

The Trail of Records:

Recordkeeping for Organic Crop Certification

Introduction

A reliable recordkeeping system is the backbone of a successful organic operation. Keeping thorough records throughout a crop's lifecycle brings transparency and integrity to an organic operation. To be certified organic, a producer must keep thorough records of all steps a crop moves through, starting with the initial seed, stock, or seedling purchase. Records should then document planting and field activities, material inputs, harvest and storage, and finally, product sales.

During organic certification inspections, inspectors perform **traceback audits** to verify that organic practices are properly followed. Traceback audits prove that a crop can be traced from its final sale all the way to its initial planting, with records demonstrating that organic regulations were met across the crop's lifecycle. For example, an inspector may select a specific crop and examine all a producer's records associated with that crop. Thorough records help an inspector to perform a traceback audit more easily and expediently. This guide provides an overview of the required recordkeeping for certified organic crop operations, including recommendations for recordkeeping templates for each section.

Contents:

- 1) Seed, Planting Stock, and Seedling Records
- 2) Planting and Production Activity Records
- 3) Input Material Records
- 4) Harvest and Storage Inventory Records
- 5) Sales and Transactions Records



Recordkeeping Systems

The National Organic Program (NOP) requires producers to keep records, but the NOP does not stipulate the specific format for those records. Farms can utilize whichever recordkeeping format and system is best suited for their operation while meeting organic recordkeeping requirements. Records can be handwritten, such as journals or calendars, or digital, such as spreadsheets and apps. There are many recordkeeping templates available; some suggestions are listed at the end of each section of this guide. Comprehensive templates available for recordkeeping systems include:

- [USDA/ATTRA Documentation Forms](#)
- [Vermont Organic Farmers Templates](#)
- [North Carolina State Extension Organic](#)
- [Organic Association of Kentucky Google Sheets](#)

1) Seed, Planting Stock, and Seedling Records

The first step in the process of crop recordkeeping is recording seed, seedling, and stock purchases. Organic producers must keep the following records for a successful traceback audit:

- 1) **Receipts & invoices** from seed, stock, and seedling purchases.
- 2) **Seed labels or tags**, either physically or digitally.
- 3) **A supplier's organic certificate** if seeds, seedlings, or stock are purchased from an organic seller.
- 4) **Any seed treatments**, such as inoculants or coatings, must be listed as a material input in the Organic System Plan (OSP).

**Note that the requirements for sourcing organic seeds and stock differ from the requirements for sourcing organic annual seedlings. The following sections cover these differences.*

Seeds and Planting Stock

Commercial Availability Search

If **organic seeds or stock** cannot be found in either the quantity, quality, or variety that is adapted for a producer's region, then a producer may use non-organic seeds and stock. However, any purchased non-organic seeds must also be **non-GMO and untreated** (more details below). Before buying non-organic seeds or stock, a producer must perform a *Commercial Availability Search*. The Commercial Availability Search requires contacting at least 3 likely suppliers of organic seed or stock to inquire about organic options for the desired crop variety. These inquiries must be recorded, including details like the name of the supplier contacted, the date of contact, the method of inquiry, and the reason why non-organic seed or stock was ultimately purchased instead of organic seed or stock.



Non-Organic Seed & Stock Requirements

If a producer purchases non-organic seed or stock, they must also receive verification from the supplier that the seed or stock is **untreated** and **non-GMO**. Forms of verification include a letter from the seller, a listing on the invoice, or documentation that shows the seed is a non-GMO variety (this is only needed when the specific seed also exists in GMO form). This non-GMO documentation could be an affidavit from the seller or seed company, the *Safe Seed Pledge* on the supplier's website, or a non-GMO *Validation Certificate* from the company.

