

option

EXPERT REVIEWED

MANAGING COVER CROPS

Checklist for Integrating Cover Crops Into Your Cropping System

Authors: Eileen Kladivko, Robert Nielsen, Shaun Casteel, Keith Johnson, and James Camberato, Purdue Department of Agronomy; Christian Krupke, Purdue Department of Entomology; William Johnson, Bryan Young, and Kiersten Wise, Purdue Department of Botany & Plant Pathology

Purdue Department of Entomology; William Johnson, Bryan Young, and Kier	sten Wise, Purdue Department of Botany & Plant Pathology
This publication is a checklist of things growers should do as they plan for using cover crops in their operation. It is a companion to <i>Managing Cover Crops: An Introduction to Integrating Cover Crops Into a Corn-Soybean Rotation</i> (Purdue Extension publication AY-353-W) and <i>Managing Cover Crops: Cover Crops for Modern Cropping Systems</i> (AY-352-W) available from the Education Store (www.edustore.purdue.edu). It is best to use this checklist in conjunction with the <i>Midwest Cover Crops Field Guide</i> , second edition (ID-433). The page numbers in the checklist below refer you to the guide for more information.	□ Select cover crop(s) and seeding rates, to match your seeding method, timing, and subsequent cash crop □ Arrange for seeding services, if needed □ Order seed in advance! Late Summer/Fall In the late summer and fall, be sure to: □ Seed the cover crop at the appropriate time Winter Over the winter:
Initial Considerations Before planting cover crops, you should: Determine the goal(s) for your cover crop (pages	☐ Consider whether you need to modify your herbicide program based on weed challenges and desired cover crops for the following year (pages 26-28, 29-35) Spring
 7-10) □ Consider your current cash crop and following year cash crop (pages 11-14, 41-43, 44-45): □ Consider C:N ratios of the cover crop (crop 	In the spring, be sure to: ☐ Observe fields for cover crop growth ☐ Watch the weather and be ready to modify when you terminate covers (pages 48-49) ☐ Scout the field for pests. If necessary, consider chemical control of pests at termination. For effective control, you must kill insect pests when they are small; large insects are difficult to kill and often move to adjacent fields (as is the case with armyworm caterpillars) (pages 36-39)
compatibility and N availability for next year's cash crop) Consider the timing of fall harvest and spring planting (time window for cover crop growth) Decide if you want a cover crop that winter kills or one that grows again in spring	
☐ Consider your current herbicide program with respect to potential carryover (pages 29-35)	☐ Terminate cover crops at appropriate time (consider cash crop, cover crop, wet vs. dry spring, etc.)
 □ Determine how you will seed the cover crop (pages 18-24): □ Decide whether you will drill or split-row plant 	☐ Allow a "host-free period" between the cover crop and the cash crop to starve any pests that may be left in the field after you kill the cover crop — two weeks is ideal
after harvest ☐ Determine whether you will use broadcast seeding with or without shallow incorporation ☐ Consider if aerial seeding/high-clearance equipment seeding into a standing cash crop is an effective	 □ Seed the cash crop, ensuring proper planter adjustments to provide seed slot closure □ Monitor for pests or incomplete termination of cover crop

Resources

Managing Cover Crops: An Introduction to Integrating Cover Crops Into a Corn-Soybean Rotation

Available from the Purdue Extension Education Store, www.edustore.purdue.edu.

This publication (Purdue Extension publication AY-353-W) outlines an introductory approach to integrating cover crops into a corn-soybean cropping system.

Managing Cover Crops: Cover Crops for Modern Cropping Systems

Available from the Purdue Extension Education Store, www.edustore.purdue.edu.

This publication (Purdue Extension publication AY-352-W) describes the benefits and considerations of using cover crops in today's agricultural rotations.

Midwest Cover Crops Council

www.mccc.msu.edu

This website includes cover crops selector tools that allow you to choose your county and get seeding dates for each cover crop. There is a tool for agronomic crops for many states, plus for a tool for vegetable crops for Michigan. You can also get seeding rates by reading the information sheet about your cover crop of choice. The website includes a wealth of other information about cover crops from around the Midwest.

Midwest Cover Crops Field Guide, second edition

Available from the Purdue Extension Education Store, www.edustore.purdue.edu.

This pocket guide (Purdue Extension publication ID-433) was produced by the MCCC and the Purdue Crop Diagnostic Training and Research Center. The guide contains more detailed information about selecting and managing cover crops and describes common cover crops for our region. The descriptions also include ranges of cover crop seeding rates.

Terminating Cover Crops: Successful Cover Crop Termination with Herbicides

Available from the Purdue Extension Education Store, www.edustore.purdue.edu.

As the title suggests, this publication (Purdue Extension publication WS-50-W) describes how producers can effectively terminate cover crops with herbicides to prevent them from becoming weeds in the cash crop.

Herbicide Carryover Table

Available from Penn State University Extension, extension.psu.edu/plants/crops/soil-management/ cover-crops/herbicide-persistence/herbicide-carryover-table.

Although published by Penn State, this table includes information that would fit Indiana.

Agronomy Technical Note: Recommended **Cover Crop Seeding Methods and Tools**

Available from the USDA-Natural Resources Conservation Service, efotg.sc.egov.usda.gov/references/public/IN/ Technical_Note_Agronomy_Cover_Crop_Seeding.pdf.

This excellent publication describes cover crop seeding methods that can be used in Indiana and similar Midwest states.

Find Out More

Find more publications in the Managing Cover Crops series by visiting the

Purdue Extension Education Store, www.edustore.purdue.edu.

Reference to products in this publication is not intended to be an endorsement to the exclusion of others that may be similar. Individuals using such products assume responsibility for their use in accordance with current directions of the manufacturer. ©2015 by Purdue Extension. All rights reserved.

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.





Order or download materials from Purdue Extension • The Education Store www.edustore.purdue.edu

Aug 2015