# Cultivating Success: A Grower's Guide to Supplying Organic Heirloom Apples to Cideries in Northern New Jersey and New York

# 1. Executive Summary: Seizing Opportunities in the Craft Cider Market

The craft cider market in Northern New Jersey and New York is experiencing a dynamic expansion, presenting significant opportunities for growers of organic heirloom apples. This growth is fueled by a consumer shift towards artisanal beverages with unique flavor profiles and transparent sourcing. While numerous cideries cultivate a portion of their own fruit, a substantial segment actively seeks external apple supplies, particularly those that can contribute to distinctive, high-quality ciders. This report details the landscape for organic heirloom apple producers, identifying potential cidery partners, their sourcing philosophies, preferred apple characteristics, and effective engagement strategies.

Key findings indicate a strong, and often premium, demand for apples that are certified organic, sustainably grown, and represent specific heirloom varieties known for their complex flavors, tannins, and acidity. The market is characterized by a bifurcated pricing structure: lower values for commodity or culled dessert apples, and significantly higher potential for intentionally grown, cider-specific and heirloom organic fruit. Success for growers hinges not only on the quality of the apples but also on understanding the nuanced philosophies of individual cideries—ranging from commitments to regenerative agriculture to a focus on hyper-local or historically significant "lost" varieties. Effective outreach involves direct communication, often with cidermakers or owners, and the ability to articulate the unique value proposition of the apples offered. This report provides actionable intelligence to help growers navigate this promising market, foster productive partnerships, and achieve premium pricing for their specialized fruit.

The craft cider movement has fostered a symbiotic relationship between innovative cider makers and specialized apple growers. Cideries require distinctive fruit to create unique products that stand out in a competitive marketplace, while growers of organic heirloom apples can find a value-added outlet that often surpasses returns from fresh market sales or conventional processing channels. The limited availability of true cider apples, particularly those with desirable tannin and acid profiles, further enhances the position of growers who cultivate these niche varieties.<sup>3</sup> Organic certification adds another layer of appeal, aligning with broader consumer trends toward health,

sustainability, and transparency in food production.<sup>5</sup>

Furthermore, the success of growers in this market extends beyond mere apple quality; it involves a deeper understanding of and alignment with the ethos of individual cideries. Many craft producers build their brand identity around specific agricultural philosophies, such as regenerative farming, the use of "untreated" fruit, or a focus on the unique terroir of their region. Therefore, growers who can demonstrate shared values and provide fruit that contributes to a cidery's distinct narrative are more likely to forge lasting and mutually beneficial partnerships. This necessitates tailored outreach and a willingness to collaborate, moving beyond simple transactional sales to become integral to the cidery's story and product.

# 2. The Market for Organic Heirloom Apples in the North NJ & NY Cider Industry

## Current trends in craft cider and demand for specialty apples

The American cider market has undergone a significant transformation, evolving from a landscape dominated by a few large producers often relying on apple juice concentrate to a vibrant and diverse craft sector. This shift is particularly evident in apple-growing regions like New York and Northern New Jersey, which boast a rich agricultural heritage and a burgeoning community of artisanal cider makers.<sup>6</sup> New York State, for instance, is a leading state in both apple production and the number of licensed cideries.<sup>13</sup>

Craft cideries differentiate themselves by emphasizing quality, authenticity, and unique flavor profiles. A core component of this differentiation is the use of 100% fresh-pressed juice from a diverse range of apple varieties, moving beyond standard culinary apples. There is a pronounced demand for heirloom apples and specific cider apple cultivars (bittersweets and bittersharps) prized for their complex tannins, acidity, aromatics, and historical significance. These characteristics are essential for creating ciders with depth, structure, and a distinct sense of place, often referred to as "terroir." The limited domestic supply of these specialty cider apples, with an estimated 200-300 bearing acres in the U.S. out of approximately 380,000 total apple acres, presents a clear market opportunity for growers cultivating these varieties. The growth in the cider industry translates directly into increased market opportunities for fruit producers, though competition for these limited supplies can be a factor.

The value proposition of organic and heirloom varieties for cideries

Organic and heirloom apples offer a compelling value proposition for craft cideries seeking to produce premium, differentiated products. The "organic" label resonates strongly with a growing segment of consumers who prioritize health, environmental sustainability, and transparency in the food system. Cideries that use certified organic apples can leverage this in their marketing, appealing to this conscious consumer base and often justifying a higher price point for their finished ciders.

Heirloom varieties, by their very nature, provide a rich tapestry of flavors, textures, and historical narratives that are highly attractive to craft producers. These apples, often with lineage tracing back centuries, possess unique chemical compositions—higher tannins, varied acid profiles, and distinctive aromatics—that are difficult or impossible to replicate with modern, mass-market dessert apples.<sup>4</sup> Many cideries are actively engaged in reviving "lost" heirloom varieties or showcasing those with strong regional connections, creating ciders with a unique story and flavor profile that commands consumer interest.<sup>7</sup> The use of such apples allows cider makers to craft beverages that are not just alcoholic drinks but expressions of agricultural heritage and artisanal skill.

The scarcity of true cider apples, particularly bittersweets and bittersharps, combined with the unique flavor contributions of specific heirloom varieties, positions growers of these apples favorably in the market. This is especially true if the apples are also organically certified, adding another layer of distinction and appeal. This supply-demand dynamic suggests that growers who can provide these specialized, high-quality inputs have the potential to command premium prices and establish strong, collaborative relationships with cideries. The value is not just in the apple itself, but in its ability to contribute to a unique, high-quality, and marketable end product.

The "local" narrative is a powerful marketing tool in the craft beverage sector, and this is amplified when combined with "organic" and "heirloom" attributes. This trifecta taps into consumer desires for authenticity, superior quality, and a tangible connection to agricultural heritage and sustainable practices. For a cidery, sourcing organic heirloom apples locally allows them to build a compelling brand story that highlights not only the quality of their cider but also their commitment to regional agriculture and environmental stewardship. This synergy can transform a simple supplier-buyer transaction into a co-marketing opportunity, where the grower's farm and practices become an integral part of the cidery's appeal.

An emerging trend that builds upon the organic foundation is the interest in "regenerative" and "biodynamic" agricultural practices. While not yet mainstream, some pioneering cideries are already championing these holistic farming systems.<sup>7</sup>

Regenerative agriculture focuses on improving soil health, biodiversity, and overall ecosystem resilience, often going beyond the requirements of standard organic certification.<sup>29</sup> Biodynamic farming incorporates these elements with additional specific preparations and a view of the farm as a self-sustaining organism. For growers who adopt and can verify these advanced ecological practices, a niche but potentially very premium market segment may develop, catering to the most discerning cideries and consumers who seek the highest levels of environmental and quality assurance.

# 3. Potential Cidery Buyers: Northern New Jersey

The craft cider scene in Northern New Jersey, while perhaps smaller than its New York counterpart, includes dedicated producers with a keen interest in quality and local sourcing. For growers of organic heirloom apples, understanding the specific philosophies and needs of these cideries is crucial.

**Table 1: Potential Cidery Buyers: Northern New Jersey** 

Cidery Name & Location	Sourcing Model	Interest in Organic Heirloom	Known/Sou ght Varieties	Quality Notes	Contact Info
Ironbound Farm & Ciderhouse Asbury, NJ	Mix: Own 108-acre transitional organic regenerative farm; also buys from NJ, NY, PA farms <sup>7</sup>	Very High	Harrison (primary focus), Canfield, Graniwinkle, Poveshon, Golden Russet, other heritage/cide r apples <sup>25</sup>	Transitional organic, regenerative, 100% fresh-presse d, no added sugar/preser vatives <sup>7</sup>	General: realperson@i ronboundfar m.com, 908-940-411 5.34 Cider Sales/Distrib ution: Bryan Reddy, breddy@iron boundhardci der.com 35
Melick's Town Farm Oldwick, Califon, Bridgewater, NJ	Primarily own apples; largest apple grower in NJ	Low to Unknown	Various dessert apples for PYO; specific cider varieties not	Conventional; uses UV "cold pasteurizatio n" for sweet cider 37	(908) 439-2318 <sup>38</sup>

			detailed <sup>36</sup>		
Alstede Farms Chester, NJ	Own apples; uses "off grade, drops" for cider <sup>40</sup>	Low to Unknown	Blend of their "different apple varieties" <sup>40</sup>	Conventional; focuses on utilizing own farm's output, including imperfect fruit 40	(908) 879-7189 <sup>42</sup>
Hacklebarn ey Farm Cider Mill Chester, NJ	Own apples; "exclusive blend" <sup>43</sup>	Unknown	"Exclusive blend of apples" <sup>43</sup>	Traditional wood-presse d; details limited <sup>43</sup>	908-879-659 3 <sup>43</sup>
Terhune Orchards Princeton, NJ	Own apples from their 250-acre sustainable farm <sup>45</sup>	Unknown	Not specified for cider	"Sustainable farm" mentioned, details on organic/heirl oom for cider sourcing not specified 45	info@terhun eorchards.co m, 609.924.231 0 <sup>45</sup>
Johnson's Locust Hall Farm Jobstown, NJ	Own "locally-grow n apples" for PYO and fresh cider 46	Low to Unknown	PYO: Empire, Golden Delicious, Cameo, Red Delicious, Fuji, Stayman, Granny Smith, Pink Lady 46	Focus on own conventional PYO varieties	Via website/soci al media <sup>46</sup>

# **Detailed Cidery Profiles: Northern New Jersey**

Ironbound Farm & Ciderhouse (Asbury, NJ)

Ironbound Farm & Ciderhouse stands out as a prime candidate for organic heirloom apple growers. Their operation is centered on a 108-acre farm in the New Jersey Highlands, which is managed using "transitional organic regenerative" practices.7 Their philosophy is explicit: "working with nature, not against it," and growing produce "free of conventional chemicals".7

While they cultivate a significant portion of their own apples, particularly heritage varieties, Ironbound explicitly states, "We buy our apples from growers in New Jersey and neighboring states — contributing to the success of our local small-scale family farms and to the revitalization of the apple industry in our region".25 This demonstrates a clear openness to external sourcing.

Their primary focus is on reviving New Jersey's historic cider apple legacy, with a special emphasis on "Newark's Famed Cider Apples". The Harrison apple is a cornerstone of their program, described by their cidermaker as "the most complete apple juice" due to its balance of sugar, acid, and tannins. They have the East Coast's largest planting of Harrison and are also working with varieties like Canfield, Graniwinkle, and the elusive Poveshon. To expand their supply and explore regional flavor differences, Ironbound provided 2,500 young Harrison trees to DeFisher Fruit Farms in Williamson, NY. Their ciders are consistently made from 100% fresh-pressed apples and contain no added sugars, sulfites, or preservatives.

Given their commitment to organic/regenerative principles and their active pursuit of specific heirloom and cider apple varieties, Ironbound represents a strong potential partner. Growers with Harrison, Golden Russet, or other unique cider apples fitting their profile, especially if organically grown, should consider reaching out.

• **Contact:** General inquiries can be made to realperson@ironboundfarm.com or by calling 908-940-4115.<sup>34</sup> For matters related to cider sales and potentially sourcing, Bryan Reddy (breddy@ironboundhardcider.com) is a listed contact.<sup>35</sup>

Melick's Town Farm (Oldwick, Califon, Bridgewater, NJ)

Melick's Town Farm is the largest apple grower in New Jersey, with extensive orchards.36 They operate their own cider mill and produce hard cider.39 Their sourcing model appears to be primarily reliant on their own significant apple production, with their website stating, "We grow it ourselves".38 While they are a major player in NJ agriculture, their scale and focus on supplying their own diverse retail operations (including pick-your-own and farm markets) suggest they are less likely to be seeking external sources of organic heirloom apples unless for a highly specialized, small-batch product or in the event of a significant shortfall in their own crop. They have indicated they are not large enough to supply wholesalers with their raw apples.37

Contact: The general farm line is (908) 439-2318.<sup>38</sup>

#### Alstede Farms (Chester, NJ)

Alstede Farms operates its own cider mill, pressing cider from their "own apples".40 Their approach to cider production emphasizes utilizing a variety of their "own local fresh picked apples," including "off grade, drops, and consumer rejected apples" as part of their sustainability and waste reduction efforts.40 They also produce non-alcoholic sparkling cider from their "homegrown apples".41 This focus on internal sourcing and use of utility-grade fruit

from their conventional farming operation makes them an unlikely primary market for premium-priced organic heirloom apples from external growers.