Harvesting Your Own Organic Seed

Producers can grow and harvest their own organic seed if the seed is harvested from an organic location included on the producer's organic certificate (i.e. in the Organic System Plan). To harvest their own seed, a producer must record the following:

- 1) **Seed source**
- 2) **Harvest date**
- 3) **Crop and variety**
- 4) **Field or location of harvest**
- 5) **Quantity harvested**
- 6) **Storage location**



Annual Seedlings

Purchased annual seedlings must be organic. There is no Commercial Availability Search or non-organic alternatives allowed for annual seedlings, except in the very rare circumstances that a temporary variance is granted. For recordkeeping of seedlings, producers must keep a copy of the supplier's organic certificate that lists organic seedlings as a crop or product, and an invoice indicating the purchased seedlings are organically produced.

Additional Seed, Seedling, and Stock Resources

Suggested Recordkeeping Templates	Referenced NOP Regulations
USDA: Documentation Forms Seed Suppliers (p. 18) Commercial Seed Search (p. 19) Seed Treatments/Coatings (p. 20) Seed-Saving/Propagation (p. 21) OAK: Organic Recordkeeping Template – Seeds and Planting Stock – Google Sheets CCOF: Seed and Planting Stock Record - Excel	§ 205.103 Recordkeeping by certified operations. § 205.105 Allowed and prohibited substances, methods, and ingredients in organic production and handling. § 205.201 Organic production and handling system plan. § 205.204 Seeds and planting stock practice standard. § 205.400 General requirements for certification.

2) Planting and Production Activity Records

The second step in the process of crop recordkeeping is recording planting and production activities. Production activities are recorded in order to give an inspector an idea of the various processes that occur on the operation and allow the inspector to verify that only organic practices have been used. The following list contains some primary examples of activities that could be recorded, but this list is not exhaustive. Planting procedures and field activities vary by operation.

Record Category	Details to Include
Planting Records	<ul style="list-style-type: none">• Name and variety of crop• Date of planting• Location/field of planting• Seed, seedlings, or stock used
Activity Logs (field activities)	<ul style="list-style-type: none">• Weeding• Tillage• Mowing• Pest/Disease Monitoring
Crop Rotation	<ul style="list-style-type: none">• Crops planted by year/season/location (including cover crops, forage crops, green manure crops, and nurse crops)• Planting maps or spreadsheets
Compost (if producing on-site)	<ul style="list-style-type: none">• Materials/feedstock used, source, and quantity• Estimated C/N ratio of mixture• Temperature readings and turning dates

Planting Records and Activity Logs

Planting records are an important aspect of an inspector being able to verify how a crop is managed throughout its lifecycle. The variety of seed, seedling, or stock should be documented, as well as which field or row it is planted in and the date of planting. Field activities such as weeding, tillage, and pest monitoring should be recorded as well to give an inspector a good understanding of the control systems an operation uses and at what frequency.

Crop Rotation

The NOP requires certified operations to practice crop rotation to build soil health, prevent soil erosion, and naturally break cycles of pests and diseases. In **annual cropping systems**, crops should be rotated such that heavy feeder crops are followed by light feeder crops and/or nitrogen-fixing legumes. Crops within the same family should not be planted in the same location year after year so as to maintain soil nutrient balances. Both short-term and long-term rotation cycles are acceptable so long as soil nutrients are maintained and erosion is controlled. Producers should maintain records of crop rotations to show inspectors that this requirement is met.

In **perennial cropping systems**, an operation's goal should be to introduce as much biodiversity as possible. This could take the form of rotating cover crops in alleys or planting hedgerows surrounding fields. Alley crops could also rotate yearly or alternate between rows.

There is no one-size-fits-all for crop rotation practices; each operation should investigate what rotation systems work best for managing their specific crops, soil, and pests. See the recommended templates listed below for crop rotation recordkeeping.

On-Site Compost Production

If an operation chooses to use compost *containing manure* that is produced on-site, there are specific compost-related records the operation must keep in order to ensure continuous compliance with NOP regulations. These records include all added inputs to the compost, sources of those inputs, dates of compost turning, estimated carbon/nitrogen ratios, and regular temperature readings. Like any other input material, compost must be verified by the certifier as approved for organic production, and detailed records provide the transparency necessary for the certifier to do so. For information regarding compost sourced from off-site, refer to the next section: Input Material Recordkeeping.

