A Survey of Farming Practices and Cover Crop Use

Dairy Farms that Have Used Cover Crops

New York State Field Crops Cover Crop Working Group

Cover crops are defined as grasses, legumes or small grains grown between regular crop production periods for soil conservation and environmental protection. These crops are usually planted after harvest of the regular crop in the fall and killed before planting the next one in the spring. We would like to get a better sense of cover crop farming practices, use, and research and extension needs for New York State, with a specific focus on cover crop use following corn silage harvest. It would be great if you could share your experiences with us and fill out this survey. Confidentiality ensured. THANK YOU!

Background

1. What county do you live in? ___________________________ County

2. a. How many acres of tillable farmland are you currently (2009) farming? __________ acres farmed
   b. How many of those acres do you own? __________ acres owned
   c. How many of those acres do you rent? __________ acres rented

3. Did you grow any of the following crops in 2010? If yes, please record the number of acres.

<table>
<thead>
<tr>
<th>Type</th>
<th>Yes</th>
<th>No</th>
<th>Acres grown in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn grown for grain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn grown for silage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alfalfa/grass hay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. What livestock do you have and how many?

<table>
<thead>
<tr>
<th>Type</th>
<th>Yes</th>
<th>No</th>
<th>Number of head in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy cattle</td>
<td></td>
<td></td>
<td>Milking/Dry: Calves/Heifers:</td>
</tr>
<tr>
<td>Beef cattle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other livestock (Please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. What is the primary tillage system you use?

   ___ No-till
   ___ Zone-till
   ___ Reduced till (chisel, disk, aerway, etc.)
   ___ Conventional till (moldboard plowing)
Current Practices

6. Do you farm any land that is certified organic?
   ___ Yes (if yes, how many acres? ________________ acres)  ___ No

7. a. Did you plant cover crops in the past three years?
   ___ Yes  ___ No

   b. If no, why did you stop planting cover crops? (Check all that apply.)
   ___ Invasive weeds are hard to control
   ___ Too much time involved
   ___ Too costly
   ___ Cover crops attracted unwanted pests
   ___ I don’t have a runoff or soil erosion problem
   ___ I don’t have highly leachable soils
   ___ Cover crops delay the planting date for the crop that follows
   ___ Cover crops reduced crop yield
   ___ Cover crops take water from the next crop
   ___ Cover crops take nutrients (nitrogen) from the next crop
   ___ I don’t own the land
   ___ Other reasons (Please describe: __________________________________________ )

8. a. Which crops did you plant as a cover crop between growing seasons? Please record the (most recently used) seeding rate and seed cost per acre for each of the cover crops you have used.

<table>
<thead>
<tr>
<th>Cover Crop (check if yes)</th>
<th>Harvested?</th>
<th>Seeding rate</th>
<th>Seed cost (year ______)</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter rye/ cereal rye</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Ryegrass (annual or perennial)</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Oats</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Winter wheat</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Winter triticale</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Red clover</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Hairy vetch</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>___Yes ___No</td>
<td>_____ lbs/acre</td>
<td>$ __________/acre</td>
<td>______</td>
</tr>
</tbody>
</table>
b. If you answered “yes” to harvesting crops, what do you harvest them for?
   ___Animal Feed  ___Grain  ___other (specify)______________________________

9. Do you plant cover crops on rented or owned acres or both?
   ___Rented acres only  ___Owned acres only  ___Both rented and owned acres

10. a. What method do you use to plant your cover crops?
    ___Grain drill  ___Air drill  ___Broadcast  ___Other (specify)______________________________
    b. If broadcast, what type of tillage do you use?
       ___Disk  ___Harrow  ___Aerway  ___None  ___Other (specify)______________________________

11. Do you custom hire your cover crop planting?
    ___Yes  ___No

12. Where do you get your cover crop seed?
    ___Local Co-op  ___Seed dealer  ___Other farmers  ___Saved seed from previous year

13. a. If you are using an overwintering cover crop, what method do you use to kill it?
    ___Tillage  ___Chemical  ___(roller) Crimper  ___Do not use overwintering cover crops
    b. How long did you wait after killing the cover crop to plant your next crop?
       ___Less than 5 days  ___6-10 days  ___11-15 days  ___16-20 days  ___More than 20 days

14. a. Does having a cover crop influence your N fertilizer application rates on crops following the cover crop?
    ___Yes, increase  ___Yes, decrease  ___No change noticed
    b. If yes, how much:
       ____________________________________________________________________________________

15. Did you experience a difference in corn or soybean crop yield after using a cover crops?
    ___Yes, increase  ___Yes, decrease  ___No change noticed

16. Why did you choose to start using cover crops? (Please rank; 1 is most important) | Please Rank top 5
   A. Soil conservation/reduce erosion
   B. Nitrogen holding/catch crop for manure nitrogen
   C. Farm is certified organic and I need extra N inputs (legume cover crops)
   D. Meet leaching index requirement
   E. Fulfill government conservation cost-share program requirement
   F. Improve trafficability
   G. Improve organic matter
   H. Weed control
   I. Allows manure to be spread during fall and/or winter
   J. Other (specify)________________________________________________________________________
17. Does planting cover crops impact your manure management decisions?
   ___Yes   ___No   ___Sometimes
   If yes, how?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

18. Does using cover crops impact your pest management decisions?
   ___Yes   ___No   ___Sometimes
   If yes, how?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

19. Does using cover crops impact your tillage management?
   ___Yes   ___No   ___Sometimes
   If yes, how?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

20. Does using cover crops impact your overall farm fuel needs?
   ___Yes   ___No   ___Sometimes
   If yes, how?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

21. Does using cover crops impact your overall farm income?
   ___Yes   ___No   ___Sometimes
   If yes, how?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

22. How many years of experience do you have using cover crops? _________ Years
Research and Extension Needs

23. Do you have enough information to make decisions about cover crop selection, use, and management?
   ___ Yes   ___ No

24. Were you able to find New York State specific information on cover crops regarding:

   Planting dates: ___ Yes   ___ No  Establishment methods: ___ Yes   ___ No
   Seeding rates: ___ Yes   ___ No  Establishment costs: ___ Yes   ___ No
   Species selection: ___ Yes   ___ No  Environmental benefits: ___ Yes   ___ No

25. If we develop information regarding cover crops, what is the best way to get it to you (Please rank)?

   A. Internet (for example: Google, Nutrient Management Spear Program webpage)
   B. Postcards
   C. 1 or 2-page Fact sheets
   D. Extension meetings
   E. Articles in trade magazines (Eastern Dairybusiness, Country Folks, etc.)
   F. Cooperative Extension mailings
   G. Field days
   H. Other (specify) _______________________________________

   Please Rank top 3 (1 is best)
   1) ________________________________________________
   2) ________________________________________________
   3) ________________________________________________

26. What questions regarding cover crops, would you like to see addressed through research?

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

27. Would you be willing to talk with us further about your cover crop experience?
   ___ Yes   ___ No
   If yes please provide your contact information:  Name_____________________________________
   Phone Number_________________________  Email Address___________________________

Thank you very much for your time and cooperation!

Mail surveys to: Quirine M. Ketterings, Department of Animal Science, 323 Morrison Hall, Cornell University, Ithaca NY 14853. Fax: 607 255 9829. Email: qmk2@cornell.edu.