• **Contact:** The general farm line is (908) 879-7189. 42

Hacklebarney Farm Cider Mill (Chester, NJ)

Hacklebarney Farm is a 7th generation farm that makes wood-pressed apple cider "fresh on the premises from an exclusive blend of apples".43 Historical accounts affirm "they still press their own".44 Due to limited current information and previous website inaccessibility 47, their specific interest in sourcing external organic heirloom apples is unknown. Their emphasis on an "exclusive blend" from their own farm suggests a primary reliance on internal resources.

• Contact: The farm's phone number is 908-879-6593.43

#### Terhune Orchards (Princeton, NJ)

Terhune Orchards is a 250-acre family-owned "sustainable farm" that produces its own apple cider among other products.45 There is no explicit mention in the available information of purchasing external apples specifically for their cider production. While "sustainable farm" is noted, the extent to which this aligns with certified organic practices for their apples or a specific interest in sourcing external heirlooms for cider is not detailed.

 Contact: General inquiries can be directed to info@terhuneorchards.com or 609.924.2310.<sup>45</sup>

Johnson's Locust Hall Farm (Jobstown, NJ)

This farm offers pick-your-own apples and sells fresh-pressed apple cider, with an emphasis on their "locally-grown apples".46 Their listed apple varieties are primarily common dessert types suitable for PYO operations.46 There is no indication of a focus on sourcing external organic heirloom apples for cider production.

Contact: Information available via their website and social media channels.

The New Jersey cider landscape indicates that Ironbound Farm & Ciderhouse is the most aligned potential buyer for organic heirloom apple growers. Their explicit mission to revive heritage apples, their regenerative and transitional organic farming practices, and their stated history of sourcing from local farms in NJ, NY, and PA make them a key target. Their collaboration with DeFisher Fruit Farms in New York for Harrison apples further underscores their commitment to expanding the availability of these unique varieties and their willingness to partner across state lines. This cross-state sourcing is an important consideration for New York-based growers, as it broadens their potential market into Northern New Jersey if the apple type and quality meet Ironbound's specific needs. Other New Jersey cideries appear more focused on utilizing their own conventionally grown crops, often incorporating utility-grade fruit into their cider production, making them less probable primary customers for premium organic heirlooms.

# 4. Potential Cidery Buyers: New York (Hudson Valley, Finger Lakes, and other relevant areas)

New York State is a major hub for craft cider production, with numerous cideries across various regions actively seeking high-quality and unique apple varieties. The Hudson Valley and Finger Lakes regions are particularly notable for their concentration of cideries interested in heirloom and cider-specific apples, often with a commitment to organic or sustainable practices.

**Table 2: Potential Cidery Buyers: New York** 

Cidery Name & Location	Sourcing Model	Interest in Organic Heirloom	Known/S ought Varieties	Quality Notes	Farm Partnersh ips	Contact Info
Angry Orchard Innovatio n Cider House Walden, NY (Hudson Valley)	Mix: Own 60-acre orchard; collaborat es with local growers/in stitutions for R&D <sup>24</sup>	Implied High (reviving heirlooms)	Newton Pippin, Golden Russet, RI Greening, Rome, Jonathan, Macintosh , Baldwin; general "heirloom" & "traditiona I cider apples" 24	"Sustaina ble working cider house"; uses NYS apples for "Farm Series" <sup>24</sup>	Crist Family (cultivates their orchard); other local growers for research	845-713-5 180; Joseph Gaynor (Cidermak er) <sup>53</sup>
Little Apple Cidery Hillsdale, NY (Hudson Valley)	Own NOFA-NY certified organic orchards; buys from other growers when own crop is short	Very High	Northern Spy, Golden Russet, Baldwin, Rubinette, Pitmaston Pineapple, Ashmead' s Kernel,	NOFA-NY certified organic for own fruit; prefers smaller fruit with flavorful skin 54	Thompson -Finch Farm (past partner) <sup>57</sup> ; sources from Lower Hudson Valley & Western	Ron Bixby, ron@little applecider y.com, (518) 610-1345

	(resulting cider may not be 100% organic) <sup>17</sup>		Harrison <sup>17</sup>		NY growers when needed <sup>54</sup>	
Metal House Cider Esopus/N ew Paltz, NY (Hudson Valley)	Mix: Own reinvigorat ed orchard; sources from historic Hudson Valley orchards <sup>8</sup>	Very High	Organic Goldrush; Esopus Spitz, Newtown Pippin, RI Greening, N. Spy, Roxbury/G olden Russet, Black Oxford, Blue Pearmain, Baldwin, Redfield (new plantings); Macintosh , Cortland, Rambo, Stayman, Spartan, Empire, Idared, Jonathan, Tydeman, Macoun (historic home orchard); wild Catskill crab <sup>8</sup>	"100% untreated"; "sustainab ly grown"; bio-intensi ve/biodyn amic practices; no unnecessa ry chemicals 8	Sources from various historic Hudson Valley orchards and abandone d orchards 8	kimberly@ metalhous ecider.co m 8
South Hill Cider Ithaca, NY	Mix: Own organicall y farmed	Very High	Dabinett, Golden Russet,	Organic/bi odynamic (own	Greene Farm (Wolcott,	info@sout hhillcider.c om, (607)

(Finger Lakes)	home orchard; sources from wild foraged, abandone d orchards, & other nearby growers <sup>18</sup>		Redfield, Tremletts Bitter, Bramleys, Zabergau Reinette, Kingston Black, Major, Michelin, Medaille d'Or, Chisel Jersey, HMJ, Sam Young, Brown Snout, E. Spitzenbu rg, Calville Blanc, Cox's Orange Pippin, Sheepnos e, Goldrush, Porters Perfection , Baldwin	farm); "sustainab ly sourced"; aims to impact grower managem ent for quality 18	NY) <sup>28</sup> ; collaborat es with neighbors for abandone d orchards <sup>18</sup>	792-1097; Orders: orders@s outhhillcid er.com, 607-272-9 862 <sup>66</sup>
Nine Pin Cider Albany, NY (Capital Region)	Primarily external sourcing; "100% NY apples" <sup>26</sup>	High (for NY-grown, unique varieties)	Harrison, Gold Rush, Golden Delicious, Franklin, Golden Russet (from Five Branches); blends from Samascott ; Idared;	"100% NY apples," never concentra te; "sustainab le" sourcing for Signature; high-suga r apples for	Samascott Orchards, Five Branches, Mourningk ill Farms, Lagoner Farms, regional land conservan cies <sup>26</sup>	518.449.99 99; Alejandro del Peral (Founder/ Cidermak er) <sup>26</sup>

			wild/forag ed apples <sup>26</sup>	Imperial <sup>26</sup>		
Bad Seed Hard Cider Highland, NY (Hudson Valley)	Mix: Own 6th gen family farm (Wilklow Orchards); sources "exclusivel y from local farms" 74	Moderate to Unknown (for organic/he irloom specificall y)	Not specified for cider, likely Hudson Valley dessert/cu linary varieties <sup>77</sup>	"100% fresh-pres sed Hudson Valley apples"; no artificial additives	Wilklow Orchards (own farm); other local farms <sup>74</sup>	info@bads eedhardci der.com, 845-236- 0956; Albert Wilklow (Farmer), Devin Britton (Productio n) 75
Treasury Cider (Fishkill Farms) East Fishkill, NY (Hudson Valley)	Estate: Own 270-acre farm with 80+ apple varieties; organic & Eco Apple certified 9	Very High (for own fruit)	Roxbury Russet; many heirloom & European bitterswee t types grown for cider 9	Organic or Eco Apple certified; "minimum of interventio n" <sup>9</sup>	N/A (Estate)	(845) 897-4377 (Fishkill Farms) <sup>79</sup>
Pennings Farm Cidery Warwick, NY (Hudson Valley)	Primarily own apples from 100+ acre farm; sources other produce from neighbors	Moderate to Unknown (for external organic heirloom apples)	Dabinett, Gold Rush, Ellis Bitter, Margil, Brown Snout, Porters Perfection (grown/sol d) 16	Grows "cider specific apple trees" 16	Sources other produce from neighborin g farms <sup>16</sup>	info@pen ningscider y.com, (845) 987-9922; SJ Pennings (Productio n) <sup>16</sup>
Orchard Hill Cider Mill (Soons	Estate (Soons Orchards); may bring	Unknown	Not specified for cider	Builds on Soons Orchards	Potentially local neighbors for	Via Soons Orchards

Orchards ) Warwick, NY (Hudson Valley)	in neighbors' produce <sup>84</sup>			legacy <sup>84</sup>	suppleme ntal produce <sup>84</sup>	
Finger Lakes Cider House (Good Life Farm) Interlaken, NY (Finger Lakes)	Mix: Own USDA organic certified farm; sources 90%+ menu from FLX region 85	Very High	Liberty, Enterprise , Goldrush (U-Pick); specialize s in cider apples <sup>85</sup>	USDA Organic & Real Organic Certified (own farm); values regional sourcing	Good Life Farm (own); other FLX farms for menu items 85	info@fing erlakescid erhouse.c om, (607) 351-3313
Green Sun Orchard Trout Creek, NY (Delaware Co.)	Primarily own apples; using fruit from previous owners while new heirloom orchard matures 90	High (for own planting); potential for sourcing specific heirlooms	Aims to grow "lost heirloom cider apples" and "known local favorites"	Uses Integrated Fruit Productio n <sup>90</sup>	N/A	Via website/g eneral inquiry
Brooklyn Cider House (Twin Star Orchards ) New Paltz, NY (Hudson Valley)	Primarily own orchard (80%+); also supplies other NY producers 91	High	Hard cider varieties & tart, disease-re sistant heirlooms	Integrates organic, bio-dyna mic, IPM; "ugly apples taste better" (flavor over appearanc e) 91	Twin Star Orchards (own)	(845) 633-8657 91

**Detailed Cidery Profiles: New York** 

Angry Orchard Innovation Cider House (Walden, NY - Hudson Valley)

As a major national brand with a dedicated research and development facility in Walden, Angry Orchard plays a significant role in the Hudson Valley apple scene.49 Their 60-acre orchard is a site for experimentation, focusing on reviving traditional cider apple varieties and developing new ones, often in collaboration with local institutions and growers.10 While they have their own fruit source, their "Farm Series" ciders specifically celebrate New York State agriculture by utilizing locally sourced ingredients.24 The Crist Family, previous owners of the orchard, continue to cultivate the land.10 Their interest in heirloom apples is evident from past releases like "Walden Hollow," which featured New York heirlooms such as Newton Pippin, Golden Russet, and Rhode Island Greening.51 Although an explicit requirement for organic apples from external growers is not consistently highlighted, their facility is described as a "sustainable working cider house brewery" 49, suggesting an appreciation for environmentally sound practices. Growers with unique heirloom varieties suitable for experimentation or small-batch production may find opportunities here, particularly if they align with Angry Orchard's research interests.

• **Contact:** General phone numbers are 845-713-5180 <sup>53</sup> or (888) 845-3311. <sup>93</sup> Joseph Gaynor is listed as a Cidermaker and Jamie Corrao as Manager. <sup>53</sup> A specific grower liaison is not readily identified in the provided materials.