Additional Planting and Production Resources:

Suggested Recordkeeping Templates	Referenced NOP Regulations
USDA: Documentation Forms - Field Activities (p. 11-12) - Crop Rotation (p. 14) - Compost Production (p. 16) OAK: Organic Recordkeeping Template – Field Activity Log - Google Sheets CCOF: Farm Activity Log - Excel	§ 205.103 Recordkeeping by certified operations. § 205.201 Organic production and handling system plan. § 205.203 Soil fertility and crop nutrient management practice standard. § 205.205 Crop rotation practice standard. § 205.206 Crop pest, weed, and disease management practice standard. § 205.400 General requirements for certification. NOSB Compost Task Final Report

3) Input Material Recordkeeping

The third step in the process of crop recordkeeping is recording any materials applied to crops or the soil. Note that “materials” are also sometimes called “inputs” or “substances.” These terms are interchangeable. Some examples of materials include fertilizers, pest controls, soil amendments, and silage tarps. Organic producers must keep the following records on **every applied material** for a successful traceback audit:

- 1) **Crop(s) and/or location(s) where materials are applied.**
- 2) **Date, application rate, and method of application.** For example: “1.5 tons per acre manure applied with a spreader to all of Field B.”
- 3) **Reason for material application.** Was this material used to control pests or disease? Note that many materials have a **use restriction**. This means that the material is allowed for certain uses **ONLY** after other practices or methods have proven ineffective.
- 4) **Purchase receipts for all input materials.** These receipts will be reviewed during the annual inspection, so keep them in a consistent, organized place.



Photo Credit: USDA

Finding Organic Materials

Before using a material, a producer must ensure it is allowed for use in organic production. OMRI-approved materials have been listed by the Organic Material Review Institute as approved for use in organic production. Be on the lookout for material restrictions, however, which only allow use of materials after other methods have been tried. The WSDA Organic Input list, published by the Washington State Department of Agriculture, also lists materials approved for organic use. It is best practice to check a material with your certification agency prior to use. All materials used should be listed in the operation’s Organic System Plan.

Manure Application

Because uncomposted (raw) manure can potentially contain contaminants and harmful bacteria, application of manure requires slightly more consideration and detailed recordkeeping. If growing crops that are for human consumption, raw manure must be applied at least **120 days** before harvest for crops that have their edible portion touching the soil. For crops that have their edible portion above the ground, raw manure must be applied at least **90 days** before harvest.

When applying manure, the following records should be kept:

- 1) **Manure type and source**
- 2) **Date and location of application**
- 3) **Date the crop was harvested**
- 4) **Application method:** Manure must be applied in a way that does not lead to contamination of soil or water.

Sourcing Off-Site Compost

If using compost that is produced elsewhere, an operation should request production documentation from the supplier to ensure the compost is suitable for organic use. The documentation should include the feedstock and materials used in the compost, the initial carbon-to-nitrogen (C:N) ratio, the method of composting, and the temperature readings across time. Producers should keep this documentation with their input records for the inspector to review.

Additional Input Material Resources:

Suggested Recordkeeping Templates	Referenced NOP Regulations
USDA: Documentation Forms - Input Material Application (p. 15) - Manure Application/Food Crop Harvest Interval (p. 17) OAK: Organic Recordkeeping Template –Inputs Log – Google Sheets CCOF: Input Material Record - Excel	§ 205.103 Recordkeeping by certified operations. § 205.105 Allowed and prohibited substances, methods, and ingredients in organic production and handling. § 205.201 Organic production and handling system plan. § 205.203(c)(2) Soil fertility and crop nutrient management practice standard. § 205.400 General requirements for certification. § 205.601 Synthetic substances allowed for use in organic crop production.

