

# Recent Trends in Certified Organic Tree Fruit

## Washington State 2015

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In cooperation with

Washington State Department of Agriculture Organic Food Program  
and Oregon Tilth Certified Organic

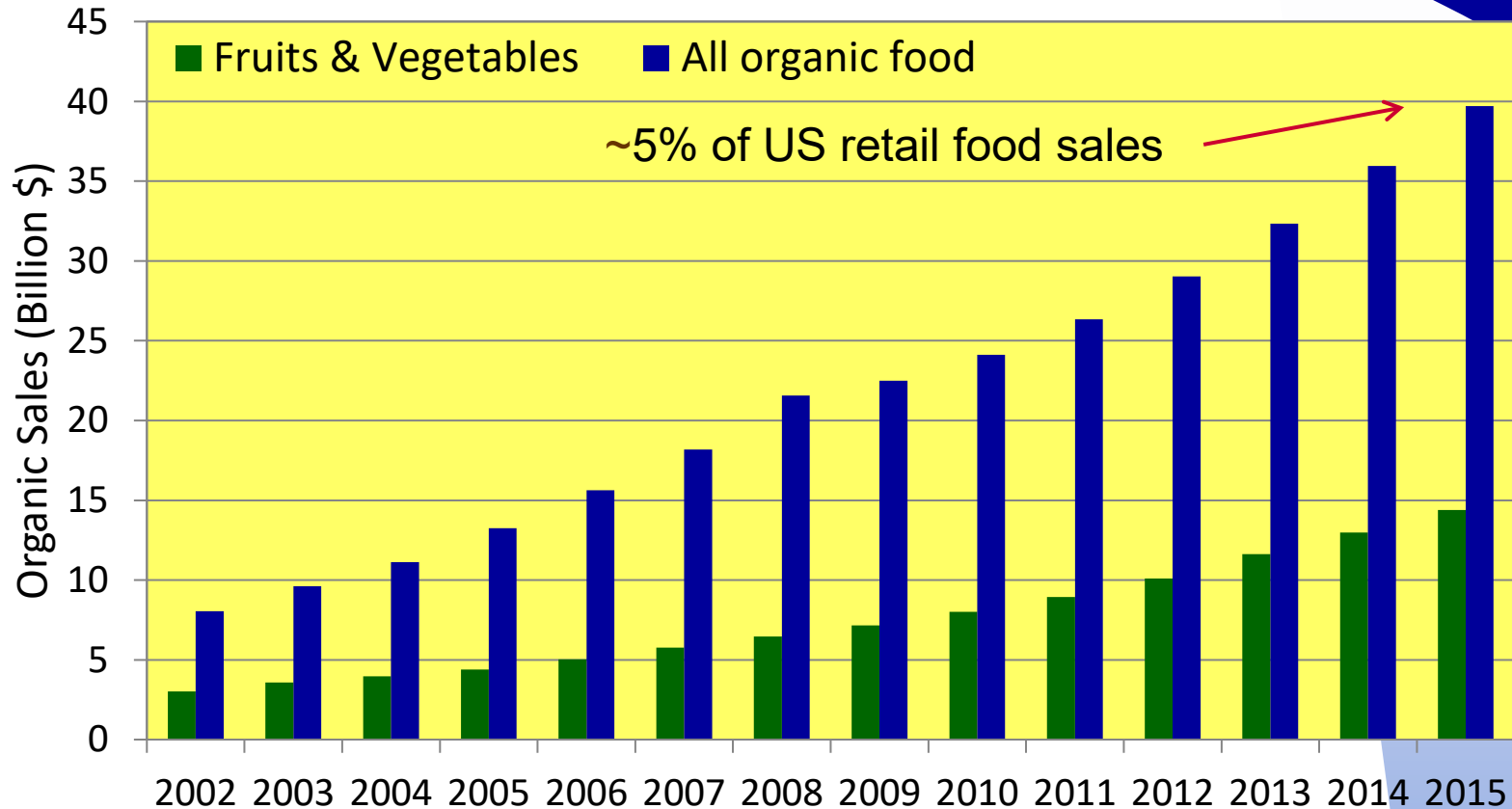
The following set of slides presents the current data on organic tree fruit area and production for Washington State, with some associated global and national data. Data come from various sources including certifiers [e.g., Washington St. Dept. of Agriculture (WSDA) Organic Program; Oregon Tilth Certified Organic (OTCO), California Certified Organic Farmers (CCOF) The World of Organic Agriculture annual publication <http://www.organic-world.net/index.html>, USDA, Calif. Dept. Food and Agric. (CDFA), and industry sources [Washington State Tree Fruit Association (WSTFA), Wenatchee Valley Traffic Association (WVTF), Washington Growers Clearinghouse (WGCH)]. Data from WSDA were extracted on Dec. 23, 2015.

Organic agriculture continues to be consumer driven. The next slide (3) shows the **growth in retail sales** of organic food in the U.S. since 2002. Growth dipped during the recession but did not stop, and has rebounded to 10-12% per year. Growth of the fruit and vegetable category was much more stable (Slide 4), confirming that these products are very core to organic consumers. These consumer data come from the Organic Trade Association annual industry survey.



