

The Northeast Organic Farming Association of New York (NOFA-NY, Inc.) Presents:

The On Farm Skills Development Guide



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How to use the NOFA-NY On Farm Skills Development Guide

This guide provides activities to plan, monitor, reflect upon and track changes as an aspiring or new farmer goes through a season of farm training. Its primary function is for beginning farmers and their farm mentors to identify areas to provide education, increasing skills and work responsibility on the farm. Completing this guide will allow you to develop a plan for information exchange and monitor progress of the beginning farmer and improved farm efficiencies.

The four main steps are:

Prioritize Learning/Work Objectives

Finalize Learning Plan

Mid-Season Review

End-of-Season Meeting Evaluation

Each beginning farmer and farm mentor will determine which areas of agriculture that they would like to focus on during the season, this guide is meant to be flexible and you only need to complete the subject areas that pertain to your needs.



Make it work for you, and we'd love to hear your feedback.

Step 1: Prioritize Learning & Work Objectives

This portion is completed by the beginning farmer. Each subject area has a baseline list of learning/work objectives. We hope that reading through these topics starts a process of self-inquiry and thinking about the various areas to explore during farm training.

Alternative option for mentor-driven prioritization: Identify the areas you, the host farmer will teach during an apprenticeship, and ask apprentices to add their top learning goals to that list.

Step 2: Finalized Learning & Performance Objectives

This portion is completed by the beginning farmer and mentor farmer. Together they review the areas the beginning farmer is interested in improving for the season and prioritize which learning/work objectives make the most sense to address. From there they can determine correlating performance objective that will help to improve farm efficiency. It is important to discuss methods of instruction that will be used and form a rough plan for the season. Finally set the date for a mid-season check-in during the pre-season meeting.

Step 3: Mid-Season Review

The beginning farmer copies the topics from the Finalized Learning Plan into the Mid-Season Review. Together the beginning farmer and mentor farmer work to complete the table and review the progress of the season and the learning plan. Finally set the date for the end-of-season meeting.

Step 4: End-of-Season Evaluation

The beginning farmer copies the topics from the Finalized Learning Plan into the End-of Season Evaluation. Together the beginning farmer and mentor farmer work together to complete the table. This is an opportunity to reflect on the seasons learning and improved farm efficiency. Take time to discuss the best education or training methods. From here the beginning farmer can use the topics identified in the plan to bridge this season to the next round of learning opportunities by identifying topics to focus on (either new topics or ones to continue from this season). This is a good time to identify off-season training plans and goals with the assistance of the mentor farmer.

Tracking Multiple Seasons of Educational Experiences

Save and use the plan from the first year to help develop your second year learning plan. Do the same each year as you develop your skills.

Verify Your Training! Documented training in agricultural methods and farm business planning can improve your chances of qualifying for loans, bank services or land access services. Initial and date each time you go through a step of the tracking process, keep each season's tools in a safe place and record workshops conferences and other training programs you attend.



Business—Retail Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/Other Educational Event
Direct Marketing: Branding, Customer Service & Outreach		1. 2.	1. 2.		
Assessing the Market		1. 2.	1. 2.		
Farmers Markets		1. 2.	1. 2.		
Restaurants & Small Grocery		1. 2.	1. 2.		
Community Supported Agriculture		1. 2.	1. 2.		
Agri-Tourism		1. 2.	1. 2.		
Farm Stand & Farm Store Sales		1. 2.	1. 2.		
Cost of Production Calculations		1. 2.	1. 2.		
Developing Price Points		1. 2.	1. 2.		
Yearly Budgeting & Cost Projections		1. 2.	1. 2.		
Risk Management: Insurance, Disaster Planning, & Contracts		1. 2.	1. 2.		
Certifications & Regulations		1. 2.	1. 2.		