Little Apple Cidery (Hillsdale, NY - Hudson Valley)

Little Apple Cidery operates its own NOFA-NY certified organic heirloom apple orchard and is deeply committed to organic practices.17 They cultivate over 30 apple varieties, including heirlooms like Northern Spy, Golden Russet, and Baldwin, as well as cider-specific varieties like Harrison and English and French types.17 When a late frost impacted their own crop, Little Apple Cidery sourced apples from other growers in the Lower Hudson Valley and Western New York, noting that the resulting ciders would not be 100% certified organic.54 This indicates a strong preference for organic fruit but a pragmatic approach to ensuring production continuity. They value smaller fruit with flavorful skin, a characteristic often found in heirloom and cider apples.54 Their "Little Batch" collaborations also feature unique varieties like Rubinette, Pitmaston Pineapple, and Ashmead's Kernel.17 This cidery represents a very strong prospect for growers of certified organic heirloom apples.

• **Contact:** Ron Bixby can be reached at ron@littleapplecidery.com or by phone at (518) 610-1345 or 917-287-6339.<sup>17</sup> They are open to wholesale inquiries.

Metal House Cider (Esopus/New Paltz, NY - Hudson Valley)

Metal House Cider is dedicated to producing small-batch, méthode champenoise ciders that reflect the terroir of the Hudson Valley.8 They source apples "entirely from historic Hudson Valley orchards and their own reinvigorated family orchard in Esopus, NY".8 A key aspect of their philosophy is the use of "100 percent untreated Hudson Valley apples" and a commitment to "sustainably grown fruit".8 They actively seek orchards free from unnecessary herbicides, fungicides, pesticides, and chemical fertilizers, believing this approach enhances fruit flavor and ecosystem health.8 Their own orchard work involves "bio-intensive and biodynamic practices".27 They have used Organic Goldrush apples and are planting a range

of American heirlooms (Esopus Spitzenburg, Newtown Pippin, Roxbury Russet, Golden Russet, Black Oxford, Baldwin) and cider varieties.8 Their strong preference for untreated, organic, or biodynamically farmed apples makes them an excellent match for growers adhering to these practices.

• Contact: Kimberly Kae can be reached at kimberly@metalhousecider.com.<sup>8</sup>

South Hill Cider (Ithaca, NY - Finger Lakes)

South Hill Cider crafts ciders from a diverse range of sources: wild foraged apples, fruit from abandoned orchards, and cider/heirloom varieties grown in their own organically farmed home orchard or sourced from other nearby growers.18 Their home orchard utilizes biodynamic preparations, underscoring a deep commitment to ecological farming.28 A significant aspect of their philosophy is "Working directly with other apple growers allows us to impact management decisions that increase the quality of the soil, the trees and ultimately the fruit".18 They work with a wide array of English, French, and American heirloom varieties, including Dabinett, Golden Russet, Kingston Black, Esopus Spitzenburg, and many others.18 Their sourcing from Greene Farm in Wolcott, NY, for varieties like Dabinett and Chisel Jersey is an example of their grower partnerships.28 South Hill Cider is a strong candidate for organic and sustainably-minded heirloom apple growers, especially those open to collaborative relationships focused on fruit quality.

• **Contact:** General inquiries can be sent to info@southhillcider.com or (607) 792-1097.<sup>66</sup> Wholesale orders are handled via orders@southhillcider.com or 607-272-9862.<sup>67</sup>

Nine Pin Cider (Albany, NY - Capital Region)

As New York's first licensed farm cidery, Nine Pin is committed to using 100% New York apples and never from concentrate.26 They have established strong partnerships with New York farms, most notably Samascott Orchards in Kinderhook and Five Branches in Williamson, NY, for a diverse range of apples.26 They also source from Mourningkill Farms and Lagoner Farms and have collaborated with regional land conservancies to utilize wild and foraged apples.69 While "organic" is not consistently highlighted as a strict requirement for all sourced apples, their Imperial cider uses high-sugar content apples like Harrison, Gold Rush, Golden Delicious, Franklin, and Golden Russet from Five Branches.69 Their mission to support NY agriculture and their use of specific, high-quality varieties suggest an interest in well-grown fruit. "Sustainable" sourcing is mentioned for their Signature cider.73

• **Contact:** The general phone number is 518.449.9999.<sup>26</sup> Alejandro del Peral is the founder and cidermaker.<sup>68</sup>

Bad Seed Hard Cider (Highland, NY - Hudson Valley)

Bad Seed Hard Cider produces ciders from 100% fresh-pressed Hudson Valley apples, either grown on their own sixth-generation family farm (Wilklow Orchards) or sourced "exclusively from local farms".74 They emphasize a "simply crafted, dry hard cider" and avoid artificial additives.75 While they highlight local sourcing, specific preferences for organic or heirloom varieties from external growers are not explicitly detailed in the provided information. Their

focus appears to be on quality fresh-pressed juice from Hudson Valley apples.

• **Contact:** General inquiries can be made to info@badseedhardcider.com or 845-236-0956. Albert Wilklow (Co-Founder, Farmer) and Devin Britton (Co-Founder, Head of Production) are key figures. To

Treasury Cider (Fishkill Farms) (East Fishkill, NY - Hudson Valley)

Treasury Cider is an estate cidery, utilizing apples grown exclusively at Fishkill Farms, a 270-acre third-generation family farm.9 The farm cultivates over 80 apple varieties, including modern dessert apples, heirlooms, and European bittersweet types specifically for cider.9 Their farming practices are environmentally conscious, with no synthetic fertilizers or herbicides used since 2009. Over 15 acres of their apples are certified organic, and the remainder of the orchard is Eco Apple certified by Red Tomato.9 Given their extensive, diverse, and sustainably managed orchards, it is unlikely they source apples externally, except perhaps for highly specific research or collaborative projects.

• Contact: Fishkill Farms can be reached at (845) 897-4377.

Pennings Farm Cidery (Warwick, NY - Hudson Valley)

Pennings Farm Cidery primarily uses apples from their own 100+ acre family farm, where they grow "hundreds of cider specific apple trees" alongside other fruits used in their ciders.16 They do source some other ingredients like honey, maple syrup, and beets from "neighboring farms".16 While this indicates openness to local sourcing for certain inputs, their primary apple supply appears to be internal. Their cider shop lists products featuring Dabinett, Gold Rush, and various English cider varieties, indicating their interest in these types.82 An explicit policy on sourcing external organic heirloom apples is not detailed.

• **Contact:** General inquiries can be directed to info@penningscidery.com or (845) 987-9922.80 SJ Pennings is noted as running the production side.16

Orchard Hill Cider Mill (Soons Orchards) (Warwick, NY - Hudson Valley)
Orchard Hill is an estate cidery that builds on the legacy of Soons Orchards.84 Soons
Orchards has a history of "Bringing in local food...and neighbors' produce to complement our homegrown offerings".84 This suggests a potential willingness to source apples externally for the cidery if specific needs arise, though details on preferences for organic or heirloom varieties are not provided.

• **Contact:** Inquiries would likely go through Soons Orchards.

Finger Lakes Cider House (Good Life Farm) (Interlaken, NY - Finger Lakes)
Located on Good Life Farm, which is USDA organic certified and Real Organic Certified,
Finger Lakes Cider House specializes in ciders from apples grown specifically for cider
making.85 Their food menu sources over 90% of its ingredients from the Finger Lakes region,
with some coming directly from their own farm.85 They offer U-Pick for organic apples like
Liberty, Enterprise, and Goldrush.88 Their strong commitment to organic farming and regional
sourcing makes them a very promising contact for local organic heirloom apple growers, even
if they primarily use their own fruit. Their extensive network and focus on showcasing Finger

Lakes terroir could lead to opportunities for unique apple varieties.86

• Contact: General inquiries can be made to info@fingerlakesciderhouse.com or (607) 351-3313.85

Green Sun Orchard (Trout Creek, NY - Delaware County)

This small, family-owned orchard is focused on growing heirloom apples and producing hard cider from fruit "grown or found on our farm".90 They are currently utilizing apples farmed by previous owners while their newly planted orchard, which includes "lost heirloom cider apples," matures.90 They employ Integrated Fruit Production methods. While their long-term goal is self-sufficiency, during their orchard's maturation phase, they might be open to sourcing specific heirloom apples that align with their vision, particularly if a grower can offer unique "lost" varieties.

• **Contact:** Inquiries would likely be general, via their website if available.

Brooklyn Cider House (Twin Star Orchards) (New Paltz, NY - Hudson Valley)
Brooklyn Cider House operates Twin Star Orchards, where they integrate organic, biodynamic, and Integrated Pest Management (IPM) practices, striving for a sustainable enterprise.91 They emphasize flavor over cosmetic appearance, famously stating "ugly apples taste better".91 While they source over 80% of their apples from their own orchard, they also supply juice, cider, and apples to other New York producers.91 In 2017, they planted nearly 8,000 young trees of hard cider varieties and tart, disease-resistant heirlooms. Their own sustainable practices and their role as a supplier to others suggest they would be interested in high-quality organic heirloom apples, potentially to supplement their own production or for specific cider profiles.

• **Contact:** The orchard can be reached at (845) 633-8657. Richard Yi is a key figure, known for presenting on natural cider production. 99

The New York cider market clearly demonstrates a strong "farm-to-glass" ethos. Many cideries either cultivate their own apples, often with a focus on sustainable or organic methods, or explicitly state their commitment to sourcing from local New York farms. This creates a generally receptive environment for New York growers, particularly those offering unique heirloom varieties or employing desirable farming practices. The Farm Cidery license in New York, which requires the use of 100% New York State apples, further reinforces this local sourcing trend. The strong trend.

The Finger Lakes and Hudson Valley regions have emerged as significant centers for cider production, with a high concentration of cideries specifically interested in heirloom and cider-specific apple varieties. Growers located in or near these regions may find a geographic advantage due to easier logistics, the potential for stronger relationship-building, and the ability to contribute to the "local terroir" narrative that many craft cideries cultivate.

While certified organic is a distinct advantage, a broader spectrum of sustainable practices also holds appeal. Cideries like Metal House Cider's search for "untreated" apples, Treasury Cider's use of "Eco Apple" certification, South Hill Cider's biodynamic preparations, and Brooklyn Cider House's integration of organic, biodynamic, and IPM methods demonstrate that a verifiable commitment to ecological farming can be a strong selling point. This opens opportunities for growers who may not be certified organic but can transparently demonstrate robust sustainable practices that align with a cidery's values.

# 5. Key Purchasing Criteria: What Cideries Value

Cideries, particularly in the craft segment, have specific criteria when sourcing apples, moving beyond simple availability to focus on characteristics that contribute to the quality, uniqueness, and marketability of their final products.

## **In-Demand Apple Varieties**

The demand is high for a diverse range of heirloom and cider-specific apple varieties. These are often categorized by their primary juice characteristics:

- Bittersweets: These apples are prized for their high tannin content and relatively low acidity. Tannins contribute body, mouthfeel, and complexity to cider. Examples frequently mentioned or used by regional cideries include Dabinett, Chisel Jersey, Harry Master's Jersey, Brown Snout, Michelin, Medaille d'Or, and Ellis Bitter.<sup>4</sup>
- Bittersharps: Combining high tannins with high acidity, these apples can form
  the backbone of complex ciders and are sometimes suitable for single-varietal
  bottlings. Kingston Black, Foxwhelp, and Wickson Crab are notable examples.<sup>4</sup>
- Sharps: Characterized by high acidity and lower tannins, sharps provide brightness, balance, and help ensure microbial stability during fermentation.
   Varieties like Bramley's Seedling, Northern Spy, Rhode Island Greening, and some crabapples fall into this category. Many American heirloom apples also fit here.<sup>4</sup>
- Aromatic Heirlooms & Dual-Purpose Apples: Many traditional American and European heirloom apples, while perhaps not fitting neatly into the English cider categories, are highly valued for their unique aromatics, sugars, and overall flavor complexity. These include Golden Russet, Harrison, Baldwin, Esopus Spitzenburg, Newtown Pippin, Roxbury Russet, Ashmead's Kernel, Cox's Orange Pippin, Rubinette, Pitmaston Pineapple, and Poveshon.<sup>4</sup> Some modern varieties like GoldRush are also sought for their excellent cider qualities.<sup>8</sup>

Cideries like Ironbound Farm focus on historic New Jersey apples such as Harrison

and Canfield.<sup>25</sup> Little Apple Cidery highlights Northern Spy, Golden Russet, and Baldwin, among others.<sup>17</sup> Metal House Cider works with Organic Goldrush and a range of Hudson Valley heirlooms.<sup>8</sup> South Hill Cider's list is extensive, featuring many English and French cider varieties alongside American heirlooms.<sup>18</sup> Nine Pin Cider uses specific varieties like Harrison and Gold Rush from partner orchards for their Imperial cider.<sup>69</sup>

### **Quality Standards and Certifications**

**Organic Certification:** Formal organic certification, such as USDA National Organic Program (NOP) <sup>5</sup> or regional endorsements like NOFA-NY Certified Organic <sup>54</sup>, is a significant asset. Cideries like Little Apple Cidery and Finger Lakes Cider House operate their own certified organic farms and naturally gravitate towards certified organic inputs.<sup>17</sup> This aligns with consumer demand for organic products and can be a key part of a cidery's marketing.

