

In addition, most respondents expected that economic returns to switchgrass production would have to be at the same level as returns to soybean or corn before adopting production. Marketing and soil quality also influenced decisions. A majority of respondents were willing to accept a revenue loss within less than \$10 per acre. Most respondents were more interested in custom harvest and transport.

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