Business - Wholesale Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/ Other Educational
Assessing the Market		1.	1.		
Cooperatives		1.	1.		
Commodity Prices & Futures		1. 2.	1. 2.		
Yearly Budgeting & Cost Projections		1.	1.		
Calculating Yields		1. 2.	1. 2.		
Determining Transportation Expenses		1.	1.		
Preseason Crop Expenses		1.	1.		
Determining Price Points		1. 2.	1. 2.		
On Farm Crop Sales		1.	1.		
Certifications & Regulations		1.	1.		
Risk Management: Insurance, Disaster Planning & Contracts		1.	1.		
Developing a Business Plan & Business Finance		1. 2.	1. 2.		

Dairy Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/Other Educational Event
Herd Health		1. 2.	1. 2.		
Nutrition, Feed & Water Requirements		1. 2.	1. 2.		
Pasture Management		1. 2.	1. 2.		
Stored Forage Management		1. 2.	1. 2.		
Milking Practices & Quality Control		1. 2.	1. 2.		
On Farm Processing		1. 2.	1. 2.		
Reproduction		1. 2.	1. 2.		
Hoof Trimming		1. 2.	1. 2.		
Manure Management		1. 2.	1. 2.		
Equipment Operation & Safety		1. 2.	1. 2.		
Housing Needs		1. 2.	1. 2.		
Predator Control		1. 2.	1. 2.		

Farm Maintenance and Repair Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/Other Educational Event
Basic Welding Skills		1. 2.	1. 2.		
Advanced Welding Skills		1. 2.	1. 2.		
Fabrication Repairs		1. 2.	1. 2.		
Hired Mechanic vs. Do It Yourself		1. 2.	1. 2.		
Pre Season Preparation		1. 2.	1. 2.		
Preventative Maintenance		1. 2.	1. 2.		
Skills Assessment for Major Repairs (engine overhaul)		1. 2.	1. 2.		
Carpentry, Building Maintenance & New Construction		1. 2.	1. 2.		
Plumbing		1. 2.	1. 2.		
Electrical		1. 2.	1. 2.		
Shop Safety		1. 2.	1. 2.		
		1. 2.	1. 2.		

Field Crops Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/Other Educational Event
Seed Variety Selection		1. 2.	1. 2.		
Crop Rotation		1. 2.	1. 2.		
Soil Tilth, Tests & Fertility		1. 2.	1. 2.		
Field Preparation for Planting		1. 2.	1. 2.		
Seeding Rates & Calibration		1. 2.	1. 2.		
Planting Dates & Days to Harvest		1. 2.	1. 2.		
Weed Control		1. 2.	1. 2.		
Pest & Disease Strategy		1. 2.	1. 2.		
Planning for Harvest, Drying & Storage		1. 2.	1. 2.		
Custom Harvest vs. Investment in Your Own Equipment		1. 2.	1. 2.		
Owning Equipment for Tillage, Planting & Harvest		1. 2.	1. 2.		
Markets Commodity & Wholesale		1. 2.	1. 2.		

Fruit Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/ Other Educational Event
Planting		1. 2.	1. 2.		
Pruning		1. 2.	1. 2.		
Tillage		1. 2.	1. 2.		
Spraying & Spray Safety		1. 2.	1. 2.		
Irrigation		1. 2.	1. 2.		
Cultivation & Weed Management		1. 2.	1. 2.		
Harvest		1. 2.	1. 2.		
Pack shed		1. 2.	1. 2.		
Food Safety		1. 2.	1. 2.		
Soil Health & Fertility Management		1. 2.	1. 2.		
Plant Health		1. 2.	1. 2.		
Equipment Operation & Safety		1. 2.	1. 2.		

Greenhouse Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/ Other Educational Event
Planting		1. 2.	1. 2.		
Pest Management		1. 2.	1. 2.		
Disease Management		1. 2.	1. 2.		
Soil Health & Fertility		1. 2.	1. 2.		
Water Systems		1. 2.	1. 2.		
Equipment Operation & Safety		1. 2.	1. 2.		
Maintenance & Repair		1. 2.	1. 2.		
Scheduling		1. 2.	1. 2.		
		1. 2.	1. 2.		
		1. 2.	1. 2.		
		1. 2.	1. 2.		

