**Abstract**

[put chicken – apple – hog photos on this page instead of with Intro]

Clover Valley Farms is a small-scale integrated farm near Duluth, Minnesota. Jeff Hall and Cindy Hale raise poultry, hogs, apples, and herbs. They started selling products in 2007 and have grown into a combination of direct sales and wholesale.

This case study describes how Cindy and Jeff started working toward their farming dreams in 1999, how they have gradually added enterprises, and how they integrate farming with their off-farm jobs and their overall lifestyle.

There are details on training and networking, business planning and goal setting, production methods, on-farm research, poultry processing, cider pressing, yields and profitability, marketing models, and business management. Jeff and Cindy’s emphasis on integration (such as the passive solar greenhouse that helps heat their home while giving life to their herbs) is highlighted throughout the case study.

Interviews and photos for this case study were obtained primarily in 2010. Some follow-up notes from 2011 are included, but as with all case studies [link to “Read This First!” page]\* in the Profiles in Sustainable Agriculture project [link to “About” page], this case study necessarily represents a snapshot in time. Like many farmers, Cindy and Jeff’s approach is continually evolving.

**\*Can we switch “Read This First!” (so that link label is on the home page) and “How to Use the Case Studies” (so that’s the title of the sub page), and make the following edits to that page (shown as tracked changes)?**

You may have already discovered that “cookie cutter” approaches don’t work well in farming. There is no formula or tool for getting you from A to Z; what works on one farm or for one farmer may not work for another. A given approach may not even work for the same farmer from one year to the next. These case studies use the examples of other beginning farmers to step you through the diverse topics you need to consider before starting or transitioning your own enterprise.

It is recommended you read through the case studies once from beginning to end, then use them as reference documents and revisit appropriate sections as needed. Although PDF versions are provided, reading the case studies online is optimal due to the number of external resources to which they are linked. The case studies have also been laid out with as many internal links as possible to help you navigate the information and find resources that are relevant in multiple locations.

Resources are provided as links within the text and in various sidebars called “Educator’s Perspective: Resource Tips” or “Farmer’s Perspective: On the Bookshelf.” Other sidebars called “At A Glance” and “Farmer’s Perspective: Lessons Learned” provide supplemental details and insight. The emphasis is on resources available in Minnesota, but many of them are relevant elsewhere.

**Edits from Emily Hoover**

Table 5a

* Apples: Add exclamation point to Zestar
* Cherries: Should be Evans Bali
* Pears: Summercrisp is one word
* Change footnote 1 (after Clover Valley Antique, Heritage Crabs, and Stinett Heritage) to a 2, and add footnote 1 to end of table title, with this note below table: “Some varieties in this table are not known to be hardy in north of Duluth.”

Add these resource tip boxes (to these locations: near Table 5a, near Table 5b, and near “Maintenance” paragraph, respectively)

Educator’s Perspective: Resource Tip

Winter Hardy Fruits

The University of Minnesota Extension fact sheet [Fruits for Minnesota](http://www.extension.umn.edu/distribution/horticulture/dg1104.html) provides recommendations for cultivars suitable for growing in the state’s four regions. There are tables for apples (early, mid, and late season), pears, apricots, plums (European and hybrid), cherries (plum, tart, and Nanking), raspberries (summer- and fall-bearing), strawberries (June- and ever-bearing), blueberries, grapes (table, juice, and jelly, plus seeded vs. seedless), mulberries, juneberries, elderberries, gooseberries, currants (red and black), along with an explanation of which fruits need multiple cultivars for fruit set.

Educator’s Perspective: Resource Tip

Currants & Gooseberries

The University of Minnesota Extension fact sheet [Currants and Gooseberries in the Home Garden](http://fruit.cfans.umn.edu/garden/currantsgooseberries.htm) describes research, cultivars, site selection, planting, pruning, harvesting, diseases, and insects for these two related fruits. Although the fact sheet is geared toward the home gardener, much of the information is relevant to commercial production. The fact sheet includes an explanation of white pine blister rust, a fungus that affects white pine trees and uses currant and gooseberry bushes as alternate hosts, and how this fungus has impacted currant and gooseberry production in the U.S.

Educator’s Perspective: Resource Tip

Tree Fruit Maintenance & Other Aspects of Production

Penn State updated their useful [Tree Fruit Production Guide](http://agsci.psu.edu/tfpg) in 2010-2011. [Part I](http://agsci.psu.edu/tfpg/part1) contains cultural information, including orchard establishment, orchard floor and weed management, plant nutrition, growth regulators, and frost protection. Other parts of the guide address chemical management, IPM spray programs, harvest and postharvest handling, cider production, and production budgets.

The [Fruit Resources](http://www.fruit.cornell.edu/index.html) page at Cornell University addresses tree fruits, grapes, and berries, with additional links to minor fruits and related topics. The [Tree Fruit](http://www.fruit.cornell.edu/tree_fruit/index.htm) page covers a similar range of topics as the Midwest Organic Tree Fruit Growers Network but includes perspectives outside of the Midwest and for conventional production. There is also information on food safety, post-harvest, business management, and labor

**Acknowledgements**

**Author**

Sarah Stai, EcoSmith Consulting

**Editing and Web Design**

Jane Jewett, Minnesota Institute for Sustainable Agriculture

**Profiled Farmers**

Jeff Hall and Cindy Hale, Clover Valley Farms

**Technical Advisers**

Beth Nelson, North Central Region – Sustainable Agriculture Research & Education

Jan Joannides, Renewing the Countryside

Betsy Wieland, University of Minnesota Extension Small Farm Team

Wayne Martin, University of Minnesota Extension Small Farm Team

Nick Olson, Land Stewardship Project

Jerry Ford, Sustainable Farming Association of Minnesota

**Reviewers**

Levi Muhl, Minnesota Department of Agriculture

Jacqui Jacob, \_\_\_\_\_\_\_\_\_\_

Emily Hoover, University of Minnesota

Sue Peterson, \_\_\_\_\_\_\_\_\_\_

Inga \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_

Jackie Hoch, Hoch Orchard and Gardens

**Photo and Video Credits**

Matthew Olin, University of Minnesota – Duluth

Sarah Stai, EcoSmith Consulting

Jeff Hall and Cindy Hale, Clover Valley Farms

**Funding**

Minnesota Institute for Sustainable Agriculture

*Copyright 2012, Minnesota Institute for Sustainable Agriculture. Additional copies of this item may be ordered from the Minnesota Institute for Sustainable Agriculture, 411 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108, email: misamail@umn.edu; phone: 612-625-8235 or 800-909-6472. Also available in full text online at: www.misa.umn.edu The information given is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Minnesota Institute for Sustainable Agriculture is implied.*