4. Harvest and Storage Inventory Recordkeeping

The fourth step in the recordkeeping process is recording the harvest, post-harvest handling, and storage of organic crops. This is required to ensure an organic crop can be traced backwards from sale, through harvest, all the way to the field of production. A producer must also be able to reconcile the total amount of crop harvested with the total amount of crop sold. This is a type of audit done at every organic inspection called a *mass-balance audit*. Refer to the next section of this guide, Sales and Transactions Recordkeeping, for more details on this type of audit.

Organic producers must keep the following harvest and storage records for EVERY crop for a successful traceback audit:

- 1) **Date of harvest of crop**
- 2) **Quantity harvested:** Note that the unit of harvest, such as bushels, bunches, or pounds, should reflect the same units in sales records for comparison compatibility during the traceback audit.
- 3) **Crop type or variety**
- 4) **Field or location of harvest**



Buffer Zone Crop Harvest

If crops that are intended for sale are grown in a buffer zone where potential for outside contamination exists, the crop must be harvested and marketed as conventional; it **cannot be sold as organic**. This plan for buffer crop harvest should be included in the operation's Organic System Plan. For all crops harvested from buffer zones, records should be kept of the quantity harvested and sold to the non-organic market.

Post-Harvest Cleaning, Storage, and Transport

Post-harvest activities may include cleaning, storage, and/or transportation. These activities must all be recorded.

Crop Cleaning: Simple crop cleaning practices, such as rinsing potatoes or carrots with potable water, do not need to be documented. For crop cleaning practices that use any materials, such as a sanitizer, record both the cleaning procedure and any materials used. Any cleaning materials must be added to the material list in the OSP, and producers should verify that the amounts used of each cleaning material align with standards such as the Safe Water Drinking Act.

Equipment Cleaning: If harvest equipment is used solely for organic crops, then minimal documentation on equipment cleaning is required. However, if harvest equipment is borrowed, rented, custom-hired, or in any way shared between organic and conventional production, that equipment must be cleaned before use on organic ground. This cleaning procedure must be recorded.

Equipment cleaning records should include:

- 1) **The date of cleaning**
- 2) **The equipment that was cleaned**
- 3) **Any materials used in the cleaning process (include these in the OSP's Materials List)**
- 4) **Brief description of the cleaning process**

If a producer has established cleaning protocols on file with their certifier, then the records can simply include date and time with a reference to the protocol used.

Storage Recordkeeping: It is important for the following storage records to be kept for all crops:

- 1) **Crop(s) being stored**
- 2) **Storage location**
- 3) **Quantity and date into storage**
- 4) **Quantity and date out of storage**
- 5) **Inventory balance, including beginning and ending inventories**



Storage Labeling: All organic crops must be

identified as organic on the storage container. The container must have unique information that links it to audit trail records. This could be a production lot number, shipping identification, or other unique identifier.

Transport: Should organic crops be transported in a vehicle that also transports non-organic crops, a **Clean Transport Affidavit** must be completed. The affidavit should include information on the transport vehicle, cleaning procedures, and other applicable details. There are multiple Clean Transport Affidavit templates available online, and one is included at the end of this section.

Additional Harvest and Storage Inventory Resources:

Suggested Recordkeeping Templates	Referenced NOP Regulations
USDA: Documentation Forms <ul style="list-style-type: none">- Planting & Harvest Record Template (p. 13)- Harvest Plan & Record Pick List (p. 24)- Harvest and Cost Records for Weekly CSA (p. 25)- Equipment Cleaning Log (p. 21)- Storage Inventory Record (p. 28)- Clean Transport Affidavit (p. 30) OAK: Organic Recordkeeping Template –Harvest Log – Google Sheets CCOF: Sample Harvest Record (Excel)	§ 205.103 Recordkeeping by certified operations. § 205.105 Allowed and prohibited substances, methods, and ingredients in organic production and handling. § 205.201 Organic production and handling system plan. § 205.400 General requirements for certification.