Livestock Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/Other Educational Event
Livestock Health		1. 2.	1. 2.		
Nutrition, Feed & Water Requirements		1. 2.	1. 2.		
Pasture Management		1. 2.	1. 2.		
Stored Feed Management		1. 2.	1. 2.		
On farm Processing		1. 2.	1. 2.		
Reproduction		1. 2.	1. 2.		
Manure Management		1. 2.	1. 2.		
Equipment Operation & Safety		1. 2.	1. 2.		
Sourcing replacement stock		1. 2.	1. 2.		
Housing Needs		1. 2.	1. 2.		
Predator Control		1. 2.	1. 2.		
Processing Options		1. 2.	1. 2.		

Produce Learning Plan

Directions: The table below is to be filled out by the beginning farmer at the start of his or her apprenticeship. Please rate your skill level, and list your current strengths and weaknesses associated with each topic, 1 being the weakest and 5 the strongest. List strengths and weaknesses and determine the year in which you would like to focus on improvement. Lastly determine if this knowledge would best be gained during an on farm task or at another farm/workshop/conference.

Learning/Work Objective	Skill Level (1-5)	Current Strength	Current Weakness	Year	Learn On Farm/Other Educational Event
Greenhouse		1. 2.	1. 2.		
Tillage		1. 2.	1. 2.		
Planting & Transplanting		1. 2.	1. 2.		
Irrigation		1. 2.	1. 2.		
Cultivation & Weed Management		1. 2.	1. 2.		
Harvest		1. 2.	1. 2.		
Pack shed		1. 2.	1. 2.		
Food Safety		1. 2.	1. 2.		
Soil Health & Fertility Management		1. 2.	1. 2.		
Plant Health		1. 2.	1. 2.		
Equipment Operation & Safety		1. 2.	1. 2.		
		1. 2.	1. 2.		

Finalized Learning & Performance Objectives

(for current year)

Directions: Once the beginning farmer has completed the applicable learning plan charts the beginning farmer and mentor farmer will meet to review learning/work objectives and determine performance objectives they both agree on for the season. These objectives will be recorded in the columns below and used to complete mid season and end of season reviews.

Learning/Work Objective	Correlating Performance Objective	Learning/Work Objective	Correlating Performance Objective
1.		6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

Date Assessed _____

Farm Mentor _____

Beginning Farmer _____

Once the finalized learning & performance objectives are complete, the beginning farmer will copy the finalized learning objectives onto the Mid Season Review and End of Season Review Worksheets. These worksheets will be used to assess the skills of the beginning farmer as well as the teaching performance of the mentor farmer throughout the season.

Mid Season Review

Directions: Copy your finalized learning/work objectives into the columns below. Complete chart with farm mentor.

Learning/Work Objective	Skill Level (1-5)	How can the beginning farmer work to better fulfill expected learning/performance objectives?	How can the mentor farmer better facilitate this experience to meet learning/performance objectives?	What other (on or off farm) learning opportunities may help the beginning farmer fulfill expected learning/performance objectives?
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Date Assessed _____

Farm Mentor _____

Beginning Farmer _____

End of Season Review

Directions: Copy your finalized learning/work objectives into the columns below. Complete chart with farm mentor.

Learning/Work Objective	Skill Level (1-5)	Is the beginning farmer confident that they can independently perform this skill?	Is the mentor confident in the beginning farmer's ability to independently perform this skill?	What does the beginning farmer still need to work on to master this skill?	Has farm efficiency improved through the gained knowledge of the beginning farmer? (Provide % improvement)
1.		Yes / No	Yes / No		
2.		Yes / No	Yes / No		
3.		Yes / No	Yes / No		
4.		Yes / No	Yes / No		
5.		Yes / No	Yes / No		
6.		Yes / No	Yes / No		
7.		Yes / No	Yes / No		
8.		Yes / No	Yes / No		
9.		Yes / No	Yes / No		
10.		Yes / No	Yes / No		

Date Assessed _____

Farm Mentor _____

Beginning Farmer _____