**Beyond Organic Practices:** A growing number of craft cideries value and actively seek apples grown using practices that extend beyond standard organic certification. These include:

- Regenerative Agriculture: Emphasized by Ironbound Farm, focusing on soil health, biodiversity, and holistic ecosystem management.<sup>7</sup>
- Biodynamic Practices: Utilized by Metal House Cider and South Hill Cider, incorporating specific preparations and viewing the farm as an integrated organism.<sup>27</sup>
- **Eco-Certified:** A program used by farms like Fishkill Farms (Treasury Cider), which involves rigorous ecology-based farming protocols specific to Northeast tree fruit.<sup>9</sup>
- Untreated/Sustainably Grown: Metal House Cider specifically seeks "untreated" apples and the "most sustainably grown fruit available," avoiding unnecessary chemicals. South Hill Cider also refers to "sustainably sourced" apples. These practices signal a profound commitment to environmental stewardship and fruit quality, appealing to cideries that build their brand on these principles.

## **Physical and Chemical Quality:**

• **Brix (Sugar Content):** A critical measure, as sugars are fermented into alcohol. Cider makers typically look for a starting juice Brix between 12-20%, which can yield a cider with 6-10% alcohol by volume. Some New York cider apples have shown soluble solids ranging from 9 to 18 Brix. Nine Pin, for example, seeks high-sugar apples for its Imperial cider. The ideal sugar-to-acid ratio is often considered to be between 15 and 30.

- Acidity (Malic Acid Levels and pH): Acidity is crucial for flavor balance, providing brightness and zest, and for microbial stability during and after fermentation. An ideal juice pH is between 3.2 and 3.7, with total acidity (as malic acid) around 0.4% to 0.8%.<sup>4</sup> Juice pH from New York cider apples has been observed to range from 2.7 to 4.4, and total acidity from 0.12% to 2.25%.<sup>106</sup> Apples are often classified (e.g., Sharp, Sweet) based on their acid and tannin levels.<sup>4</sup>
- Tannin Profiles: Tannins contribute significantly to the mouthfeel (astringency, bitterness), structure, complexity, and aging potential of ciders. They are particularly important for traditional English and French style ciders. Bittersweet and Bittersharp apple varieties are specifically cultivated for their high tannin content. While New York-grown European varieties may sometimes exhibit lower tannin levels than their European counterparts, they are still highly sought.
- Condition of Fruit: While cider apples may not need the cosmetic perfection of fresh market fruit <sup>102</sup>—indeed, some cideries like Brooklyn Cider House embrace "ugly apples" for their superior flavor <sup>91</sup>—the fruit must still be sound. For unpasteurized cider, regulations and best practices mandate the use of "intact, sound apples," with decayed or rotten fruit being discarded. <sup>108</sup> Dropped apples are generally discouraged for unpasteurized products due to higher microbial loads <sup>108</sup>, although some farms like Alstede use drops for their sweet cider, which is likely UV-treated or pasteurized. <sup>40</sup> The key is that any damage should not compromise the microbiological quality of the fruit. <sup>108</sup>

While specific heirloom varieties are highly prized for their unique aromatic and flavor contributions, the underlying juice chemistry—the balance of sugars, acids, and tannins—is of paramount importance to cidermakers. Growers who can provide objective data on these parameters for their apples, such as Brix levels, titratable acidity (TA), and pH, will possess a distinct advantage in negotiations. This information allows cidermakers to more accurately predict fermentation outcomes and how the apples will contribute to a blend, demonstrating a higher level of professionalism and understanding of the cider-making process on the part of the grower. This can translate to a higher perceived value for the fruit.

Furthermore, while "organic" certification serves as a valuable baseline, demonstrating "beyond organic" practices such as regenerative agriculture, biodynamic farming, or Eco-certification can be a powerful differentiator. This is particularly true when approaching premium craft cideries that market their products based on deep sustainability, terroir, and a holistic connection to the land. These advanced ecological commitments resonate with the ethos of such producers and their target consumers.

It is also important to understand the nuances of fruit condition. While cider makers often have a higher tolerance for cosmetic blemishes compared to the fresh market, this does not equate to an acceptance of poor-quality or compromised fruit. <sup>91</sup> Especially for ciders that are unpasteurized or minimally processed, the microbial integrity of the apple is crucial. Sound, intact fruit, free from rot or significant bruising that could introduce spoilage organisms, remains a key requirement. <sup>108</sup> Growers should always clarify specific condition standards with each potential cidery partner.

Table 3: Key Heirloom & Cider Apple Varieties for NJ/NY Cideries

Variety Name	Primary Characteristic( s)	Key Flavor/Chemica I Attributes (Tannin, Acid, Sugar)	Known Cideries Using/Seeking It (Examples)	Notes
Harrison	Aromatic Heirloom, (Sweet/Sharp)	Rich, sweet, viscous juice, good sugar, lively tartness, complex flavor	Ironbound Farm, Nine Pin Cider <sup>32</sup>	Historic Newark apple; excellent for single varietal or blending. Ironbound considers it "most complete apple juice". 32
Golden Russet	Aromatic Heirloom, (Sweet/Sharp)	High sugar, good acidity, nutty, pear-like, champagne-she rbet notes <sup>4</sup>	Ironbound Farm, Little Apple Cidery, South Hill Cider, Metal House, Nine Pin Cider, Angry Orchard 17	Highly versatile, prized for fresh eating and cider; excellent sugar content for fermentation.
Dabinett	Bittersweet	Medium tannins, low acid, classic bittersweet profile <sup>18</sup>	South Hill Cider, Pennings Farm Cidery <sup>18</sup>	Popular English cider apple; good for blending to add body and tannins.

Kingston Black	Bittersharp	High tannin, high acid, distinctive flavor	South Hill Cider	Classic English bittersharp; often used for single-varietal ciders due to its balanced complexity.
Northern Spy	Sharp, Aromatic Heirloom	High acid, aromatic, good for storage <sup>17</sup>	Little Apple Cidery, Metal House, South Hill Cider <sup>17</sup>	Historic NY apple; provides acidity and brightness to blends.
Baldwin	Sharp, Aromatic Heirloom	Good acid, rich flavor, good sugar <sup>4</sup>	Little Apple Cidery, South Hill Cider, Angry Orchard, Metal House <sup>17</sup>	Historic New England apple; versatile for cider.
Roxbury Russet	Sharp, Aromatic Heirloom	High acid, sugary, distinctive russet flavor <sup>4</sup>	Treasury Cider (Fishkill Farms), Metal House <sup>9</sup>	One of the oldest American apples; excellent for cider, providing sharpness and character.
Esopus Spitzenburg	Sharp, Aromatic Heirloom	High acid, rich, complex, aromatic flavor	South Hill Cider, Metal House <sup>18</sup>	Historic NY apple, reputed favorite of Thomas Jefferson; adds elegance and complexity.
Newtown Pippin	Sharp, Aromatic Heirloom	High acid, complex, often pineapple notes, good keeper <sup>4</sup>	Angry Orchard, Metal House <sup>51</sup>	Historic American apple; valued for its acidity and unique flavor in cider blends.
Wickson Crab	(Bitter)Sharp	Very high sugar,	Ironbound	Small apple with

		high acid, intense flavor <sup>20</sup>	(Pét-Nat), various craft cideries <sup>31</sup>	powerful juice; adds significant sugar and acid to blends.
Organic Goldrush	Sharp/Sweet, Modern	High sugar, good acidity, crisp, stores well	Metal House, Nine Pin Cider, Finger Lakes Cider House (U-Pick), South Hill Cider <sup>8</sup>	Modern disease-resistan t variety with excellent cider qualities, especially when organic.

# 6. Pricing, Payments, and Agreements

Navigating the financial aspects of selling organic heirloom apples to cideries requires an understanding of market prices, the importance of quality-based premiums, and the potential for contractual agreements.

## **Market Price Insights**

Pricing for cider apples is highly variable and influenced by numerous factors, including apple variety, quality (Brix, acidity, condition), organic certification, volume, region, and the specific buyer-seller relationship. Publicly available data often lacks the specificity needed for organic heirloom cider apples, but some benchmarks exist:

- **USDA Data:** Reports from May 2025 (for the 2024 crop year) from Washington state indicated prices for conventional juice apples at \$100-\$140/ton (approximately \$2.10-\$2.94 per 42lb bushel) and organic juice apples at \$220-\$300/ton (approximately \$4.62-\$6.30 per bushel). A February 2025 report for the 2024 New York crop showed conventional juice stock prices at \$9.00-\$13.00/cwt, which translates to roughly \$3.78-\$5.46 per bushel. It is crucial to note that these "juice apple" prices likely reflect general processing grades rather than premium heirloom or cider-specific varieties.
- Virginia Tech Study (2022 data): While not from NJ/NY, this study provided more granular pricing for different apple categories supplied to cideries: dessert apples (sweet or acidic) averaged \$9.16-\$10.80/bushel, heirloom/dual-purpose apples averaged \$14.93/bushel, and specialty cider apples (bittersweets/bittersharps) commanded an average of \$23.55/bushel.<sup>112</sup> Organic status was not specified for these Virginia prices, but the significant premium for specialty cider apples is evident.
- Northeast General Context: A common observation is that apples sold to

cideries as culls or utility-grade fruit from dessert apple packing lines fetch prices 3 to 6 times lower than fresh market prices for the same cultivars. However, for apples intentionally grown for cider, particularly specialty or heirloom varieties, growers must receive significantly higher prices—in the range of \$16 to \$30 per bushel—to ensure profitability.

 Recent Market Conditions: The U.S. apple industry faced challenges in 2023-2024 with falling prices due to high production and reduced exports, though some recovery was noted in early 2025.<sup>114</sup> Despite this, organic retail sales have remained strong, although domestic organic acreage has seen some decline, potentially tightening supply for specific organic commodities.<sup>21</sup>

A clear distinction exists in the market: low-value culled dessert fruit versus high-value, intentionally cultivated specialty, heirloom, and organic apples. Growers of organic heirloom varieties are firmly positioned in the latter category and should benchmark their pricing expectations accordingly, focusing on the premiums achieved by specialty cider apples rather than rates for generic processing fruit. The \$14.93/bushel for heirlooms and \$23.55/bushel for specialty cider apples reported in the Virginia study <sup>112</sup>, along with the \$16-\$30/bushel target for intentional cider apples <sup>2</sup>, serve as more relevant reference points than the lower figures often quoted for undifferentiated juice apples.

Given the scarcity of precise, publicly available farm-gate price data specifically for organic heirloom cider apples in the NJ/NY region, direct negotiation with cideries is paramount. Growers who can provide comprehensive quality data for their fruit (e.g., Brix, acidity profiles, specific varietal characteristics) and clearly articulate their organic and sustainable farming practices are better positioned to justify premium pricing. Understanding the cidery's end-product positioning (e.g., premium, super-premium, single-varietal) can also inform price discussions, as cideries producing higher-value finished goods can typically afford to invest more in their raw materials. The trend towards premiumization in the overall cider market <sup>117</sup> further supports the potential for higher prices for differentiated, high-quality apples.

