**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 footage 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.

Cornell University offers well-done [Organic Production Guides](http://www.nysipm.cornell.edu/organic_guide/) for a variety of fruits and vegetables. As of 2011, guides were available for apples, blueberries, strawberries, and grapes. The thorough [A Grower’s Guide to Organic Apples](http://www.nysipm.cornell.edu/organic_guide/apples.pdf) has chapters on organic certification, site selection and orchard design, rootstock and cultivar selection, soil fertility and crop nutrient management, groundcover and weed management, pesticides, insecticides, IPM, pests and diseases, wildlife damage management, harvest and postharvest handling, and production and marketing costs.

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