# Consumer Demand

## Growth of US Organic Food Sales

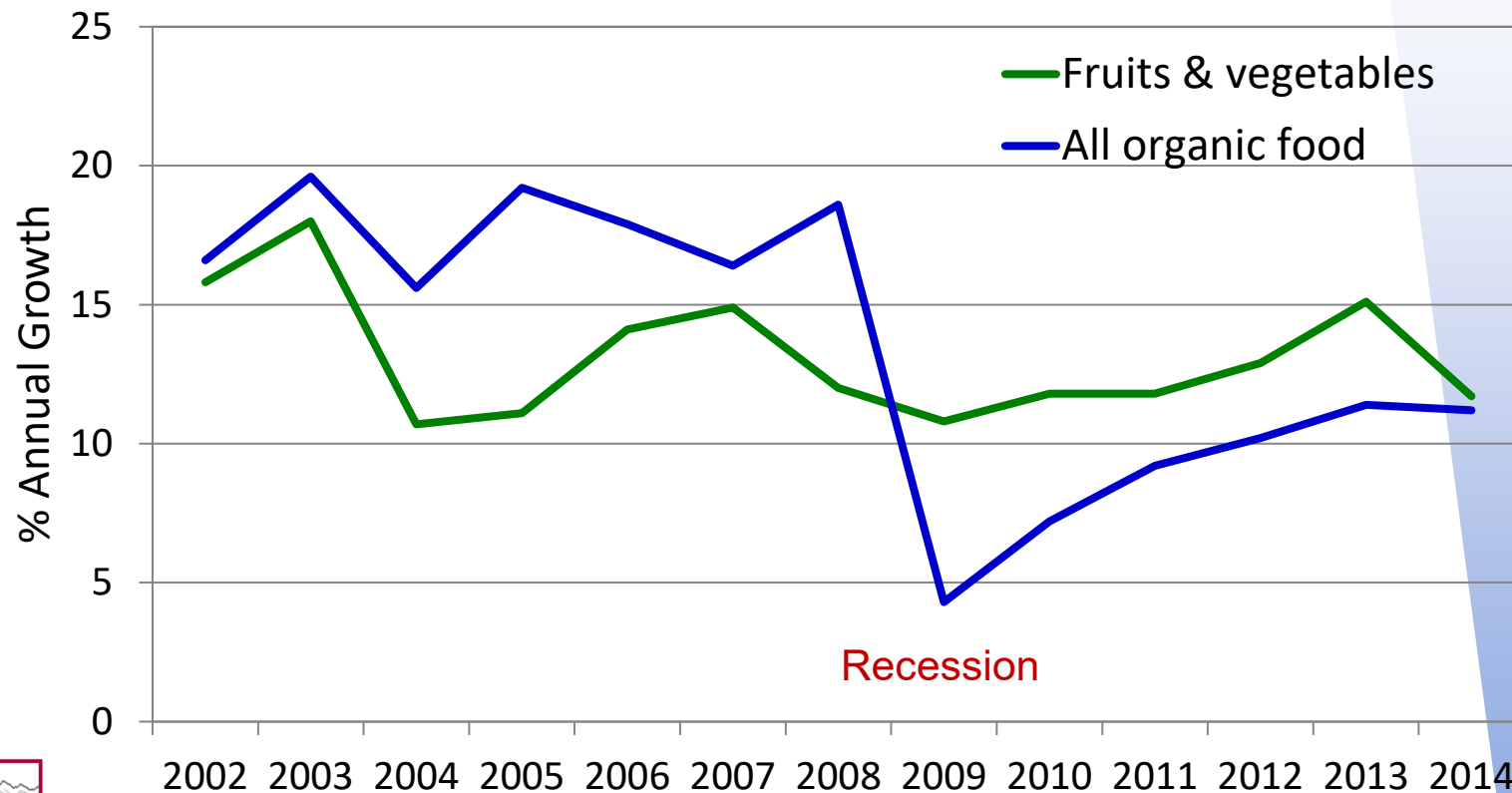


Retail organic food sales increased **10.4%** in 2015.  
Organic fruits and vegetable sales increased **10.9%**  
and were **36%** of all organic food sales; **~7%** of all fruits  
and vegetables sales (\$) in U.S. in 2014 were organic.



# Consumer Demand for Organic Food

## Annual growth rates for organic foods



- based on supermarket retail sales; does not include direct market, specialty stores



Estimates of **global area** of organic horticultural crops, including tree fruits, have been made several times in the past by the authors to help track trends. The most recent data (2014) were used in the following slides. Organic tree fruit represented about 1% of all organic agricultural land globally, with temperate tree fruits having 38% of all organic tree fruit area ([slide 6](#)). Tropical/subtropical tree fruits are now the largest category. Apple had the largest area for a specific fruit, followed by banana ([slide 7](#)) and avocado (data not shown). Area of organic tree fruit expanded rapidly since 2008 but declined slightly in 2014 (slides [8](#) and [9](#)). This may be due to serious diseases in banana (black Sigatoga, Fusarium wilt TR4) and orange (citrus greening), as well as withdrawal of subsidy-induced apple land in Poland. Europe continues with the largest area of organic temperate tree fruit (Poland 41,326 ha; Italy 17,889 ha; Turkey 14,808 ha), followed by China (25,266 ha) and the U.S. (13,268 ha). Organic apple area declined in several countries (China, Poland, Argentina), but increased about 10% in Italy and Turkey ([slide 10](#)).

# Global Organic Tree Fruit Area

Organic tree fruit crops 496,000 ha  
~1% of organic agriculture land

	Hectares* 2014	% of organic tree fruit	% change from 2013	% of all global
Temperate	188,201	38	-11	1.5
Citrus	75,215	15	-8	0.8
Tropical/ Subtropical	233,143	47	+8	1.0

\*certified + transition

1 hectare (ha) = 2.47 acres



# Global Organic Tree Fruit Area

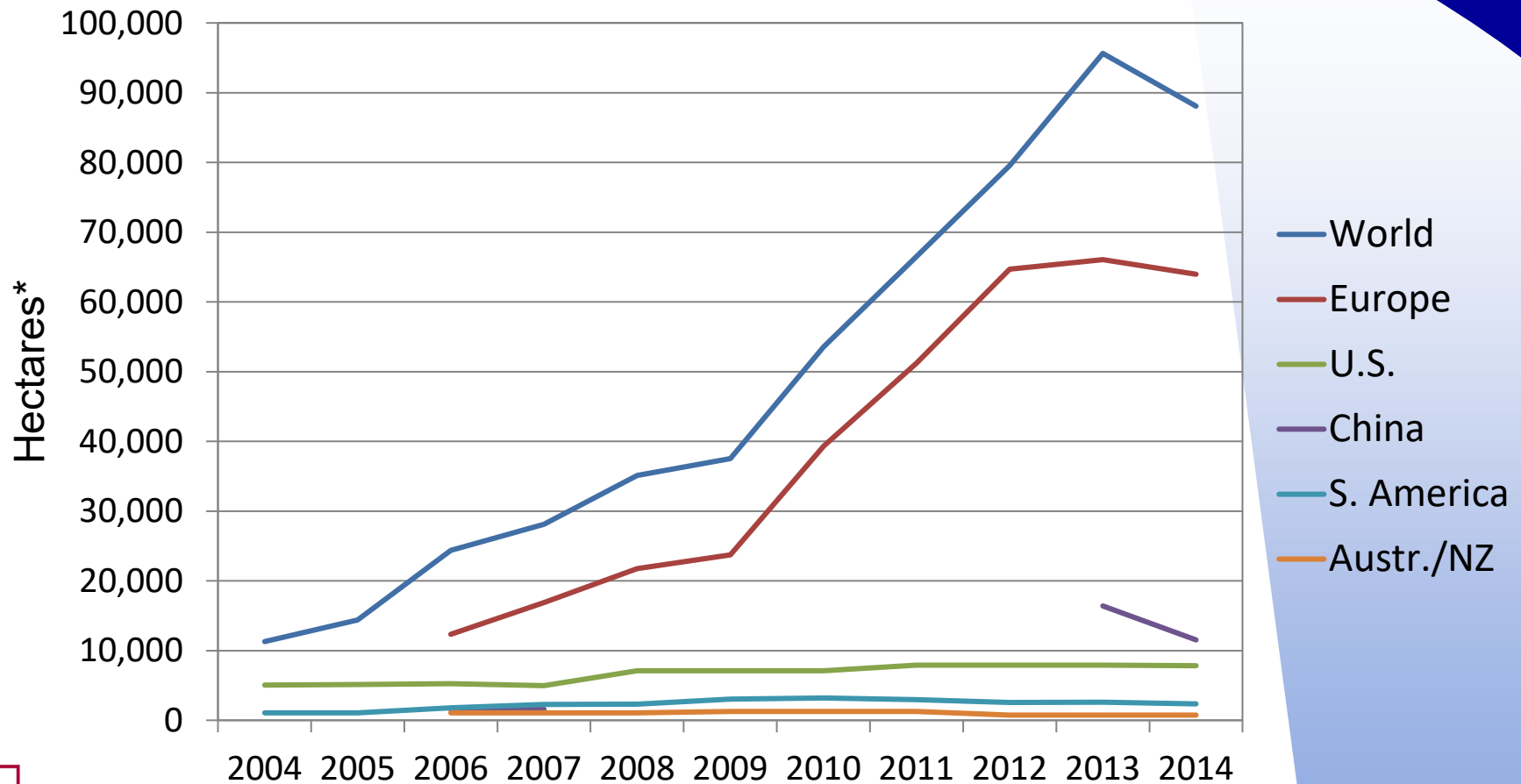
	Hectares* 2014	% change from 2013	% of organic category	% of all global#
Apple	88,106	-8	46	1.7
Apricot	20,978	-6	11	4.2
Cherry	11,952	+15	6	2.6
Peach/Nect.	9,066	-6	4	0.4
Pear	17,425	-2	9	0.9
Plum	12,633	+12	6	0.4
Other, no details	33,912		18	
Banana	60,432	-24	26	1.2
Orange	32,764	-23	44	0.8