#### **Contractual Considerations**

For growers making significant investments in cultivating organic heirloom or cider-specific varieties, establishing clear agreements with buyers is highly advisable. The risk of producing a niche cultivar without an identified market can be substantial.<sup>1</sup> Long-term contracts are a common mechanism in many production regions to foster stable relationships between orchards and cideries, providing price guarantees and volume commitments that benefit both parties.<sup>1</sup>

Key terms to consider in any supply agreement include:

- **Volume Commitments:** Agreed-upon quantities for purchase, potentially over multiple seasons.
- **Pricing Structure:** Fixed price per bushel/bin/ton, or a tiered structure based on quality parameters (e.g., higher Brix levels commanding a premium).
- Quality Specifications: Clearly defined standards for apple varieties, organic certification verification, condition (e.g., freedom from rot, acceptable level of cosmetic blemishes), and potentially minimum/target levels for Brix, acidity, or tannin.
- Delivery/Pickup Logistics: Responsibilities for transportation, provision of bins/containers, delivery windows, and receiving protocols at the cidery.
- Payment Terms: Timeline for payment after delivery and inspection.
- Contingencies: Clauses addressing crop failures, quality deviations, or changes in market conditions.

Decisions regarding planting or dedicating specific blocks to cider apples should ideally be made in collaboration with potential cidery buyers. This collaborative approach can help align production with actual market demand, reducing risk for the grower and ensuring a consistent supply of desired fruit for the cidery.

# 7. Logistics and Effective Outreach

Successfully selling organic heirloom apples to cideries involves not only growing high-quality fruit but also managing the logistics of supply and employing effective strategies for approaching and engaging potential buyers.

### **Volume and Delivery**

Specific minimum purchase volumes for apples are rarely publicized by individual craft cideries, as needs can vary significantly based on their production scale, tank capacity, and product portfolio. However, some inferences can be made. In New York State, the Farm Cidery license requires a minimum annual production of 50 gallons of cider. Assuming a conservative juice yield of 3-4 gallons per bushel, this implies a baseline need of roughly 12-17 bushels of apples per year for the smallest licensed producers. Many craft cideries operate on a small-batch basis, meaning they may purchase apples in quantities ranging from a few bins to several tons at a time, depending on the specific cider being made and the yield of the particular apple varieties. For example, Yates Cider Mill, though primarily a sweet cider operation, has minimums for large orders of finished cider (e.g., 8 gallons) and notes bulk discounts starting at 12 gallons, which could indirectly suggest batch sizes for apple

processing.<sup>118</sup>

Logistical arrangements for getting apples from the farm to the cidery are a critical point of discussion. Options generally include:

- **Grower Delivery:** The grower is responsible for transporting the apples to the cidery. This requires the grower to have appropriate vehicles and containers (bins).
- Cidery Pickup: The cidery arranges to pick up the apples from the farm. Some
  cideries that offer direct-to-consumer pickup for their finished products, like
  Downeast Cider or New York Cider Company <sup>119</sup>, may have the logistical capacity
  for farm pickups of raw fruit.

Growers should proactively clarify these expectations with each potential cidery, including who provides bins, preferred delivery/pickup schedules, and any specific receiving protocols at the cidery, such as inspection procedures or requirements for cold storage upon arrival.<sup>108</sup>

## **Approaching Cideries**

Identifying the correct contact person is the first step in successful outreach. For smaller craft cideries, this is often the owner or the head cidermaker, as they are typically intimately involved in all aspects of production, including fruit sourcing. Larger operations might have a dedicated production manager, orchard liaison, or purchasing agent. Reviewing a cidery's website ("About Us," "Contact," "Trade/Wholesale" pages) or social media can often reveal key personnel. For instance, SJ Pennings at Pennings Farm Cidery is noted for running production <sup>16</sup>, Devin Britton is Head of Production at Bad Seed Hard Cider <sup>75</sup>, Alejandro del Peral is the founder/cidermaker at Nine Pin Cider <sup>68</sup>, and Joseph Gaynor is a Cidermaker at Angry Orchard. <sup>53</sup>

Best practices for making initial contact include:

- 1. **Targeted Research:** Before reaching out, thoroughly research the cidery's products, sourcing philosophy (if stated), and any mentioned apple varieties. This demonstrates genuine interest and helps tailor the pitch.
- 2. **Initial Contact:** An email is often a good first step, allowing the cidery to review information at their convenience. A follow-up phone call can also be effective.
- 3. Clear Offer Document: Prepare a concise document or email outlining:
  - Your farm's name, location, and a brief story (especially highlighting organic/heirloom focus).
  - o A list of available organic heirloom apple varieties.

- Estimated quantities available and harvest timing.
- o Details of your organic certification (e.g., USDA NOP, NOFA-NY).
- Any available quality data (e.g., typical Brix ranges for your varieties, notes on acidity/tannin if known).
- Mention of any unique growing practices (e.g., regenerative, biodynamic).
- 4. **Offer Samples:** Be prepared to provide samples of your apples. This is crucial for cidermakers to assess flavor, aroma, and juice characteristics firsthand.
- 5. Inquire and Listen: Ask about their current apple needs, varieties they are seeking or experimenting with, specific quality specifications (beyond what's publicly available), typical purchasing cycles, and preferred logistical arrangements.

For smaller craft cideries, building a direct, personal relationship with the owner or cidermaker can be particularly effective. These individuals are often deeply passionate about their craft and the ingredients they use. They value the story behind the fruit and appreciate growers who understand their vision and can provide unique, high-quality apples that contribute to it. Direct interaction allows for a nuanced understanding of needs on both sides and can foster a collaborative partnership that goes beyond simple transactions. This aligns with the observation that many craft cideries emphasize their connection to local farms and specific apple varieties in their branding and marketing efforts.<sup>8</sup>

Proactively offering quality data, such as Brix levels or even more detailed acid and tannin profiles if available (perhaps through collaboration with a local university extension), can significantly differentiate a grower. This demonstrates a professional approach and an understanding of the technical aspects of cider production.<sup>4</sup> Providing such information upfront can streamline the cidery's evaluation process, build trust, and make it easier for them to commit to a purchase, potentially at a premium price.

# 8. Strategic Recommendations for Organic Heirloom Apple Growers

To successfully navigate the North NJ and NY cider market, organic heirloom apple growers should adopt a multifaceted strategy that emphasizes quality, storytelling, targeted outreach, and relationship building.

1. **Develop and Communicate Your Unique Farm Story:** Beyond the apples themselves, craft a compelling narrative about your farm. Highlight the history of your orchard, the specific heirloom varieties you cultivate (and why), your

- commitment to organic principles, and any "beyond organic" practices like regenerative agriculture or biodynamic farming. This story can resonate deeply with craft cideries that value authenticity and terroir, potentially becoming part of their own brand narrative.<sup>7</sup>
- 2. Conduct Targeted Cidery Research and Outreach: Avoid a scattergun approach. Thoroughly research individual cideries in North NJ and NY, focusing on those with a stated interest in heirloom apples, organic sourcing, or sustainable practices (refer to Tables 1 and 2). Tailor your initial communication to align with their known varietal interests, product lines, and sourcing philosophy. A personalized approach demonstrates genuine interest and understanding of their needs.
- 3. **Prioritize Relationship Building:** Aim to establish long-term partnerships rather than focusing solely on transactional sales. Attend industry events such as CiderCon, regional cider weeks, and grower meetings to network with cidermakers. Where appropriate and non-disruptive, visit cidery tasting rooms to understand their products and ethos. Open communication and a collaborative mindset are key.

## 4. Emphasize Quality, Consistency, and Data:

- Invest in horticultural practices that ensure high-quality fruit, focusing on achieving desirable cider-making characteristics like good Brix levels, balanced acidity, and, for certain varieties, robust tannin development.<sup>4</sup>
- If possible, obtain analytical data for your key varieties (Brix, Titratable Acidity (TA), pH). Sharing this information with potential buyers demonstrates professionalism and helps them assess the fruit's potential.<sup>19</sup>
- If a contract is established, strive for consistency in quality and reliability in supply.
- 5. Showcase Certifications and Unique Practices: Clearly communicate your USDA organic certification and any regional endorsements (e.g., NOFA-NY). If you employ regenerative, biodynamic, Eco-Certified, or other advanced sustainable practices, highlight these as they can be significant differentiators for certain cideries.<sup>5</sup>
- 6. **Be Flexible and Open to Collaboration:** Be prepared to discuss a cidery's specific needs, which might include varieties you don't currently grow extensively. Explore possibilities for contract growing if a cidery is seeking a reliable source for particular apples. Collaborative experimentation with new or rare varieties can also strengthen partnerships.
- Consider Diversification into True Cider Varieties: While many heirloom
  dessert apples make excellent cider, there is a distinct and often unmet demand
  for true cider-specific varieties, particularly English bittersweets and bittersharps,

and unique American cider apples.<sup>3</sup> For growers looking at long-term market positioning, carefully planned diversification into these varieties—ideally in consultation with potential cidery buyers to mitigate market risk <sup>1</sup>—could provide access to a premium niche and make the orchard an indispensable partner to high-end cideries.

By implementing these strategies, organic heirloom apple growers can enhance their visibility, credibility, and ultimately, their success in supplying the burgeoning craft cider market in Northern New Jersey and New York.

# 9. Key Industry Resources

Navigating the cider apple market effectively requires access to information, networking opportunities, and technical expertise. Several organizations and institutions serve as valuable resources for growers in Northern New Jersey and New York.

#### **Grower and Cider Associations:**

- New York Cider Association (NYCA): A pivotal organization for the New York cider industry, NYCA advocates for producers and growers, offers educational resources, hosts events like Cider Week New York, and was instrumental in passing Direct-to-Consumer (DTC) shipping legislation.<sup>11</sup> They facilitate connections within the industry and publish market information. Scott Ramsey is the Executive Director. Their website (newyorkcider.org) is a key resource.
- American Cider Association (ACA): This national body provides broad industry support, including hosting the annual CiderCon®, offering market data insights, webinars, and certification programs like the Certified Cider Professional and Certified Pommelier. Orchardist memberships are available, providing access to a national network and resources.<sup>99</sup>
- New York Apple Association (NYAA): Primarily focused on marketing and promoting all New York apples, the NYAA also provides resources that can be relevant for growers looking to connect with processors, including cideries. Their website (applesfromny.com) features a locator map that can identify cideries and heirloom apple growers.<sup>14</sup>
- New Jersey State Horticultural Society (NJSHS): This society offers resources, news, and events for fruit growers in New Jersey, including those interested in apple production for various markets.<sup>36</sup>

# **University Extension and Research Programs:**

Cornell University (New York): Cornell has a world-renowned hard cider

program (HardCider.cals.cornell.edu) and conducts extensive research on cider apple varieties, optimal production practices for New York conditions, juice quality characteristics, and economic analyses.<sup>4</sup> Researchers like Dr. Greg Peck are leading figures in this field. Publications such as the New York Fruit Quarterly and resources from the Harvest NY program (which has analyzed the cider supply chain) are invaluable.<sup>12</sup>

- Rutgers NJAES (New Jersey): The New Jersey Agricultural Experiment Station at Rutgers University conducts research relevant to local fruit growers, including trials on hard cider apple varieties suited for New Jersey's growing conditions.<sup>125</sup> They publish the biennial New Jersey Commercial Tree Fruit Production Guide, which contains valuable horticultural information.<sup>135</sup> Megan Muehlbauer is a key contact for cider apple research.
- **Penn State Extension (Pennsylvania):** While in a neighboring state, Penn State Extension offers workshops and resources on hard cider production and apple cultivation that are relevant to the broader Mid-Atlantic region.<sup>137</sup>
- UMass Extension (Massachusetts): The New England Cider Apple Program, involving UMass Extension, conducts research on cider apple suitability, pest management, and fruit quality in the New England context, which can offer insights for growers in the Northeast.<sup>102</sup>

#### **USDA Resources:**

- National Agricultural Statistics Service (NASS): Provides official data on apple production, acreage, and general farm-gate prices. While often not specific enough to differentiate organic heirloom cider apples, it offers broader market context.<sup>139</sup>
- Agricultural Marketing Service (AMS): Publishes market news reports on wholesale and retail apple prices, including categories for organic apples and juice apples, which can help in understanding general price trends.<sup>110</sup>

Active engagement with these associations, particularly NYCA and ACA, can provide growers with unparalleled networking opportunities, access to market intelligence often not publicly available, and a voice in industry advocacy. University extension programs, especially Cornell and Rutgers for this region, are critical for research-backed horticultural advice, data on cider apple varieties, juice quality assessments, and economic viability studies. These resources empower growers to make informed decisions about varietal selection, cultivation practices, and market strategies.