5. Sales and Transactions Recordkeeping

The final step in the process of crop recordkeeping is recording sales and transactions. The types of records kept will vary with each operation depending on crops, methods, and markets. Specific record requirements for different markets will be listed later in this section, including Markets and Farmstands, Community-Supported Agriculture (CSA) subscriptions, and Wholesale. As a basis, organic producers must keep the following sales and transactions records for a successful audit:

- 1) **Crop and quantity sold**
- 2) **Date of sale**
- 3) **Buyer**

Sales and transaction records must also trace back to harvest and/or storage as part of the record trail. **Ensure crops are identified as organic on all sales records.**

Additional Records Required for Various Market Types

Market/Farmstand	CSA	Wholesale
<ul style="list-style-type: none">• Quantity of crop brought to market• Quantity of unsold crops that return from market	<ul style="list-style-type: none">• Quantity of crops being sold• Value of product• Quantity of shares/subscriptions	<ul style="list-style-type: none">• Market/buyer• Date of sale• Crop and quantity• Transportation method• Packing list• Paid invoices

Mass-Balance Audit, Yield Analysis and Total Sales

Mass-Balance Audit: At each annual inspection, the inspector will need to reconcile the total quantities harvested with the total quantities sold over a given time period. This is called the mass-balance audit. This audit requires thorough and consistent harvest and sales records for each organic crop.

Yield Analysis: The inspector will also likely conduct a yield analysis, which is used to verify that an operation's yields from organic harvest align with what would be expected from the number of organic crops planted. A yield analysis will require records on the total area planted (acres or row-feet) and the number of transplants or quantity of seed used, as well as harvest records.

Total Farm Sales: The inspection will also require records on total farm sales by calendar and/or crop year, which can be recorded using a spreadsheet, invoices, settlement sheets, or any other method that works for the operation.

Additional Sales and Transactions Resources:

Suggested Recordkeeping Templates	Referenced NOP Regulations
USDA: Documentation Forms - Farmers Market Load List or Farmstand Sales (p. 23) - Harvest and Cost Records for Weekly CSA (p. 25) - Total Farm Sales Record (p. 27) OAK: Organic Recordkeeping Template – Yield Tracking – Google Sheets CCOF: Sample Market Load List (Excel)	§ 205.103 Recordkeeping by certified operations. § 205.201 Organic production and handling system plan. § 205.400 General requirements for certification.

Summary

This guide covered the recordkeeping requirements from seed to sale for organic crops, which allows a straightforward traceback audit during an annual organic certification inspection. To meet organic recordkeeping requirements, records must be kept for the following steps of production:

- 1) **Seeds, Seedlings, and/or Stock**, including receipts from seed purchases, supplier organic certificates, and the Commercial Availability Search for any seeds or stock that are non-organic.
- 2) **Planting Information and Field Activity**, including planting dates and locations, field activities like weeding, tilling, and mowing, crop rotations, and compost applications.
- 3) **Input Materials**, including materials, locations, and reasons for application, as well as specific information regarding manure application.
- 4) **Harvest, Handling, and Storage Procedures**, including harvest dates and quantities, cleaning protocols, storage information, and transport of crops.
- 5) **All Sales and Transactions**, including crop and quantity sold, dates of sales, and buyer information. Specific records must also be kept depending on the market(s) the operation sells to.

Additional Recordkeeping Resources

[CCOF: Recordkeeping Checklist for Organic Growers](#)

[MOFGA: Record Keeping for Organic Producers](#)

[MOSA: Recordkeeping That Works](#)

[Oregon Tilth: Recordkeeping Case Study](#)

[Oregon Tilth: Recordkeeping for Farms](#)

[Texas Agriculture Audit Trail Walkthrough](#)

[WSDA: Organic Recordkeeping Requirements](#)

More resources can be found in the TOPP Resource Library at OrganicTransition.org