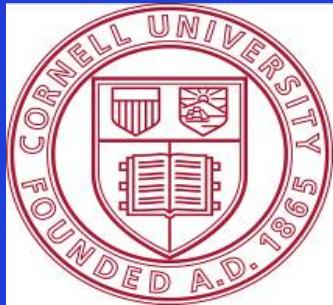


Heirloom and Hard Cider Apples for Commercial Growers

Ian A. Merwin



Cornell University
Department of Horticulture



Growing High-Demand Cultivars?

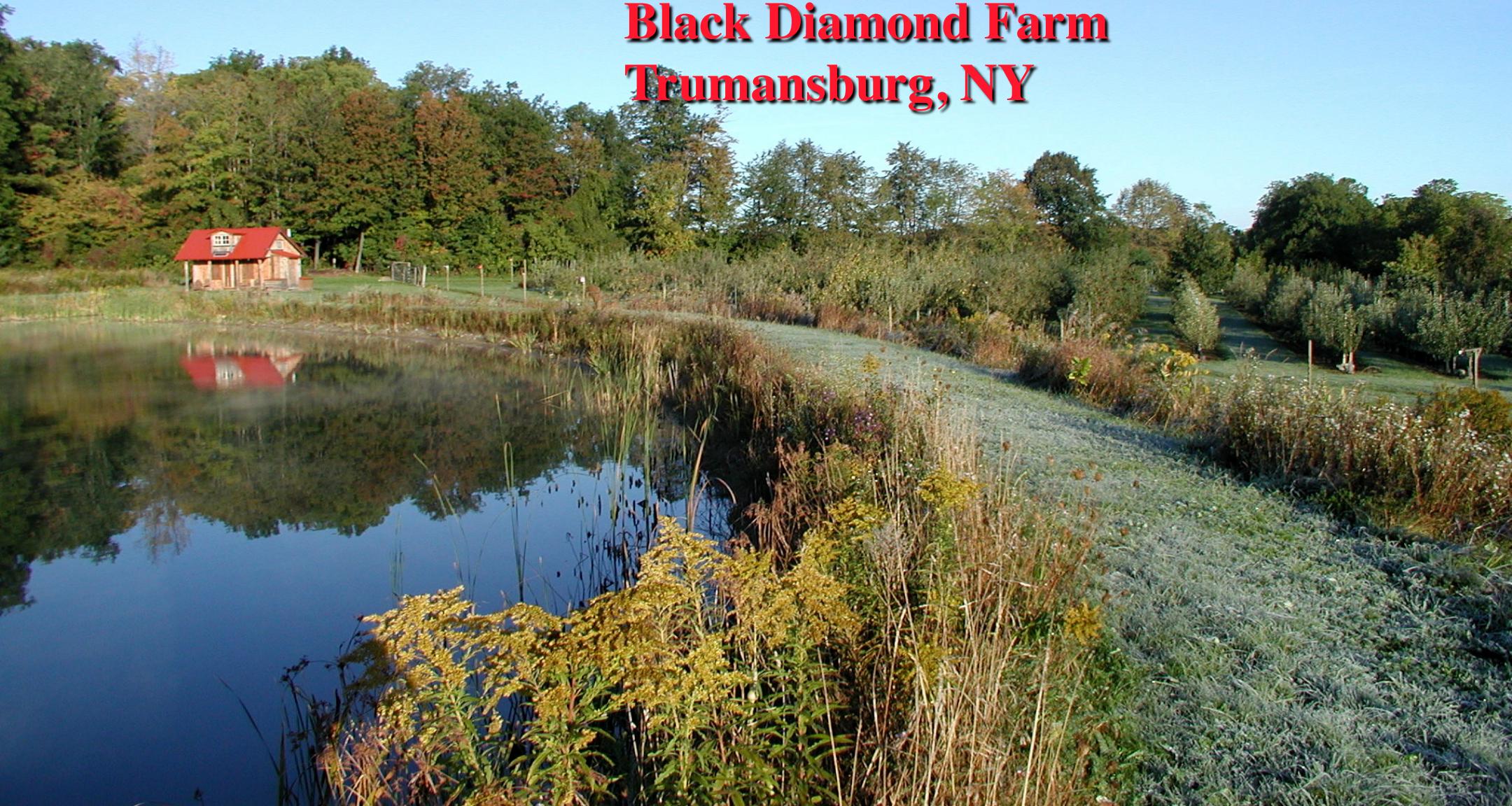
- HoneyCrisp paradigm: Scarcity + Demand = High prices and customer enthusiasm
- May need high value cultivars to remain profitable
- New apple varieties are not available to everyone
- Club variety contracts for a few selected growers
- What market strategies or apple varieties will enable other growers to succeed in the future?

Positive Trends for Apple Growers

- Great interest in “local” and “organic” fruit
- Increasing on-farm retail sales...agritourism
- Farm Wineries and Cideries increasing rapidly
- Increased numbers of CSAs and Farmers Markets
- Food security and energy costs favor local growers
- Supermarket system generates consumer interest in food and produce that’s really “different”
- Heirloom and cider apples fit these market niches!