### 10. Conclusions and Recommendations

The market for organic heirloom apples in the Northern New Jersey and New York cider industry presents a promising, albeit nuanced, opportunity for growers. The craft cider segment's growth is intrinsically linked to the availability of unique, high-quality fruit that can produce distinctive ciders. Organic certification and the cultivation of specific heirloom and cider-apple varieties are key differentiators that can command premium pricing and foster strong partnerships with cideries.

## **Key Conclusions:**

- Demand is Specialized: Cideries are increasingly seeking specific apple characteristics—tannins, acidity, aromatics, and unique flavor profiles—found in heirloom and cider-specific varieties. Generic dessert apples, even if organic, may not meet the needs of many craft producers aiming for complex, artisanal ciders.
- 2. Organic is a Baseline, "Beyond Organic" is a Premium: While organic certification is highly valued and often a prerequisite for certain cideries, practices such as regenerative agriculture, biodynamic farming, and Eco-certification are emerging as further differentiators that appeal to sustainability-focused cideries and their consumers.
- 3. **Location Matters, but Quality Travels:** Proximity to cideries in the Hudson Valley and Finger Lakes (NY) or specific cideries like Ironbound Farm (NJ) offers logistical advantages. However, exceptional or rare organic heirloom varieties can attract interest from cideries willing to source from a wider radius if the quality and story align with their brand. Ironbound Farm, for example, explicitly sources from NY and PA in addition to NJ.<sup>15</sup>
- 4. **Pricing is Tiered and Negotiable:** A distinct premium exists for intentionally grown organic heirloom and cider-specific apples compared to culled or commodity-grade fruit. Prices in the range of \$15-\$30+ per bushel are targets for these specialty apples, but final pricing is subject to direct negotiation and depends heavily on variety, quality metrics (Brix, etc.), volume, and the buyer-seller relationship.
- 5. **Relationships are Paramount:** Successful entry into this market often hinges on building direct relationships with cidermakers and owners. These are frequently passion-driven individuals who value collaboration and the story behind their ingredients.
- 6. Data and Transparency Enhance Value: Growers who can provide data on their apples' chemical characteristics (Brix, acidity) and are transparent about their farming practices (especially organic and sustainable methods) are better positioned to engage cideries effectively and justify premium pricing.

#### **Actionable Recommendations for Growers:**

- 1. **Focus on In-Demand Varieties:** Research and cultivate heirloom and cider-specific apple varieties known for their desirable cider-making qualities (refer to Table 3). Consider a diverse portfolio that includes bittersweets, bittersharps, and unique aromatic heirlooms. If considering new plantings of true cider varieties, collaborate with potential cidery buyers to gauge interest and mitigate risk.<sup>1</sup>
- 2. **Prioritize Organic and Sustainable Practices:** Maintain and clearly communicate organic certification. Explore and implement "beyond organic" practices if feasible, as these are increasingly valued by premium craft cideries.
- 3. **Develop a Compelling Farm Narrative:** Articulate the unique aspects of your farm, your growing philosophy, and the specific qualities of your heirloom apples. This story is a valuable marketing asset when approaching cideries.

## 4. Conduct Targeted Outreach:

- Identify and prioritize cideries in North NJ and NY whose sourcing philosophies and product lines align with your offerings (refer to Tables 1 and 2).
- Contact the appropriate person (cidermaker, owner, production manager) with a tailored proposal that includes available varieties, quantities, organic certification, and any quality data.
- o Be prepared to offer samples.
- 5. **Negotiate from a Position of Value:** Understand the premium your organic heirloom apples command. Use available market data and your apples' unique qualities to negotiate fair pricing. Be prepared to discuss quality tiers and potential for long-term agreements.
- 6. **Invest in Quality Assessment:** If possible, obtain basic juice analysis (Brix, pH, TA) for your key varieties. This data empowers your negotiations and helps cidermakers assess suitability.
- 7. **Engage with Industry Resources:** Join and actively participate in organizations like the New York Cider Association and the American Cider Association. Utilize the research and expertise available from Cornell University and Rutgers NJAES extension programs.
- 8. **Be Prepared for Collaboration:** View cideries as potential partners. Be open to discussing their specific needs, experimenting with varieties, and potentially entering into contract growing arrangements for mutual benefit.

By strategically cultivating desirable organic heirloom apples, understanding the specific needs of the regional cider market, and proactively engaging with potential

buyers, growers in Northern New Jersey and New York can successfully tap into this dynamic and rewarding sector.

#### **Works cited**

- 1. Markets New England Tree Fruit Management Guide, accessed May 27, 2025, https://netreefruit.org/apples/cider-apples/markets
- 2. The economics of growing cider apples, accessed May 27, 2025, https://apples.extension.org/the-economics-of-growing-cider-apples/
- 3. Growing apples for the cider industry in the U.S. Northern Climate of Vermont: Does the math add up?, accessed May 27, 2025, <a href="https://www.uvm.edu/~orchard/fruit/pubs/18Becot\_ISHS\_CiderAppleMarketVT\_v3.2PrePub.pdf">https://www.uvm.edu/~orchard/fruit/pubs/18Becot\_ISHS\_CiderAppleMarketVT\_v3.2PrePub.pdf</a>
- Growing Apples for Craft Ciders New York State Horticultural Society, accessed May 27, 2025, <a href="https://nyshs.org/wp-content/uploads/2015/03/5-10-Merwin-Pages-NYFQ-Book-Spring-2015.pdf">https://nyshs.org/wp-content/uploads/2015/03/5-10-Merwin-Pages-NYFQ-Book-Spring-2015.pdf</a>
- Learn about Organic Certification NOFA-NY Northeast Organic Farming Association of New York, accessed May 27, 2025, https://nofany.org/organiccertification/about/
- Cider Market: Industry Analysis and Forecast (2025-2032) Trends, accessed May 27, 2025, <a href="https://www.maximizemarketresearch.com/market-report/global-cider-market/27300/">https://www.maximizemarketresearch.com/market-report/global-cider-market/27300/</a>
- 7. IRONBOUND FARM + ORCHARDS Ironbound Farm and Ciderhouse, accessed May 27, 2025, <a href="https://www.ironboundhardcider.com/farm-orchards">https://www.ironboundhardcider.com/farm-orchards</a>
- 8. Metal House Cider | From 100% untreated Hudson Valley Apples, accessed May 27, 2025, http://metalhousecider.com/
- 9. The Orchard Treasury Cider, accessed May 27, 2025, <a href="http://www.treasurycider.com/the-orchard">http://www.treasurycider.com/the-orchard</a>
- 10. Empire State Development Announces Angry Orchard Groundbreaking in Walden, accessed May 27, 2025, <a href="https://agriculture.ny.gov/news/empire-state-development-announces-angry-orchard-groundbreaking-walden">https://agriculture.ny.gov/news/empire-state-development-announces-angry-orchard-groundbreaking-walden</a>
- 11. Cider Guide 2024 by Hudson Valley Wine Magazine Issuu, accessed May 27, 2025, https://issuu.com/hvwinemagazine/docs/ciderguide 2024 v3 issuu
- 12. Hard Cider Supply Chain Analysis (pdf Cornell Cooperative Extension Harvest New York, accessed May 27, 2025, <a href="https://harvestny.cce.cornell.edu/uploads/doc\_48.pdf">https://harvestny.cce.cornell.edu/uploads/doc\_48.pdf</a>
- 13. In recent quarters we've been following the progression of a Southern Tier farm from a traditional tiestall barn to a compost Cornell Cooperative Extension Harvest New York, accessed May 27, 2025, <a href="https://harvestnv.cce.cornell.edu/pdf/impacts/pdf19">https://harvestnv.cce.cornell.edu/pdf/impacts/pdf19</a> pdf.pdf
- 14. Cider Week New York Blooms This Spring: May 3-11, 2025 Morning Ag Clips, accessed May 27, 2025,

- https://www.morningagclips.com/cider-week-new-york-blooms-this-spring-may -3-11-2025/
- 15. FAQ Ironbound Farm and Ciderhouse, accessed May 27, 2025, <a href="https://www.ironboundhardcider.com/faq">https://www.ironboundhardcider.com/faq</a>
- 16. Hard Apple Cider Pennings Farm Cidery Brand Story, accessed May 27, 2025, <a href="https://www.penningscidery.com/about/our-story/">https://www.penningscidery.com/about/our-story/</a>
- 17. Little Apple Cidery, accessed May 27, 2025, https://www.littleapplecidery.com/
- 18. Cider Making South Hill Cider | Heirloom Finger Lakes Cider in Ithaca, New York, accessed May 27, 2025, <a href="https://www.southhillcider.com/cider-making">https://www.southhillcider.com/cider-making</a>
- 19. Prairie Gardens' Comprehensive Cider Apple, accessed May 27, 2025, <a href="https://prairiegardens.org/wp-content/uploads/2022/02/Prairie-Gardens-Cider-Apples.pdf">https://prairiegardens.org/wp-content/uploads/2022/02/Prairie-Gardens-Cider-Apples.pdf</a>
- 20. Ithaca Cideries & Cellars | Finger Lakes Cider House, accessed May 27, 2025, https://www.visitithaca.com/food-drink/cideries/
- 21. Organic Situation Report, 2025 Edition USDA ERS, accessed May 27, 2025, <a href="https://www.ers.usda.gov/sites/default/files/\_laserfiche/publications/110884/EIB-281.pdf">https://www.ers.usda.gov/sites/default/files/\_laserfiche/publications/110884/EIB-281.pdf</a>?v=54890
- 22. Cider & Heirloom Apples Harmony Orchards, accessed May 27, 2025, https://harmonyorchards.com/cider-heirloom-apples/
- 23. Buy Cider South Hill Cider | Heirloom Finger Lakes Cider in Ithaca, New York, accessed May 27, 2025, <a href="https://www.southhillcider.com/buy-cider">https://www.southhillcider.com/buy-cider</a>
- 24. Angry Orchard Valley Table, accessed May 27, 2025, https://valleytable.com/purveyors/angry-orchard/
- 25. GROWING NEWARK'S HERITAGE CIDER APPLES Ironbound Farm and Ciderhouse, accessed May 27, 2025, https://www.ironboundhardcider.com/newark-cider-apples
- 26. Home Nine Pin Cider New York's First Farm Cidery, accessed May 27, 2025, <a href="https://www.ninepincider.com/">https://www.ninepincider.com/</a>
- 27. New York | Metal House Cider Oz Wine Company, accessed May 27, 2025, https://www.ozwinecompany.com/cid-producer-metal-house-cider
- 28. Producer Profile South Hill Coeur Wine Co., accessed May 27, 2025, <a href="https://www.coeurwineco.com/producer/south-hill">https://www.coeurwineco.com/producer/south-hill</a>
- 29. OUR FARMING PRACTICES Ironbound Farm and Ciderhouse, accessed May 27, 2025, https://www.ironboundhardcider.com/farm
- 30. Ironbound Farm LocalHarvest, accessed May 27, 2025, <a href="https://www.localharvest.org/ironbound-farm-M77216">https://www.localharvest.org/ironbound-farm-M77216</a>
- 31. SHOP CIDER Ironbound Farm and Ciderhouse, accessed May 27, 2025, <a href="https://www.ironboundhardcider.com/shopcider">https://www.ironboundhardcider.com/shopcider</a>
- 32. Newark Cider Royal Ironbound Farm and Ciderhouse, accessed May 27, 2025, <a href="https://www.ironboundhardcider.com/harrison-cider">https://www.ironboundhardcider.com/harrison-cider</a>
- 33. TREE VARIETIES Ironbound Farm and Ciderhouse, accessed May 27, 2025, https://www.ironboundhardcider.com/tree-info
- 34. Ironbound Farm and Ciderhouse, accessed May 27, 2025, <a href="https://www.ironboundhardcider.com/">https://www.ironboundhardcider.com/</a>
- 35. CONTACT US + VISIT US Ironbound Farm and Ciderhouse, accessed May 27,