\*certified + transition; # using 2013 FAO global data

Source: World of Organic Agriculture; FAO



# Organic Apple Trends Expansion of Global Area

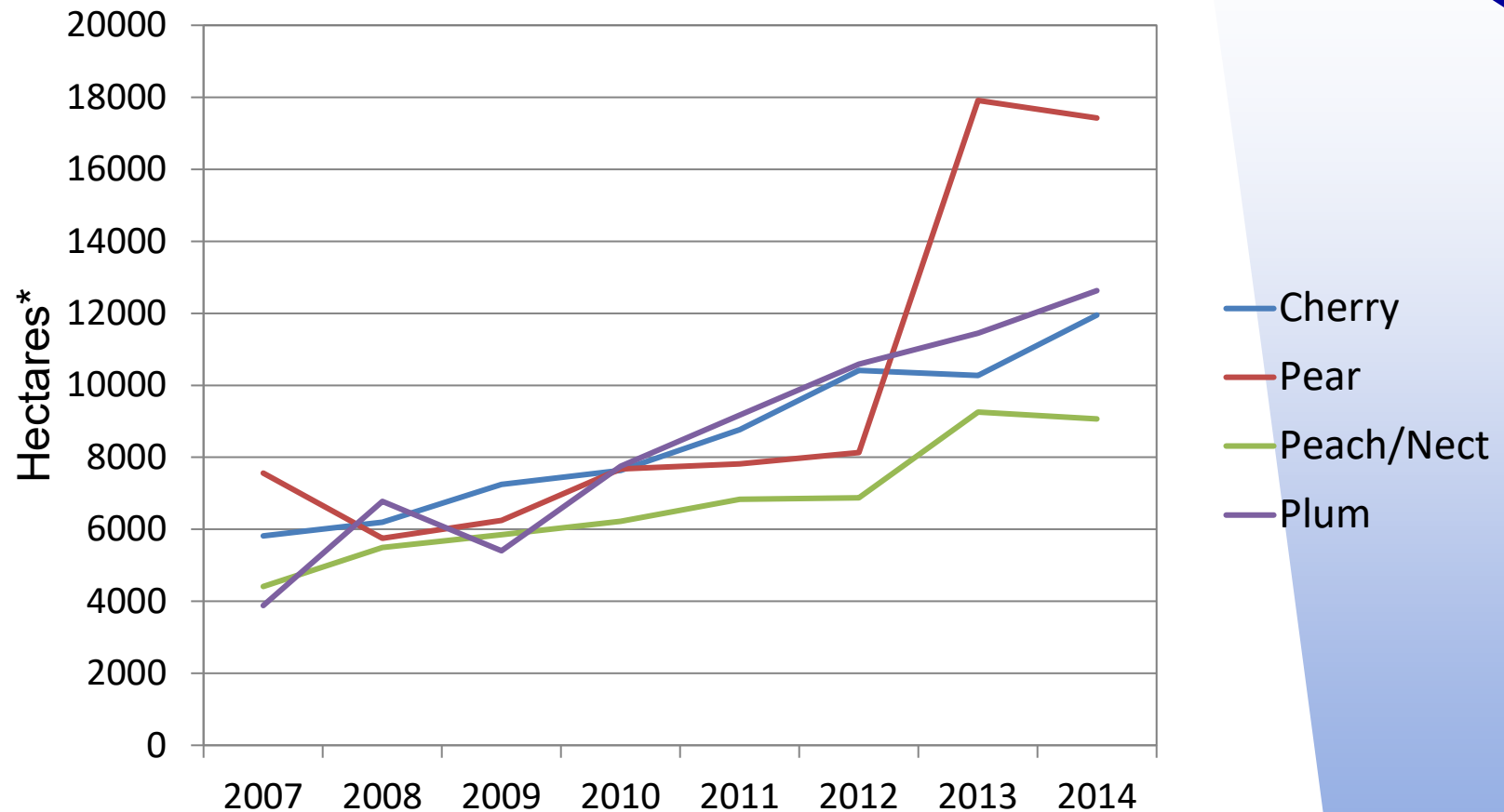


\*Certified + Transition area

1 hectare = 2.47 acres



# Organic Tree Fruit Trends Expansion of Global Area



\*Certified + Transition area

# World Organic Apple Area

	2014 Ha (C+T)	% change from 2013
World	88,016	-6
US	7,889	?
Europe	63,986	-3
Poland	31,452	-11
Germany	4,800	+2
Italy	3,950	+10
France	6,227	+8
Turkey	4,290	+13
China	11,540	-30
Argentina	1,248	-17
Chile	1,127	+1
New Zealand	450	?

## WA organic apples, 2014

- 5,689 ha cert.
- 72% of US
- 6% of world certified area (2014)

Europe is the leading region for producing organic tree fruits.

- 72% of world organic apple area

1 hectare (ha) = 2.47 acres

Data on the **area of organic tree fruit** production in the U.S. are not collected regularly and are not segregated by the fruit type, except for apple. The results in the following tables (slides [12](#) and [13](#)) come from USDA ERS reports, certifier data, CDFA, and USDA NASS surveys. In general, >90% of certified organic apple area has been located in the semi-arid regions of the western U.S. where there is little summer rainfall which minimizes many key diseases. This pattern holds true for other temperate tree fruit as well, such as pears, sweet cherries, peaches/nectarines, plums, and apricots. For example, based on data from the NASS 2014 Organic Production Survey, Washington State is the major producer of organic apples, pears, and cherries. It has 70% of the reported organic apple acres, producing 93% of the reported fresh fruit volume in the country. It also has 57% of the organic pear acres and 79% of the volume, and 75% of the sweet cherry acreage and 93% of the volume. A similar situation exists for peaches/nectarines and plums/prunes in California. Additional data can be found on slides [61](#) to 63.

# 2014 U.S. Organic Temperate Tree Fruit Area (ac)

	WA	CA	US estimate
Apple	14,052	3,392	19,370
Pear	1,843	697	3,078
Other pome		71	71
Apricot	298	393	691
Cherry, sweet	1,560	563	2,302
Cherry, tart	372	0	467
Nectarine	440	846	1,286
Peach	580	1,583	3,039
Plum/prune	58	2,228	2,377
Other stone	16	379	395
Total	19,219	10,152	33,076

Reported as acres. Data from various certifiers, CDFA, and USDA-NASS.

