

Cover Crop Planning Scenario and Discussion for 8/17 Workshop

In this exercise, reference the farm description that has been provided and using your group's knowledge and the attached cover crop decision making tables, determine what the best type of cover crop or cover crop mix will address the identified resource concerns on the farm. In addition, identify any changes the farmer could make in the operation to improve the overall soil health on the farm, including tillage practices, crop rotations, etc. When the whole group reconvenes, your moderator will make a short presentation of the group's recommendations and also identify any additional questions that may have arose when completing the exercise.

1. Planning Scenario for Small, Diversified Farm with High Tunnel

Jerry Garcia owns Eco Farms, a five-acre organic operation that grows specialty herbs and vegetables on contract for local restaurants. The small farm has a true loam soil with 3-5% slopes. The farm primarily uses hand labor but does have a small tractor with a rototiller attachment that they use to incorporate compost before planting. They also have a high tunnel for growing tomatoes but are starting to experience disease pressure. Jerry would like to continue to build organic matter in the soil, add nitrogen for the next crop and reduce labor for weed control. Attracting pollinators would be a plus as well. On a visit to the farm, you identified soil erosion as a resource concern.

2. Planning Scenario for Operation with Lima Beans

Franklin Fordhook has a typical rotation of no-till corn with minimum till wheat and soybeans. He is looking for opportunities to plant value-added crops in his operation, including lima beans as an alternative to soybeans on some of his acreage next year. His soils are predominantly sand and loamy sand with a 0-1% slope. He wants to adopt practices that help retain moisture for the lima beans on his non-irrigated field, and look into other potential opportunities for value-added crops. The resource concerns you identified while out on the farm were soil erosion, soil compaction, organic matter depletion, and nutrients in ground and surface water.

3. Planning Scenario for Vineyard and Transitioning Fruit Farm

Barry Appleton has a 20-acre farm, with a 2-3% slope and predominantly sandy-loam soils. Roughly half of the farm is a 10-year old vineyard and the other half is about to transition from minimal-till grain crops to blueberries and tree fruits, such as peaches and apples. The organic matter is 1.5% and pH is 6.5-7.0. Organic matter for most fruit crops should be a minimum of 3%, but ideally higher. However, many experts believe that grapes should be 2.5-3.0% OM and blueberries should have a pH of 4.5-5.5. Compaction and weed control inputs are issues in the vineyard and it is a goal to keep them to a minimum as the other half of the farm transitions to fruit.