**A market strategy based on rare and heirloom
fruit varieties, sold locally and regionally...**

**Black Diamond Farm
Trumansburg, NY**



Black Diamond Farm:

A little history

- Small (64 acres, 8 acres of fruit), family operated
- Initially grew only scab-resistant apples
- First heirloom and cider apples planted in 1994
- Jonagold, Sansa, Gingergold, HoneyCrisp in 1998
- Joined Ithaca Farmers Market in 1998, GreenStar Cooperative Market in 2000, small CSA since 2002
- Market to metropolitan areas through distributor
- Grow 200+ apple, plum, peach, and cherry varieties, no more than 200 trees of any cultivar, high density

Strategy for Fruit Quality

- Everything is field packed directly into bushel boxes, culls dropped in the field, fruit is only handled once
- Spot-pick most varieties...usually 3 to 4 times
- Only tree ripe fruit goes to market. No MCP use.
- Nothing is stored longer than 8 weeks, except fruit for hard cider that is “sweated” before pressing
- No ground-applied N fertilizer after the third leaf
- Irrigate, prune, and thin aggressively for size
- Flavor and texture more important than appearance

A Different Market Strategy

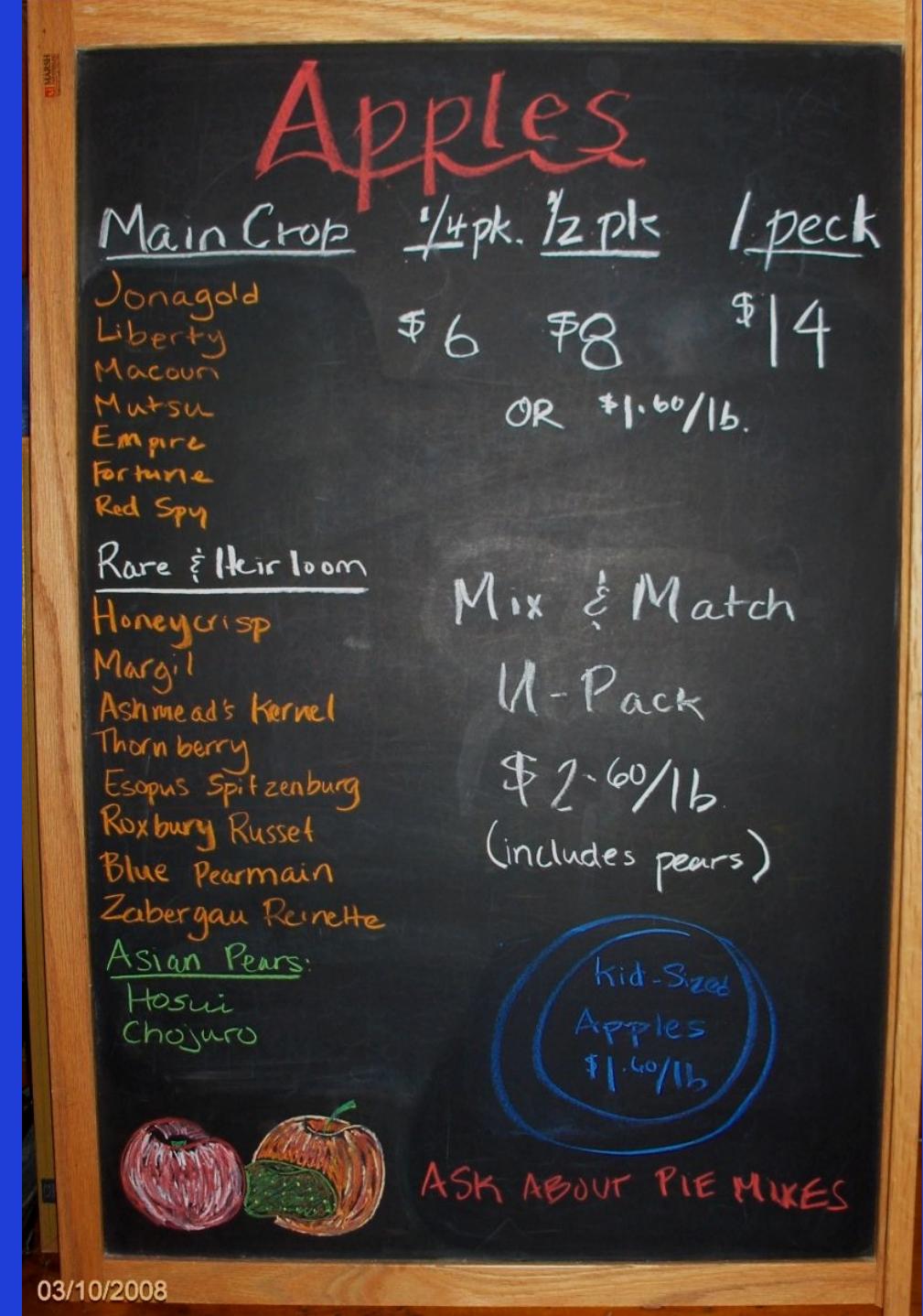
- Every cultivar is limited in time and quantity
- Sell out each variety before customers get bored!
- Four price categories: Rare & Antique, Maincrop, “Lunchbox”, and Utility
- Database with each customer’s fruit and variety preferences...e-mail them when favorites are picked
- Precut slices and tastings of every variety we sell
- Customers pack mixed bags at market within each price category (fruit graded for free...) and culls are sold as utility, or brought home for cider making