# US Organic Apple Area (acres, estimated)

State	2000	2001	2003	2005	2007	2008	2009	2011	2014
WA*	4,228	6,540	7,003	6,721	8,018	12,936	15,735	14,296	14,052
CA*	4,423	4,853	4,045	3,402	3,900	3,393	3,450	2,322	3,392
AZ	1,795	1,715	835	865	816	816	--	354	?
CO	431	635	235	202	209	164	--	509	194
OR	350	350	265	123	106	136	201	234	262
Other West	281	677	171	83	147	139	--	96	17
West total	11,508	14,770	12,554	11,396	13,196	17,584	>20,000	17,934	17,917
Midwest	419	567	650	708	612	655	--	1,207	319
NY & NE	83	52	5	392	212	193	--	361	645
S & SE	28	15	1	8	47	33	--	40	11
US Total	12,038	15,404	13,210	12,504	14,067	18,465	>21,000	19,542	19,370

\*WA and CA values are from WSDA, OTCO, CCOF, and CDFA

>90 % in arid west

Combined data sets from WSU-CSANR, USDA-ERS, USDA-NASS; Other West states include ID, MT, NM, NV, UT; updated 2011 to ERS values.

The **acreages** of different organic tree fruits in Washington over time are shown in [slide 15](#). While accounting for about 21% of all certified organic acres in the state, organic tree fruit generates over 60% of the farmgate value of all organic products grown in the state ([slide 16](#)). Storage, packing, and marketing add another \$80-90 million of value each year. Estimates for the value of organic tree fruit that is processed could not be determined, but demand for these products is growing (e.g., juice, puree, sliced apples). Organic apples dominate the organic tree fruit sector for area, production, and value, and sales value has been rapidly increasing ([slide 17](#)). Organic apples and pears will likely set record sales values (\$) with the 2015 crop.

# Organic Tree Fruit Acres Washington State



	--- Certified acres ---							Trans acres
	2009	2010	2011	2012	2013	2014	2015	2015
Apple	15,735	14,790	14,296	13,657	14,030	14,052	14,283	<b>3,356</b>
Pear	1,964	2,033	1,917	1,900	1,820	1,843	2,050	165
Cherry	2,437	2,147	1,826	1,792	1,837	1,939	2,056	155
Apricot*	265	299	296	266	299	298	260	--
Peach&Nectarine	1,238	1,251	1,146	1,106	1,021	1,021	948	11
Plum&Prune*	130	125	92	89	58	58	56	--
Mixed stone	30	13	17	45	7	16	32	--
Total*	21,799	20,658	19,590	18,855	18,941	19,228	19,685	3,687

*\*apricot includes aprium; plum includes pluot and plumcot; totals do not include mixed tree fruit*

Tree fruit has a **22%** share of all organic acreage in Washington State;  
Accounted for **~65%** of farmgate sales in 2011 (apple **>50%**)





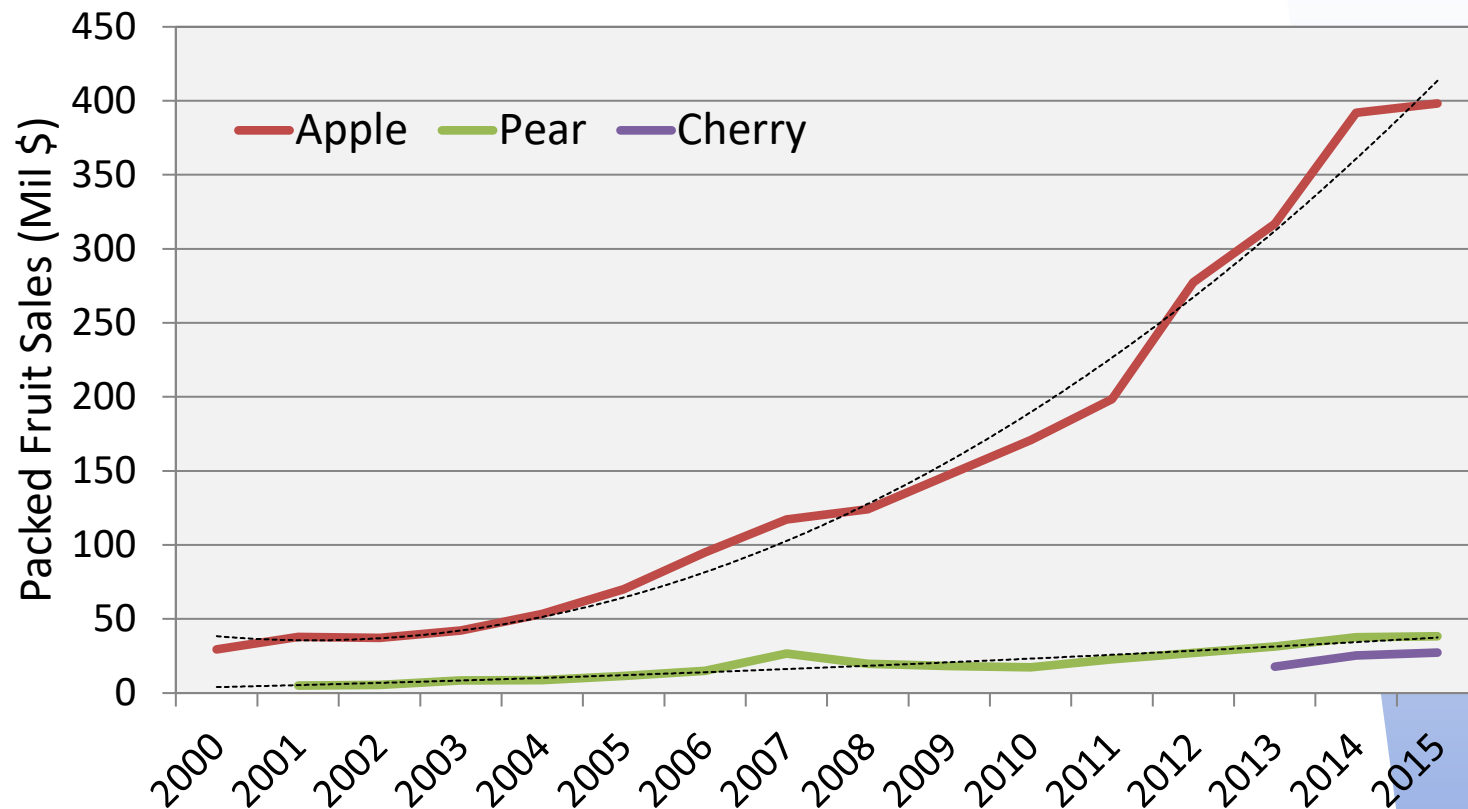
# Value of WA Organic Tree Fruits

	2009	2010	2011	2011	2012	2013	2014	2015
(Mil \$)	Sales Yr Farmgate Value			Crop Yr Packed Value				
Apple	77.85	96.28	121.04	198.55	277.40	317.0	391.9	398.1e
Pear	8.87	8.66	11.87	22.71	27.04	31.4	37.6	38.2e
Cherry	9.92	10.05	17.09	15.31	16.15	17.9	25.4	27.3
Other	5.05	7.49	10.95	>11.0	?	?	?	?
Total	101.69	122.48	160.95	>248	>320	>343	>455	>464

Sales year = Jan.-Dec., regardless of when the crop was harvested. Crop year = value of the crop harvested in the given year, that may be sold over multiple years; uses Packed value based on FOB price. e=estimate.