- 2025, https://www.ironboundhardcider.com/contact-visit-us
- 36. Our Story Melick's U-Pick, accessed May 27, 2025, https://melickstownfarm.com/our-story/
- 37. Melick's Town Farm Wikipedia, accessed May 27, 2025, <a href="https://en.wikipedia.org/wiki/Melick%27s">https://en.wikipedia.org/wiki/Melick%27s</a> Town Farm
- 38. Home Melick's U-Pick, accessed May 27, 2025, https://melickstownfarm.com/
- 39. Cider Mill & Orchard Melick's U-Pick, accessed May 27, 2025, https://melickstownfarm.com/cider-mill-orchard/
- 40. Cider Mill | Alstede Farms | NJ, accessed May 27, 2025, https://www.alstedefarms.com/cider-mill/
- 41. Alstede Farms Sparkling Cider, accessed May 27, 2025, <a href="https://www.alstedefarms.com/farm-store/alstede-farms-sparkling-cider/">https://www.alstedefarms.com/farm-store/alstede-farms-sparkling-cider/</a>
- 42. Home | Alstede Farms | NJ, accessed May 27, 2025, https://www.alstedefarms.com/
- 43. Hacklebarney Farm | VisitNJ.org, accessed May 27, 2025, https://visitnj.org/nj-farms-orchards/hacklebarney-farm
- 44. Hacklebarney Farm Cider Mill 104 State Park Road Chester, NJ 07930 | mywalkinmanhattan, accessed May 27, 2025, <a href="https://mywalkinmanhattan.com/2019/11/11/hacklebarney-farm-cider-mill-104-state-park-road-chester-nj-07930/">https://mywalkinmanhattan.com/2019/11/11/hacklebarney-farm-cider-mill-104-state-park-road-chester-nj-07930/</a>
- 45. Terhune Orchards Family owned winery and orchard in Central NJ, accessed May 27, 2025, <a href="https://www.terhuneorchards.com/">https://www.terhuneorchards.com/</a>
- 46. Apple Picking NJ | Family-Owned Farm in Jobstown, accessed May 27, 2025, https://www.johnsonslocusthallfarm.com/apple-picking/
- 47. accessed December 31, 1969, http://www.njcidermill.com/
- 48. HACKLEBARNEY FARM Mother's Day Weekend!, accessed May 27, 2025, http://www.hacklebarneyfarm.com/
- 49. Angry Orchard Cider House Selux, accessed May 27, 2025, https://www.selux.us/usa/en/cases/angry-orchard-cider-house
- 50. Angry Orchard, accessed May 27, 2025, https://nycwineandspirits.com/shop/?brands=Angry+Orchard
- 51. Cider Review: Angry Orchard's Walden Hollow and approaching Cider Week!, accessed May 27, 2025, <a href="http://alongcameacider.blogspot.com/2016/09/cider-review-angry-orchards-walden.html">http://alongcameacider.blogspot.com/2016/09/cider-review-angry-orchards-walden.html</a>
- 52. Angry Orchard Cider House Find their beer near you TapHunter, accessed May 27, 2025, <a href="https://www.taphunter.com/brewery/angry-orchard-cider-house/5858300399583">https://www.taphunter.com/brewery/angry-orchard-cider-house/5858300399583</a>
- 53. ANGRY ORCHARD Hudson Valley Cider Guide, accessed May 27, 2025, <a href="https://hvciderguide.com/angry-orchard/">https://hvciderguide.com/angry-orchard/</a>
- 54. Apples - Little Apple Cidery, accessed May 27, 2025, <a href="https://www.littleapplecidery.com/apples.html">https://www.littleapplecidery.com/apples.html</a>
- 55. Cider - Little Apple Cidery, accessed May 27, 2025, <a href="http://www.littleapplecidery.com/cider.html">http://www.littleapplecidery.com/cider.html</a>

- 56. Little Apple Cidery Columbia County Tourism, accessed May 27, 2025, <a href="https://columbiacountytourism.org/business/little-apple-cidery/">https://columbiacountytourism.org/business/little-apple-cidery/</a>
- 57. Little Apple Cidery Copake Hillsdale Farmers Market, accessed May 27, 2025, <a href="https://www.copakehillsdalefarmersmarket.com/wp-content/uploads/2023/01/CORE-Article2023.pdf">https://www.copakehillsdalefarmersmarket.com/wp-content/uploads/2023/01/CORE-Article2023.pdf</a>
- 58. Little Apple Farm and Cidery | Hudson Valley Bounty, accessed May 27, 2025, https://hudsonvalleybounty.com/businesses/little-apple-farm-and-cidery
- 59. 2021 Leroy | Metal House Cider, accessed May 27, 2025, https://shopciders.com/metal\_house\_cider/leroy\_89971
- 60. Metal House Cider Moves to New Paltz with Big Plans and Tiny Bubbles, accessed May 27, 2025,

  https://www.chronogram.com/food-dripk/metal-bouse-cider-moves-to-pow-palt
  - https://www.chronogram.com/food-drink/metal-house-cider-moves-to-new-palt z-with-big-plans-and-tiny-bubbles-23271153
- 61. Metal House Field Blend Selections, accessed May 27, 2025, <a href="https://www.fieldblendselections.com/metal-house">https://www.fieldblendselections.com/metal-house</a>
- 62. Metal House Cider 'Bam Bam' 750ml Organic GABA, accessed May 27, 2025, https://gabaapp.com/product/metal-house-cider-bam-bam-750ml-organic/
- 63. South Hill Prelude Cider CraftShack Buy craft beer online., accessed May 27, 2025, <a href="https://craftshack.com/products/south-hill-prelude-cider">https://craftshack.com/products/south-hill-prelude-cider</a>
- 64. Single Varietal Ciders & Pommeau South Hill Cider | Heirloom Finger Lakes Cider in Ithaca, New York, accessed May 27, 2025, <a href="https://www.southhillcider.com/single-varietal-ciders">https://www.southhillcider.com/single-varietal-ciders</a>
- 65. South Hill Cider Ibantik Craft Beverages, accessed May 27, 2025, https://www.ibantikbev.com/posts/owner-portfolio/south-hill-cider/
- 66. South Hill Cider | Heirloom Finger Lakes Cider in Ithaca, New York, accessed May 27, 2025, <a href="https://www.southhillcider.com/">https://www.southhillcider.com/</a>
- 67. Contact Us South Hill Cider | Heirloom Finger Lakes Cider in Ithaca, New York, accessed May 27, 2025, <a href="https://www.southhillcider.com/wholesale">https://www.southhillcider.com/wholesale</a>
- 68. Our Story Nine Pin Cider New York's First Farm Cidery, accessed May 27, 2025, <a href="https://www.ninepincider.com/our-story/">https://www.ninepincider.com/our-story/</a>
- 69. Visit Nine Pin Cider New York's First Farm Cidery, accessed May 27, 2025, <a href="https://www.ninepincider.com/visit/">https://www.ninepincider.com/visit/</a>
- 70. Nine Pin Cider to Host Inaugural Wild Cider Cup: The Conservancy Competition Nine Pin Cider New York's First Farm Cidery, accessed May 27, 2025, <a href="https://www.ninepincider.com/nine-pin-cider-to-host-inaugural-wild-cider-cup-t-he-conservancy-competition/">https://www.ninepincider.com/nine-pin-cider-to-host-inaugural-wild-cider-cup-t-he-conservancy-competition/</a>
- 71. Nine Pin Ciderworks Empire Wine, accessed May 27, 2025, <a href="https://www.empirewine.com/search/?q=b%3A2167">https://www.empirewine.com/search/?q=b%3A2167</a>
- 72. Imperial Nine Pin Cider New York's First Farm Cidery, accessed May 27, 2025, <a href="https://www.ninepincider.com/cider/imperial/">https://www.ninepincider.com/cider/imperial/</a>
- 73. Buy Nine Pin Signature Cider Purdy's Discount Wine & Liquor, accessed May 27, 2025, https://www.purdyswine.com/product/nine-pin-signature-cider/
- 74. Bad Seed Hard Cider, accessed May 27, 2025, https://www.badseedhardcider.com/
- 75. About Bad Seed Hard Cider, accessed May 27, 2025,

- https://www.badseedhardcider.com/about
- 76. Bad Seed Cider Co | Hudson Valley Bounty, accessed May 27, 2025, https://hudsonvalleybounty.com/businesses/bad-seed-cider-co
- 77. Bad Seed Dry Hard Cider | Total Wine & More, accessed May 27, 2025, https://www.totalwine.com/beer/cider/apple-cider/bad-seed-dry-hard-cider/p/158 980118
- 78. Buy Bad Seed Dry Cider Purdy's Discount Wine & Liquor, accessed May 27, 2025, <a href="https://www.purdyswine.com/product/bad-seed-dry-cider/">https://www.purdyswine.com/product/bad-seed-dry-cider/</a>
- 79. Treasury Cider, accessed May 27, 2025, http://www.treasurycider.com/
- 80. Hard Cider Company | Pennings Farm Cidery in NY NYC NJ, accessed May 27, 2025, https://www.penningscidery.com/about/
- 81. Apple Picking in Warwick, Orange County NY Pennings Farm Market, accessed May 27, 2025, <a href="https://www.penningsfarmmarket.com/apple-picking-in-warwick-orange-county-ny/">https://www.penningsfarmmarket.com/apple-picking-in-warwick-orange-county-ny/</a>
- 82. Dabinett | Pennings Farm Cidery Buy Cider Online!, accessed May 27, 2025, <a href="https://shopciders.com/pennings-farm-cidery/dabinett-83130">https://shopciders.com/pennings-farm-cidery/dabinett-83130</a>
- 83. Pennings Farm Cidery, accessed May 27, 2025, https://www.penningscidery.com/
- 84. Orchard Hill, accessed May 27, 2025, <a href="https://orchardhillcidermill.com/">https://orchardhillcidermill.com/</a>
- 85. Finger Lakes Cider House FingerLakes.com, accessed May 27, 2025, <a href="https://www.fingerlakes.com/listing/finger-lakes-cider-house/">https://www.fingerlakes.com/listing/finger-lakes-cider-house/</a>
- 86. Menus Finger Lakes Cider House, accessed May 27, 2025, https://www.fingerlakesciderhouse.com/pages/menus
- 87. Finger Lakes Cider House | Cayuga Lake Wine Trail, accessed May 27, 2025, https://cayugawinetrail.com/plan-your-trip/attractions/finger-lakes-cider-house
- 88. Organic U-Pick Finger Lakes Cider House, accessed May 27, 2025, https://www.fingerlakesciderhouse.com/pages/organic-u-pick
- 89. U-Pick Apples Finger Lakes Cider House, accessed May 27, 2025, <a href="https://www.fingerlakesciderhouse.com/pages/u-pick-apples">https://www.fingerlakesciderhouse.com/pages/u-pick-apples</a>
- 90. OUR STORY Green Sun Orchard, accessed May 27, 2025, https://www.greensunorchard.com/about
- 91. VISIT OUR ORCHARD Brooklyn Cider House, accessed May 27, 2025, https://www.brooklynciderhouse.com/orchard
- 92. FORTY YEARS OF INNOVATING IN THE WHITE SPACE ANNUAL REPORT 2024 SEC.gov, accessed May 27, 2025, <a href="https://www.sec.gov/Archives/edgar/data/949870/000130817925000380/sam013245\_ars.pdf">https://www.sec.gov/Archives/edgar/data/949870/000130817925000380/sam013245\_ars.pdf</a>
- 93. Angry Orchard Innovation Cider House | Walden, NY 12586 ILoveNY.com, accessed May 27, 2025, <a href="https://www.iloveny.com/listing/angry-orchard-innovation-cider-house/43349/">https://www.iloveny.com/listing/angry-orchard-innovation-cider-house/43349/</a>
- 94. In Depth: Little Apple Cidery Copake Hillsdale Farmers Market, accessed May 27, 2025,
  - https://www.copakehillsdalefarmersmarket.com/in-depth-little-apple-cidery/?utm\_source=rss&utm\_medium=rss&utm\_campaign=in-depth-little-apple-cidery
- 95. Contact Us - Little Apple Cidery, accessed May 27, 2025,