CSA bagged “Fruit of the Week” and Farmers Market Booth on Halloween



Price Board at Ithaca Farmers Market

www.incredapple.com





Sansa



GoldRush



Crimson Crisp



Liberty



Northfield Beauty



Chestnut Crab



St. Edmund's Pippin



Holstein Cox



Egremont Russet



Cox Orange Pippin



Karmijn de Sonnaville



Pink Pearl



Bramley's Seedling



Margil (Reinette Musquee)



Esopus Spitzenburg



Zabergau Reinette



Orleans Reinette



Blue Pearmain



Hudson's Golden Gem



Tompkins King



Keepsake



Roxbury Russet



Ashmead's Kernel



Calville Blanc



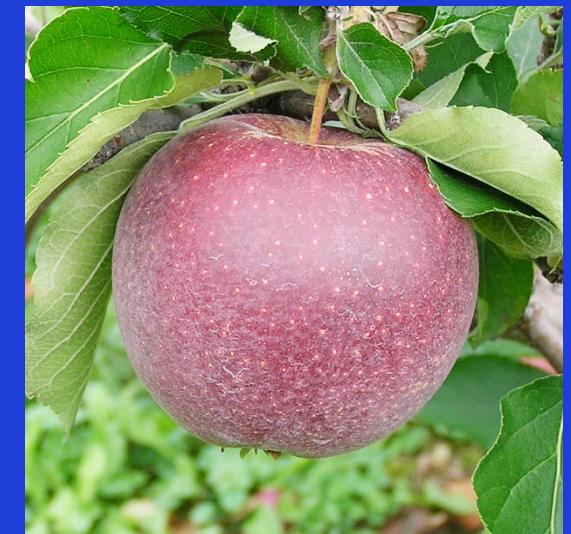
Golden Russet



Albemarle (Newtown) Pippin



GoldRush



Black Oxford

Growing (Hard) Cider Apples: Four Categories

- SWEETS: tannins < 0.2%, titratable acid < 0.45%
- SHARPS: tannins < 0.2%, titratable acid > 0.45%
- BITTERSWEETS: tannins > 0.2%, titr. acid < 0.45%
- BITTERSHARPS: tannins > 0.2%, titr. acid > 0.45%

Potential problems with hard cider varieties

- Some are very late blooming—full bloom on Macs when late cider varieties are at half inch green!
- Potential for fire blight—but copper OK during bloom because fruit finish is usually not an issue...
- Can be difficult to thin (both timing and thinners)
- Growth habits are different—blind wood, upright, sectorial bearing, set in tight clusters, heat stress...

What makes it worthwhile?

- Demand and prices are very high (\$20 to 50 per bushel), likely to stay that way for many years
- Number of (hard) cideries has doubled in past five years, mostly on east and west coasts
- National association of cider makers recently formed (Chicago CiderCon) could enable regulatory reforms and facilitate marketing
- Many good dual purpose heirloom apples too

BITTERSWEETS for hard cider:
My shortlist after 20 yrs—Somerset and Hereford
Redstreak, Tremletts (Geneva) Bitter, Harry Masters
Jersey, Dabinett, Brown Snout, Chisel Jersey,
Fillbarrel, Porters Perfection, Binet Rouge...





A few BITTERSHARPS
Porter's Perfection
and Kingston Black
that can make high quality
hard ciders without blending



Recommended English Cider Varieties...

Late September to Early October

Ashton Bitter
Ellis Bitter
Major

Somerset Redstreak**
White Jersey

Mid to Late October

Brown's Apple**
Dabinett
Harry Masters' Jersey

Michelin
Reinette O'bry
Sweet Coppin

November

Chisel Jersey†
Dabinett†

Yarlington Mill

*All mid-season flowering except Chisel Jersey which is mid to late season.

**Control of biennialism difficult.

†Pollen cross-incompatible.



Try some berry crops like
Table and Wine Grapes...





Peaches, Asian and
European type plums
Sweet and Tart Cherries
(the Hungarian types...)



**Plant something new (or old) every year,
and take out varieties that are no longer
in high demand from your customers...**





More to read online in:

NEW YORK FRUIT QUARTERLY
VOLUME 16 . NUMBER 4 . WINTER 2008