# Value of WA Organic Apples and Pears



Based on shipped volume for the crop (e.g., 2008 harvest was shipped in both 2008 and 2009) and estimated weighted average price per packed box during the same period. Dashed line is polynomial trend line estimate. Does not include processed fruit. *Data: WSTFA, WGCH, WVTA*

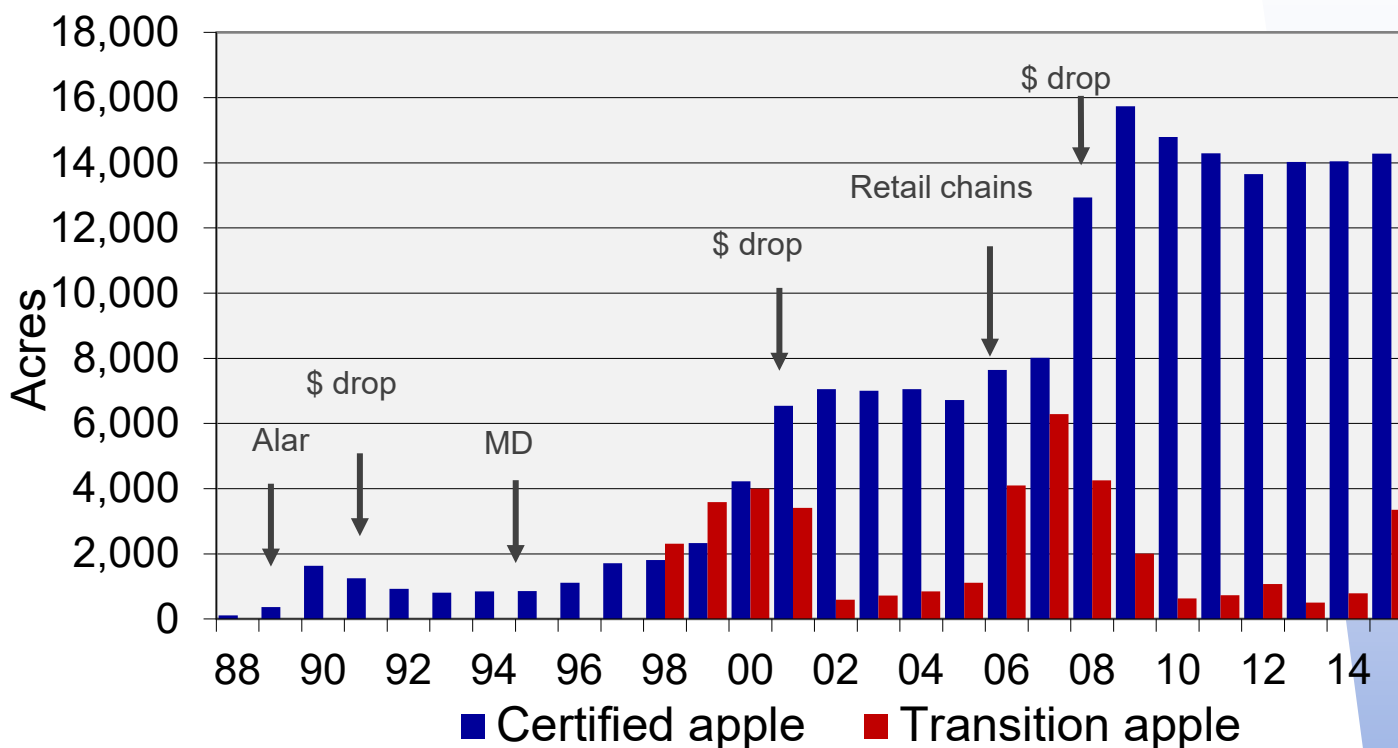
The expansion of **organic apple area** in the state has proceeded in a stepwise fashion as shown in [slide 19](#). Partly this is due to the 3-year transition requirement that creates a lag between a market signal to growers and their ability to enter the market. There is also a lag in exiting, for example when prices fall, since growers have invested in the transition period and in various production practices. Increases in area have been spurred by crisis situations, such as Alar in 1989, and the crash in conventional 'Red Delicious' prices in the late 1990s.

While 'Red Delicious' remains the most widely planted cultivar under conventional management, 'Gala' and 'Fuji' dominate organic plantings, with 'Honeycrisp' increasing rapidly in area ([slide 20](#)). The change in area of cultivars over time can be seen in slides [21](#) and [22](#). In addition, many new and specialty cultivars are being grown organically, including some for hard cider production ([slide 23](#)).



Photo: F. Peryea

# Organic Apple Acreage Washington State



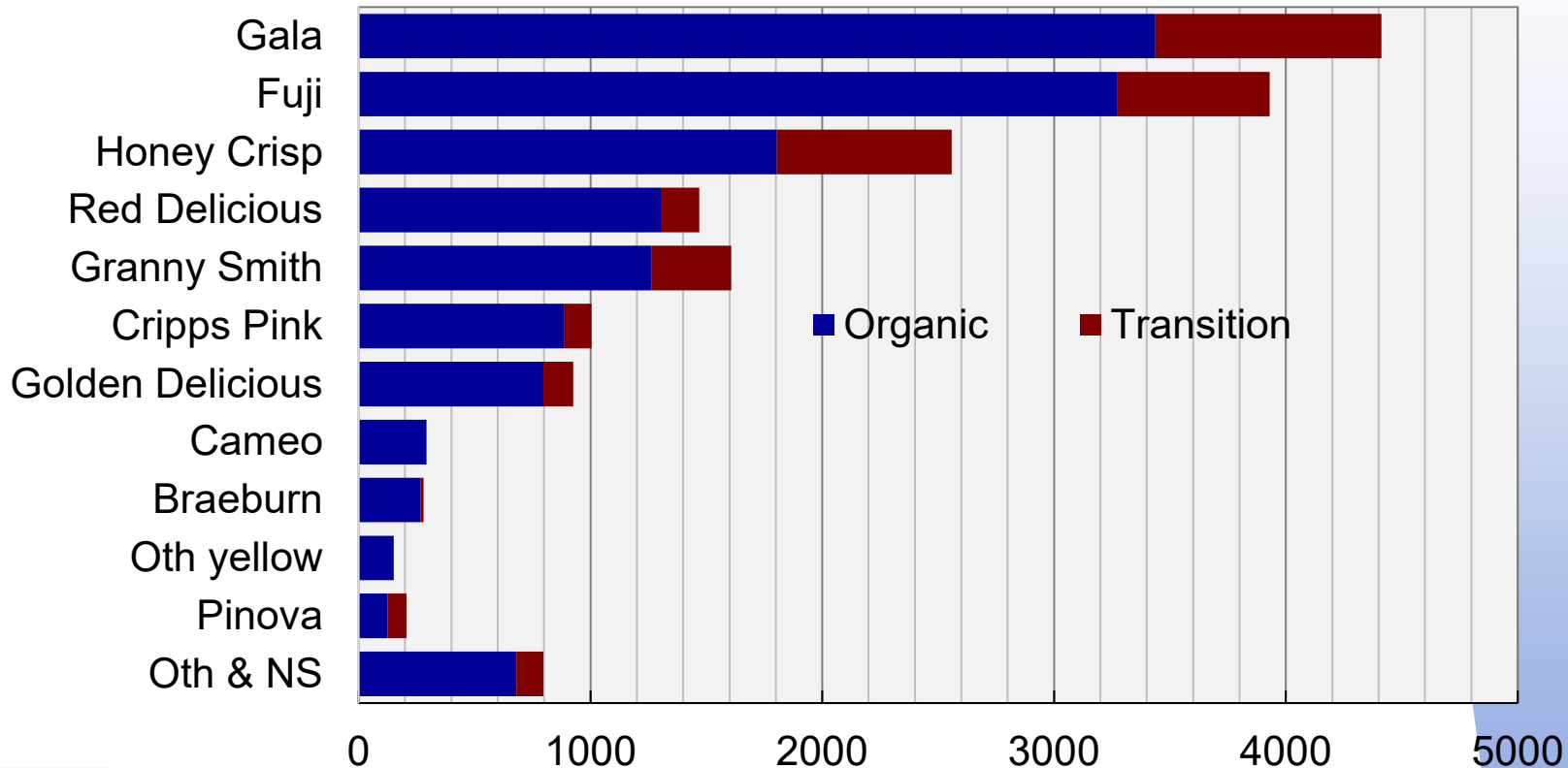
**14,279 ac = 9.6% of WA apple bearing acreage**  
(based on 2014 WA-NASS estimate of 148,000 acres)

Some historical events that have influenced organic apple production include the Alar incident, price volatility (\$ Drop), the introduction of mating disruption (MD) for codling moth control, and market entry by national chain supermarkets (Retail chains).



