

This guidance document is provided as a set of instructions based on 2013 - 2016 cover crop projects. The steps listed below are minimum criteria steps. For example, the District can choose to host more than one field day event, facilitate more than one demonstration plot, plant more than 10 acres, etc. The Foundation will not be able to exceed the budgeted caps per District as listed in the contract, so keep this in mind during the planning process. The Foundation recognizes that not all of the processes will work for each District. If you need to deviate from any of the criteria, consult with the Foundation in writing and the technical support team will weigh in on the matter.

District Technical Support Team

The District is encouraged to set up a team of experts to lead the project at the county level. Consider the following for the county level technical support team - district staff, district conservationists, county level Cooperative Extension, Department of Ag regional agronomists, Division of Soil and Water soil scientists, staff from other pilot districts, and producers with a history of cover crops. Determine goals at the county level to will help the District promote multi-species cover crops that address any issues unique to your region. As questions arise, the Foundation will rely on the following technical support team to weigh in on the issue at hand: Dr. Alan Franzluebbbers with NRCS / ARS and Steve Woodruff with NRCS East Technology Center.

Producer Selection

1. Preference should be given to producers that have interest in continuing beyond the project's timeline.
2. Select a producer that has a working knowledge of the basics of soil health, such as the use of no-till.

Demonstration Plot Selection – Examples to be sent out to selected Districts

1. Select a field that is easily accessible for field day events.
2. Select a site with a minimal range of soil types, the more uniform the better. Preference is given to sites that do not require subsoiling.
3. Consider the following minimum acres for the demonstration plot.
 - a. Coastal & Piedmont Districts – 10 acres, if you are partnering with a vegetable grower and need to lower the amount please communicate that to the Foundation.
 - b. Mountain Districts – 2 to 5 acres, partners request you find the largest area possible but we understand that many mountain fields are small.

4. Select a field that will allow for 4 strips with a minimum width of 40 feet (wider strips are preferred). If the producer's equipment will better accommodate narrower strips, please consult with the Foundation.
5. Plan to plant the multi-species cover crop mix in alternating strips. On the secondary strips, it is preferable that no cover crop is planted, but a monoculture cover crop is permissible.

Cover Crop Establishment / Removal = TAKE PICTURES

1. After evaluating the goals of the producer and the District, select a seed mix that includes four species at a minimum, two of which are legumes. The technical support team is able to provide guidance as needed.
2. For establishment processes, follow the criteria listed below;
 - a. Coast & Piedmont - broadcast the mix on or before September 30th or no-till drill the mix by October 31st. If broadcasting, plan to spread 25% greater amount of seed than if no-till drilling. If producer has concerns with meeting the establishment date, encourage them to harvest this field first so that cover crop can be planted in a timely manner. Prior to deviating from these dates, consult with the Foundation.
 - b. Mountain - broadcast the mix on or before September 15th or no-till drill the mix by October 15st. If broadcasting, plan to spread 25% greater amount of seed than if no-till drilling. If producer has concerns with meeting the establishment date, encourage them to harvest this field first so that cover crop can be planted in a timely manner. Prior to deviating from these dates, consult with the Foundation.
3. For termination processes, follow the criteria listed below;
 - a. Coast & Piedmont – terminate cover crops no earlier than April 15th by rolling down and/or chemical treatment. If producer has concerns of lateness of removal date, encourage them to save this field for planting last. Prior to deviating from these dates, consult with the Foundation.
 - b. Mountain – terminate cover crops no earlier than May 1st by rolling down and/or chemical treatment. If producer has concerns of lateness of removal date, encourage them to save this field for planting last. Prior to deviating from these dates, consult with the Foundation.

Field Day Logistics = TAKE PICTURES

1. The District chooses to host a spring or fall/winter event, only one is required. The District can do a joint event with another District but reimbursement from Foundation cannot exceed total cap. The District is encouraged to seek other sponsors and invite vendors such as sister agencies offering conservation programs, seed dealers, chemical dealers, equipment dealers, etc. Also consider applying for Continuing Education Credits, the Foundation will secure Certified Conservation Planner credits with NRCS.
2. Location – consider an indoor and outdoor setting in case of inclement weather. Consider accessibility, parking, and general safety (emergency contact numbers).

