

Windbreak Technology Workshop

Objectives

- Identify and detect wind-related and air quality problems and other environmental concerns to determine the need for windbreaks or other wind control practices.
- Describe windbreak functions, benefits, and principles of design.
- Determine areas to be protected (structures, sites, fields), inventory their present condition, and recognize the use of windbreaks and related practices.
- Prepare cost-effective alternatives including windbreaks that meet cooperator objectives, and solve wind related and air quality resource problems.
- Assemble and present site-specific windbreak planting plans as part of a conservation management system including design, site preparation, planting, and maintenance.

Time	Proposed Agenda	Instructor <i>(see end notes)</i>
<i>Tuesday</i>		
8:00 am	Welcome	<i>Instructor</i>
8:10 am	Course objectives, expectations for participants, content, schedule	<i>Facilitator</i>
8: 20 am	My turn (participant introductions and windbreak experiences)	<i>Participants</i>
8: 50 am	Pre-test	<i>Participants</i>
<i>9:15 am</i>	<i>Break</i>	
9:30 am	How windbreaks function (climatic and physical effects)	<i>Instructor</i>
<i>10:30 am</i>	<i>Break</i>	
10:45 am	Site assessment and soil capabilities	<i>Instructor</i>
11:15 am	Snow management with windbreaks	<i>Instructor</i>
<i>11:45 am</i>	<i>Lunch</i>	
12:45 pm	Resource needs for structures, livestock shelters and other types of sites	<i>Instructor</i>
1:30 pm	Planning considerations for aesthetics and wildlife	<i>Instructor</i>
<i>2:00 pm</i>	<i>Break</i>	
2:15 pm	Windbreak site preparation, planting and maintenance options	<i>Instructor</i>
<i>3:00 pm</i>	<i>Break</i>	
3:15 pm	Water use needs for windbreaks	<i>Instructor</i>
3:45 pm	Economics of windbreaks	<i>Instructor</i>
4:15 pm	Producer testimony & overview of tomorrow	<i>Instructor</i>
5:00	Adjourn	

Time	Agenda (continued)	Instructor
Wednesday		
8:00 am	Inventory and evaluation – introduction to field trip	<i>Instructors</i>
8:30 am	Leave for field & evaluate field sites	<i>Instructors</i>
	Living snow fence	
	Shelterbelt	
	Renovation	
<i>12:00 pm</i>	<i>Lunch (sack lunch needed) & travel to PMC</i>	
1:00 pm	Plant Material Center tour	<i>PMC Host & Instructors</i>
	Woody program	
	Demonstration – site preparation, tree planter, fabric layer, tree protectors, competition control	
3:30 pm	Site assessment for planning exercise	<i>Instructors</i>
4:00 pm	Return to Billings	
5:00 pm	Adjourn	
Thursday		
8:00 am	Windbreak design options	<i>Instructor</i>
8:30 am	Wildlife enhancement options	<i>Instructor</i>
9:00 am	Windbreak renovation	<i>Instructor</i>
<i>9:30 am</i>	<i>Break</i>	
9:45 am	Field planning site inventory and evaluation	<i>Instructor</i>
10:15 am	Conservation buffer guidelines	<i>Instructor</i>
10:45 am	Introduction to planning exercise	<i>Instructor</i>
11:00 am	Develop alternatives for planning exercise site including key complementary actions	<i>Participants (facilitated by instructors)</i>
<i>11:45 pm</i>	<i>Lunch</i>	
12:45 pm	Develop field windbreak alternatives for planning exercise site including key complementary actions (continued)	<i>Participants (facilitated by instructors)</i>
1:30 pm	Present and defend alternatives with instructor/peer critiques (4 groups)	<i>Participants</i>
<i>2:30 pm</i>	<i>Break</i>	
2:45 pm	Present and defend alternatives with instructor/peer critiques (4 groups)	<i>Participants</i>
3:45 pm	Post test	<i>Participants & Instructor</i>
4:15 pm	Wrap-up and adjourn	<i>Facilitator</i>

Notes:

- Windbreak renovation video available for last day if time allows (30 minutes)