WA Fuji; ARS Photo

# Organic Apple Variety Acres Washington 2015



Fuji and Gala = 47% of certified apple acres;  
Honeycrisp tops Red and Granny since 2013



Combined certifier data; Cripps Pink includes  
Pink lady; Pinova includes Pinata and Sonata.

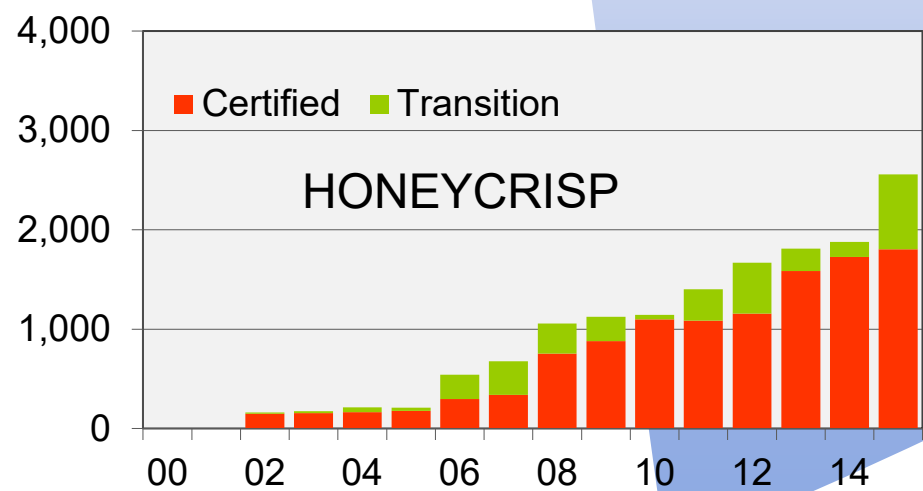
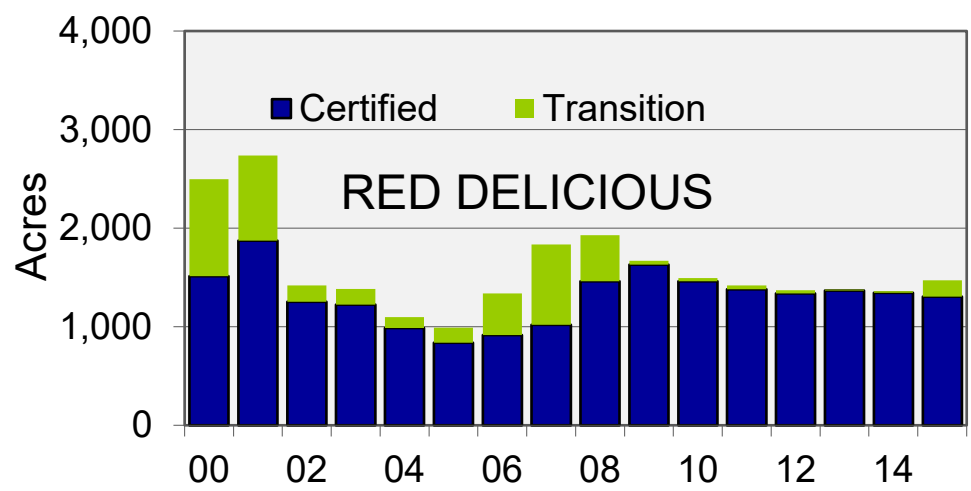
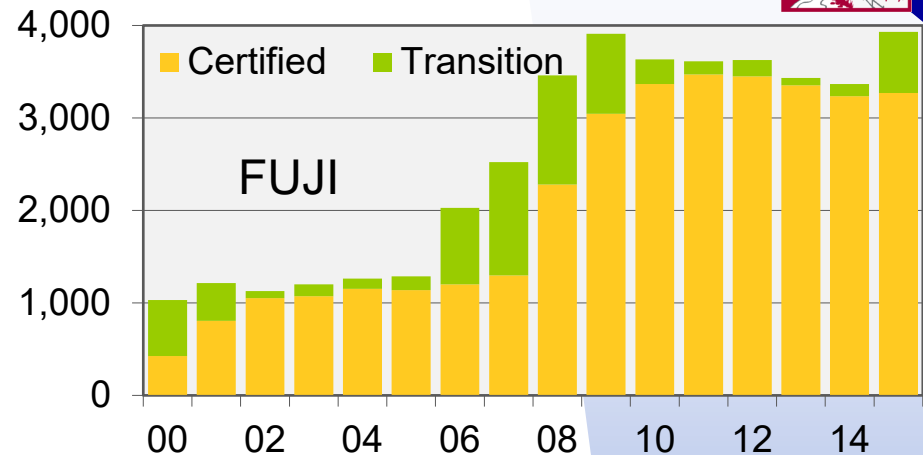
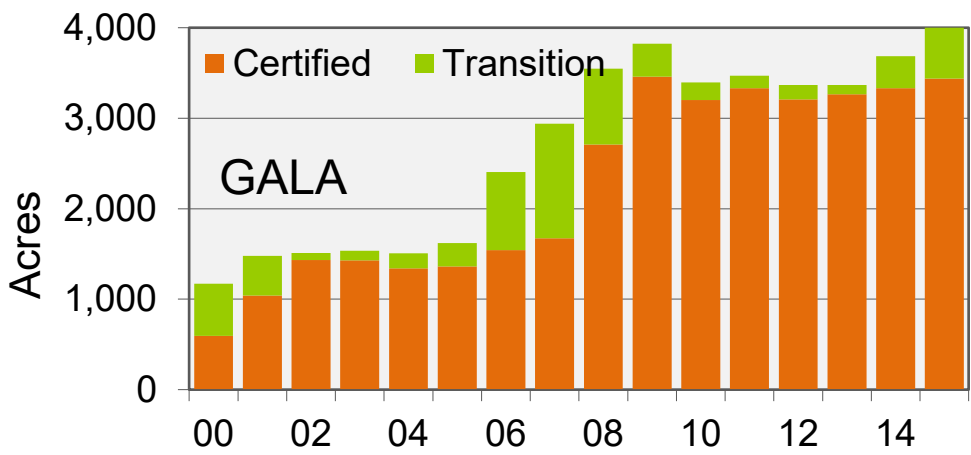