- https://www.littleapplecidery.com/contact-us.html
- 96. Metal House Cider, accessed May 27, 2025, https://shopciders.com/metal\_house\_cider
- 97. 2021 Chichinette | Metal House Cider, accessed May 27, 2025, https://shopciders.com/metal\_house\_cider/chichinette\_100143
- 98. Hard Cider: The Apple of New York's Eye Wine4Food, accessed May 27, 2025, <a href="https://www.wine4food.com/editors-picks/hard-cider-apple-new-yorks-eye/">https://www.wine4food.com/editors-picks/hard-cider-apple-new-yorks-eye/</a>
- 99. NY Cider Shines at CiderCon 2025, Secures Prestigious Industry Honors |
  Brewbound.com, accessed May 27, 2025,
  <a href="https://www.brewbound.com/pr/2025/02/19/ny-cider-shines-at-cidercon-2025-secures-prestigious-industry-honors">https://www.brewbound.com/pr/2025/02/19/ny-cider-shines-at-cidercon-2025-secures-prestigious-industry-honors</a>
- 100. Cidery Quick Reference | Liquor Authority NY.gov, accessed May 27, 2025, https://sla.ny.gov/cidery-quick-reference-1
- Projects | Cornell Hard Cider Resources, accessed May 27, 2025, <a href="https://hardcider.cals.cornell.edu/projects/">https://hardcider.cals.cornell.edu/projects/</a>
- 102. New England Cider Apple Program UMass Amherst, accessed May 27, 2025, <a href="https://www.umass.edu/agriculture-food-environment/sites/ag.umass.edu/files/news/pdf/new-england-cider-apple-program-poster-1.pdf">https://www.umass.edu/agriculture-food-environment/sites/ag.umass.edu/files/news/pdf/new-england-cider-apple-program-poster-1.pdf</a>
- 103. Single-Varietal Ciders | Buy Cider Online | U.S. Shipping, accessed May 27, 2025, <a href="https://www.pressthenpress.com/collections/single-varietal-cider">https://www.pressthenpress.com/collections/single-varietal-cider</a>
- 104. Good times for hard cider, accessed May 27, 2025, https://goodfruit.com/good-times-for-hard-cider/
- 105. growing practices Champlain Orchards, accessed May 27, 2025, <a href="https://champlainorchards.com/pages/growing-practices">https://champlainorchards.com/pages/growing-practices</a>
- 106. (PDF) Characterization of fermented cider apple cultivars grown in Upstate New York, accessed May 27, 2025, <a href="https://www.researchgate.net/publication/287715266">https://www.researchgate.net/publication/287715266</a> Characterization of fermented cider apple cultivars grown in Upstate New York
- 107. Cider apple Wikipedia, accessed May 27, 2025, <a href="https://en.wikipedia.org/wiki/Cider\_apple">https://en.wikipedia.org/wiki/Cider\_apple</a>
- 108. Apple Cider Processing Operations Requirements & Guidelines, accessed May 27, 2025,
  - https://www.afdo.org/wp-content/uploads/2020/11/Apple\_Cider\_Processing\_Operations Requirements Guidelines acc updated 2019.pdf
- 109. Apple Trees Online | Buy High Quality Plants Raintree Nursery, accessed May 27, 2025, <a href="https://raintreenursery.com/collections/apple-trees">https://raintreenursery.com/collections/apple-trees</a>
- 110. NATIONAL APPLE PROCESSING REPORT Agricultural Marketing Service USDA, accessed May 27, 2025,
  - https://www.ams.usda.gov/mnreports/fvwaplproc.pdf
- 111. NATIONAL APPLE PROCESSING REPORT, accessed May 27, 2025, <a href="https://downloads.usda.library.cornell.edu/usda-esmis/files/2j62s492k/np195608p/2b88sb04t/FVWAPLPROC.PDF">https://downloads.usda.library.cornell.edu/usda-esmis/files/2j62s492k/np195608p/2b88sb04t/FVWAPLPROC.PDF</a>
- 112. 2022 Virginia Cider Apple Report AWS, accessed May 27, 2025, https://vaw-public-prod.s3.amazonaws.com/aa071e41bad654d280a7f805391352 90.pdf

- 113. Cider Apples New England Tree Fruit Management Guide, accessed May 27, 2025, <a href="https://netreefruit.org/book/export/html/93">https://netreefruit.org/book/export/html/93</a>
- Industry advocating Eat More Apples campaign Good Fruit Grower, accessed May 27, 2025,
  - https://goodfruit.com/industry-advocating-eat-more-apples-campaign/
- 115. Farm Credit East Presents Webinar: 2025 Northeast Apple Outlook Morning Ag Clips, accessed May 27, 2025,
  - https://www.morningagclips.com/farm-credit-east-presents-webinar-2025-northeast-apple-outlook/
- 116. 2025 Apple Industry Outlook: Headwinds Persist in the U.S. Farm Credit East, accessed May 27, 2025,
  - https://www.farmcrediteast.com/en/resources/Industry-Trends-and-Outlooks/Reports/2504KEP\_AppleOutlook
- 117. Cider sees interesting seasonal variation in the US IWSR, accessed May 27, 2025.
  - https://www.theiwsr.com/insight/cider-sees-interesting-seasonal-variation-in-the-us/
- 118. Large Orders Yates Cider Mill, accessed May 27, 2025, https://yatescidermill.com/large-orders/
- 119. Downeast Cider House, accessed May 27, 2025, https://downeastcider.com/
- 120. Cider Club New York Cider Company, accessed May 27, 2025, <a href="https://www.nyciderco.com/cider-club">https://www.nyciderco.com/cider-club</a>
- 121. Membership American Cider Association, accessed May 27, 2025, <a href="https://ciderassociation.org/membership/">https://ciderassociation.org/membership/</a>
- 122. American Cider Association, accessed May 27, 2025, <a href="https://ciderassociation.org/">https://ciderassociation.org/</a>
- 123. NY Cider Shines at Cidercon 2025! Morning Ag Clips, accessed May 27, 2025, <a href="https://www.morningagclips.com/ny-cider-shines-at-cidercon-2025/">https://www.morningagclips.com/ny-cider-shines-at-cidercon-2025/</a>
- 124. 2025 Apple Marketing Order RFP Questions Department of Agriculture and Markets NY.Gov, accessed May 27, 2025, <a href="https://agriculture.ny.gov/questions-and-answers-rfp-0374-marketing-promoting-and-market-research-new-york-state-apples-apple">https://agriculture.ny.gov/questions-and-answers-rfp-0374-marketing-promoting-and-market-research-new-york-state-apples-apple</a>
- 125. 2021 Apple Crop Outlook American Cider Association, accessed May 27, 2025, https://ciderassociation.org/2021-apple-crop-outlook/
- 126. Apples Archives American Cider Association, accessed May 27, 2025, <a href="https://ciderassociation.org/category/apples/">https://ciderassociation.org/category/apples/</a>
- 127. Cornell analysis of N.Y. apple industry reveals bigger economic impact Good Fruit Grower, accessed May 27, 2025, <a href="https://goodfruit.com/cornell-analysis-of-n-y-apple-industry-reveals-bigger-economic-impact/">https://goodfruit.com/cornell-analysis-of-n-y-apple-industry-reveals-bigger-economic-impact/</a>
- 2025 HARD CIDER TRAIL OPENS: Apple Hill Growers, accessed May 27, 2025, <a href="https://applehill.com/event/hard-cider-trail-opens-apple-hill-growers-2/2025-09-06/">https://applehill.com/event/hard-cider-trail-opens-apple-hill-growers-2/2025-09-06/</a>
- 129. New York Apple Association: Home, accessed May 27, 2025, <a href="https://www.applesfromny.com/">https://www.applesfromny.com/</a>

- 130. Holiday 2024 | Winter 2025 Issue Edible Jersey, accessed May 27, 2025, <a href="https://ediblejersey.ediblecommunities.com/aggregator\_page/about-us-holiday-2">https://ediblejersey.ediblecommunities.com/aggregator\_page/about-us-holiday-2</a> 024-winter-2025-issue/
- 131. News & Info New Jersey State Horticultural Society, accessed May 27, 2025, <a href="https://nishs.org/news">https://nishs.org/news</a>
- 132. The Economics of Growing Cider Apples | CDN, accessed May 27, 2025, https://bpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/c/7021/files/2016/06/Cide r Apple Prod Econ Galinato and Peck-1e44sgk.pdf
- 133. Cider Making Cornell Cooperative Extension Seneca County, accessed May 27, 2025, <a href="http://senecacountycce.org/agriculture/cider-making">http://senecacountycce.org/agriculture/cider-making</a>
- 134. Evaluation of Hard Cider Apple Varieties to Promote Hard Cider Industry Growth In New Jersey, accessed May 27, 2025, <a href="https://www.nacaa.com/awards/apps/supplementals/15775-horticulture\_news\_hard\_cider\_articlefinal.pdf">https://www.nacaa.com/awards/apps/supplementals/15775-horticulture\_news\_hard\_cider\_articlefinal.pdf</a>
- 135. Additional Resources (2023/2024 New Jersey Commercial Tree Fruit Production Guide), accessed May 27, 2025, <a href="https://njaes.rutgers.edu/pubs/commercial-tree-fruit-guide/12-Additional-Resources.pdf">https://njaes.rutgers.edu/pubs/commercial-tree-fruit-guide/12-Additional-Resources.pdf</a>
- 136. 2025/2026 New Jersey Commercial Tree Fruit Production Guide (Rutgers NJAES), accessed May 27, 2025, <a href="https://niaes.rutgers.edu/pubs/publication.php?pid=e002">https://niaes.rutgers.edu/pubs/publication.php?pid=e002</a>
- 137. New Cider and Craft Beverage Tap House to Open in State College, accessed May 27, 2025, <a href="https://www.statecollege.com/articles/business/new-cider-and-craft-beverage-tap-house-to-open-in-state-college/">https://www.statecollege.com/articles/business/new-cider-and-craft-beverage-tap-house-to-open-in-state-college/</a>
- 138. Hard Cider Production Resources Penn State Extension Wine & Grapes U., accessed May 27, 2025, <a href="https://psuwineandgrapes.wordpress.com/2015/01/16/hard-cider-production-resources/">https://psuwineandgrapes.wordpress.com/2015/01/16/hard-cider-production-resources/</a>
- 139. USDA/NASS 2024 State Agriculture Overview for New York, accessed May 27, 2025, <a href="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?states/Ag\_Overview.php.gov/Quick\_States/Ag\_Overview.php.gov/Quick\_States/Ag\_Overview.php.gov/Quick\_States/Ag\_Overview.php.gov/Quick\_States/Ag\_Overview.php.gov/Quick
- 140. USDA/NASS 2024 State Agriculture Overview for New York, accessed May 27, 2025, <a href="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?state="https://www.nass.usda.gov/Quick\_States/Ag\_Overview.php?states/Ag\_O
- National Retail Report Specialty Crops Agricultural Marketing Service -USDA, accessed May 27, 2025, <a href="https://www.ams.usda.gov/mnreports/fvwretail.pdf">https://www.ams.usda.gov/mnreports/fvwretail.pdf</a>