3. Example topics for agenda
 - a. Introduction – District Supervisor
 - b. Science of soil health – nutrient cycles, living ecosystem discussion
 - c. Basics of soil health demonstrations – slake test, particle size demonstration, rainfall simulators, etc. Consider reserving the Mobile Soils Classroom.
 - d. Mechanics / Importance of cover crops (general) – management, selecting seed mix, establishment / growth termination processes
 - e. Tour of demonstration plot – discuss specifics of cover crop such as seed mix, establishment, growth termination, any issues encountered
4. Example speakers (not listed in order of preference)
 - a. Producer and District staff
 - b. NRCS – State office agronomists/specialists or East National Technology Support Center staff
 - c. Extension – county level or others at university
 - d. NC Dept of Ag – regional agronomists or other soil scientists with Division of Soil and Water Conservation
 - e. Producers from other areas of state / country actively using cover crops
 - f. District staff from other pilot counties
5. Workshop Survey – to be distributed to selected Districts. Turn information in as aggregated data.
6. Workshop Timeline – establish date TWO MONTHS in advance
 - a. Notify the Foundation ASAP regarding dates under consideration. The Foundation will work with all Districts to avoid multiple events being scheduled on the same day.
 - b. One month prior to event - Send a Save the Date postcard / flier for distribution through mail using known producer lists from the District, Extension, and applicable commodity groups. The announcement should include date, time, location, speakers invited, meals provided, registration cost if any, and continuing education credits requested. Include reference to funders.
 - c. Two weeks prior to event – finalize agenda including funder logos.

Project Timeline

1. Submit an electronic copy of the Foundation’s signed contract.
2. September 15, 2017
 - a. Submit a narrative including the following;
 - i. General directions to site from District office
 - ii. Establishment and removal methods

- iii. Seed mixture to be used
 - iv. Testing – list field tests you would like to conduct. *PLEASE NOTE – Foundation funds cannot be used to pay for the Haney Test but can be used to pay for any other tests such as Earthfort or Cornell tests.*
- b. Submit a completed landowner questionnaire, a form will be shared with selected Districts.
 - c. Submit electronic photos of field
 - i. Pick photo spots you can replicate later in growing season.
 - ii. Send no more than 10 by email or by drop box. *Do not format into a pdf, send each photo as standalone files, this allows for better looking reports compiled by the Foundation for funders.*
 - iii. Include photo description in word document – number of photo, date of photo, general orientation of photo, details such as plants id, name of person(s), etc. When taking a photo of ground cover include a coin or pen for scale.
 - d. Submit a project map with location of strips and demonstration plot delineated in Toolkit, Google Earth, GIS or some other electronic mapping program. An example will be provided to select Districts.
 - e. Field Day plans – The District is required to host one event at a time of District’s choosing. For event details include: date, time, location with address, primary point of contact, draft agenda, meal/refreshment details, continuing education credits being requested. Share the workshop details and final agendas for posting to the Foundation website.
5. September to October 2017
- a. Complete broadcast cover crop establishment with a minimum 25% increase in seeding rate over the standard drilling rate (Mountain = 9.15; Coast & Piedmont = 9.30). TAKE PICTURES
 - b. Complete no-till drill cover crop establishment. If producer has concerns of earliness of establishment date, encourage them to harvest this field first (Mountain = 10.15; Coast & Piedmont 10.31). TAKE PICTURES
6. Winter 2017 to Spring 2018 (AT LEAST TWO MONTHS PRIOR TO EVENT) - Submit field day event date/location and any other tentative details available. The District is required to host one event at time of District’s choosing. For event details include: date, time, location with address, primary point of contact, draft agenda, meal/refreshment details, continuing education credits requested. Share workshop details and final agendas for posting to Foundation website.
7. April to May 2018 – Begin termination of existing cover crop (rolling and/or spraying). If producer has concerns of lateness of growth termination date, encourage them to save this field for planting last (Coast & Piedmont = 4.15; Mountain 5.1). TAKE PICTURES

8. June 5, 2018 – Submit invoicing including request for payment, final report, all receipts and electronic photos with photo log. *Invoices can be submitted ahead of schedule, to insure prompt billing submit by the 5th of the month. If you need an extension please let the Foundation know.*

INVOICING

1. Cover Letter – signed by Supervisor, list total amount requested, whom to make check out to
2. Final Report - form to include:
 - a. Producer name
 - b. Location of demonstration plot
 - c. Acreage of demonstration plot
 - d. Number of strips and average width
 - e. Crop rotation in place
 - f. Removal process & date
 - g. Seed mix and ratios
 - h. Establishment process & date
 - i. Field Day – number of attendees, how advertised, agenda, summary of evaluations, comments from producers / staff
 - j. FieldPrint Calculator report and any issues / lessons learned
3. Receipts – must equal total amount being requested.
4. Workshop agenda & registration list
5. Pictures – removal, establishment, field work, field day event = no more than 25 total. Include photo description in word document – number of photo, date of photo, general orientation of photo, details such as plants id, name of person(s), etc. When taking a photo of ground cover include a coin or pen for scale.

Data Collection – See Attachment 3

Fieldprint Calculator - <https://www.fieldtomarket.org/fieldprint-calculator/>

The FieldPrint Calculator will rely heavily on information provided by the producer, with different questions being posed based on earlier responses. You will need to enter the data electronically with the producer, this can be done in the field if a work tablet is available. If all information is readily available it should take approximately 30 minutes to input the data. At the end of the session a report is generated, plan to save it as a PDF and submit to the Foundation.

An example report is attached based on a hypothetical example of a research plot in Goldsboro. The Foundation encourages the District to explore the online tool and let us know what questions you have.