Photo: B. Barritt



# Organic Apple Varieties

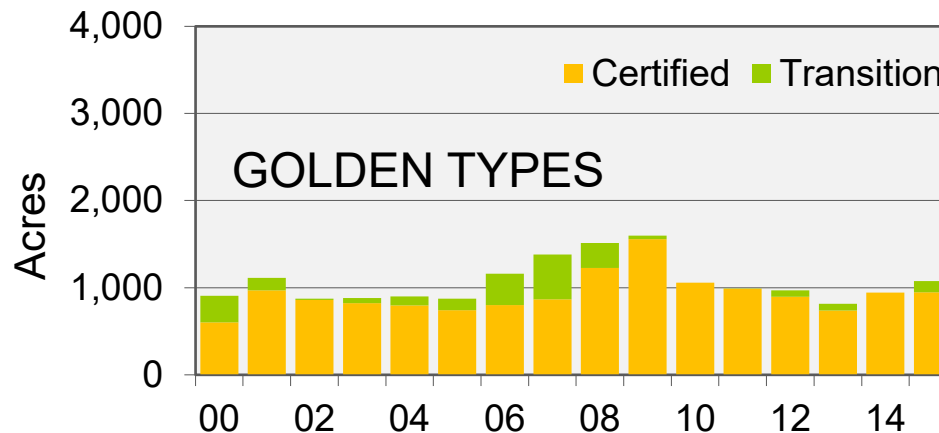
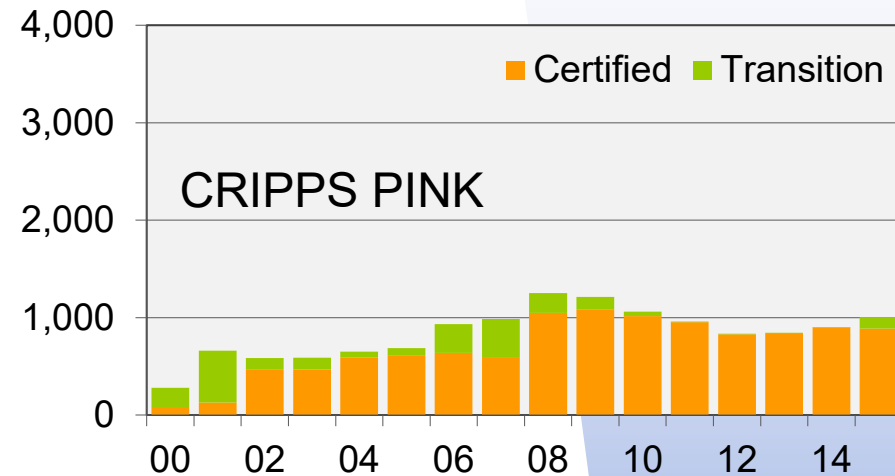
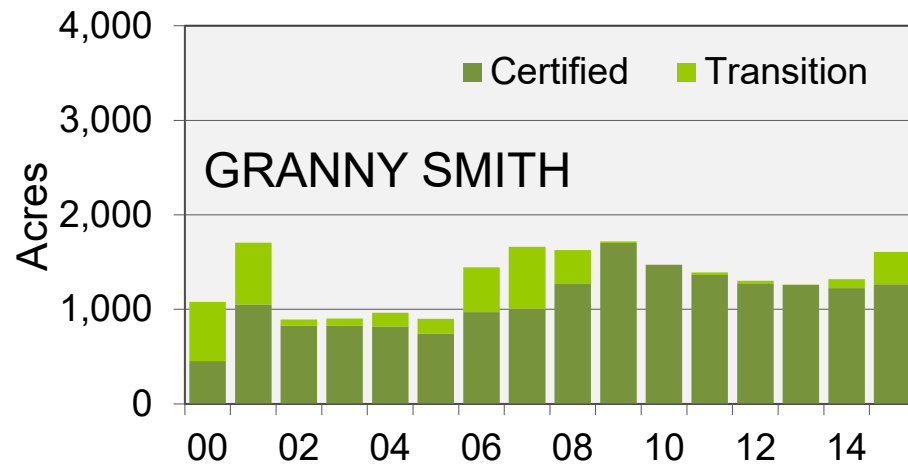
## Washington State Acres Trend



# Organic Apple Varieties Washington State Acres Trend



Photo: ARS





# Organic Specialty Apples

## Washington State 2012

Over 100 varieties of organic apples grown in WA, from small to larger quantities

- 50-100 ac: Ambrosia<sup>®</sup>, Jonagold, Opal<sup>®</sup>
- 11-50 ac: Autumn Glory<sup>®</sup>, Empire, Envy<sup>™</sup>, Ginger Gold<sup>®</sup>, Golden Supreme<sup>®</sup>, Jazz<sup>™</sup>, Jubilee, Kanzi<sup>®</sup>, Lady Alice<sup>®</sup>, McIntosh, Minneiska (SweeTango<sup>®</sup>), Pacific Rose<sup>™</sup>, RosaLynn
- 1-10 ac: Blondee, Gravenstein, Earligold, Liberty, Rome, Cortland, Sansa, Spitzenberg, Tsugaru, Winesap, Winter Banana, Zestar!<sup>®</sup>

**Varieties listed in WSDA producer directory:**

<http://agr.wa.gov/FoodAnimal/Organic/docs/wsdacertorgproducers.pdf>

**THE BEST ORGANIC APPLES ON EARTH  
GROW IN WASHINGTON!**

The organic fruit and vegetable category is one of the fastest growing segments in your produce department. And organic apples are a booming part of the apple category. "Ten years ago, organic meant a small mom and pop store with some apples in a box," said Harold Ostenson of Pac Organic Fruit in George, WA. "Today it has grown into a significant market," he said. "My guess is at least one million boxes in Wenatchee and Yakima alone."

Bob Boule, managing partner of Washington Organics agrees. "Washington is by far the largest organic apple producer in the U.S. -- maybe even the world," he said.

"As recently as five years ago," he went on to say, "if we sold a pallet of organic apples of one grade and one size, it was a big order. Last year we sold semi-truck loads of organic apples. And yesterday I sold 22 pallets of Washington extra fancy organic apples -- to one grower."

"We've got the volume, we've got the varieties, we've got 12-month availability," he added. "And thanks to Controlled Atmosphere storage, some of the best tasting organic apples are in June and July."

And there's one more reason why more and more people are buying Washington organic apples: "They taste extremely good, they are absolutely beautiful," said Boule.

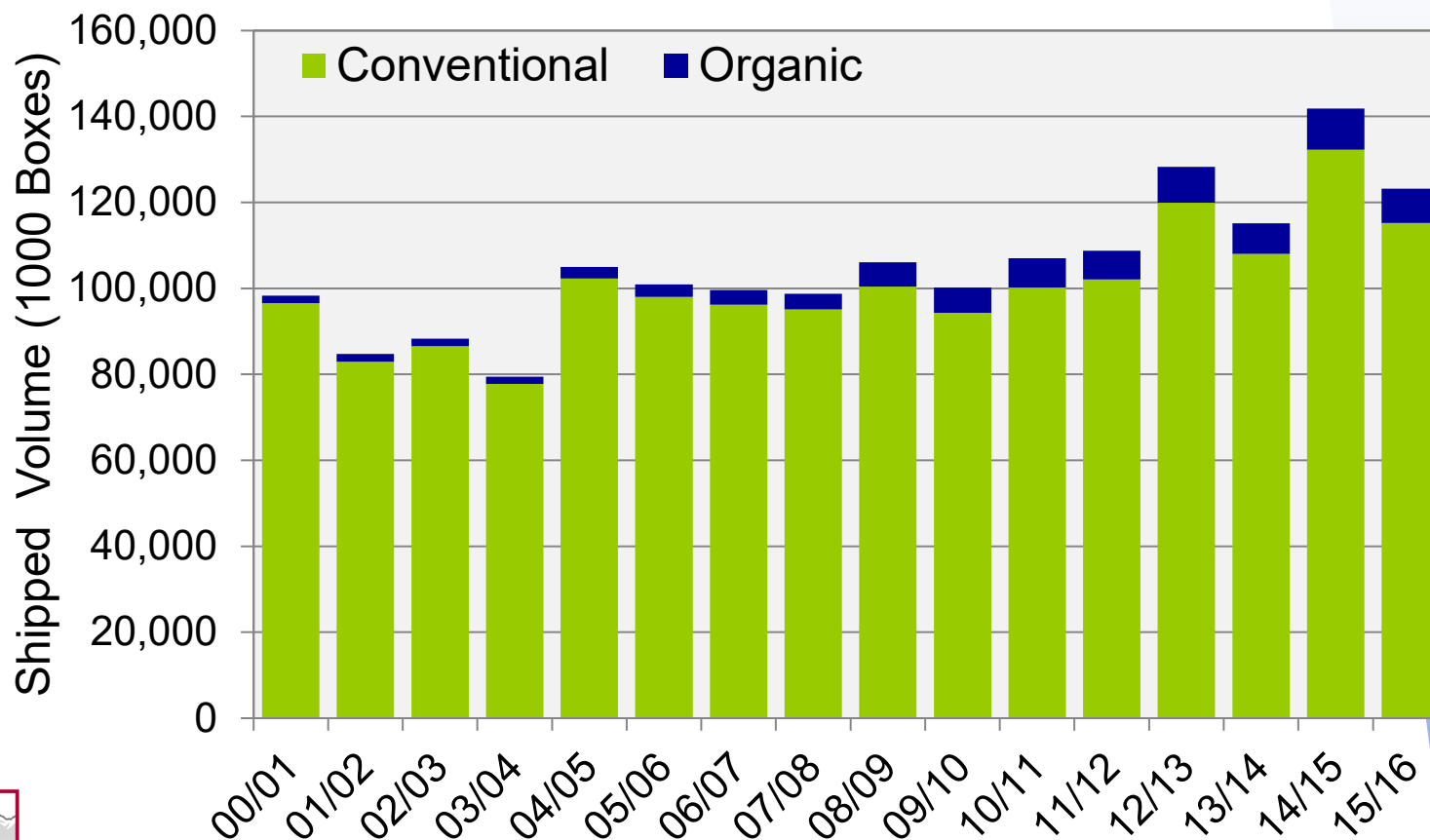


**WA Apple Commission**

In 2015, certified organic apples represented about 9.6% of all bearing apple acres in the state. This has translated to about 6% of the fresh shipments of apples (slides [25](#) and [26](#)), with an unknown amount of organic fruit going to the processor market or being sold as conventional for various reasons.

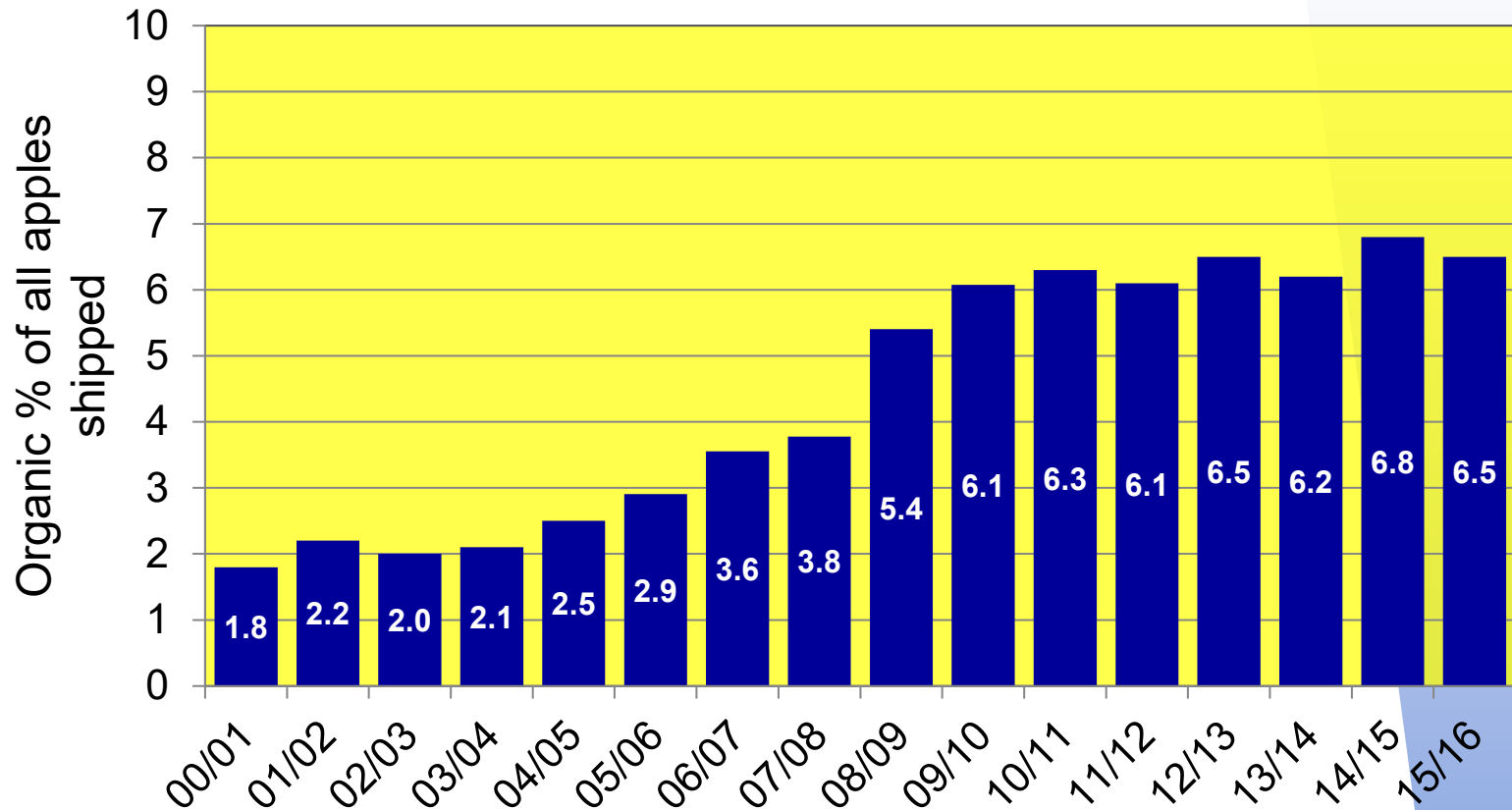
A general upward trend of shipments has occurred since a big jump in 2008 (slide [27](#)), despite slight declines in acreage after 2009. This can be attributed to newer high-yielding plantings coming into production, as well as less fruit being diverted to conventional or other markets. The increase has been driven by dramatic rises in 'Gala' and 'Fuji' shipments, with both exceeding 2 million 40-lb boxes in 2012, a large crop year (slides [28](#), [29](#)). The rise of organic 'Honeycrisp' production is also evident. Despite the rapid rise in supply, prices have also risen during this period.

# Washington Apple Volume Conventional and Organic



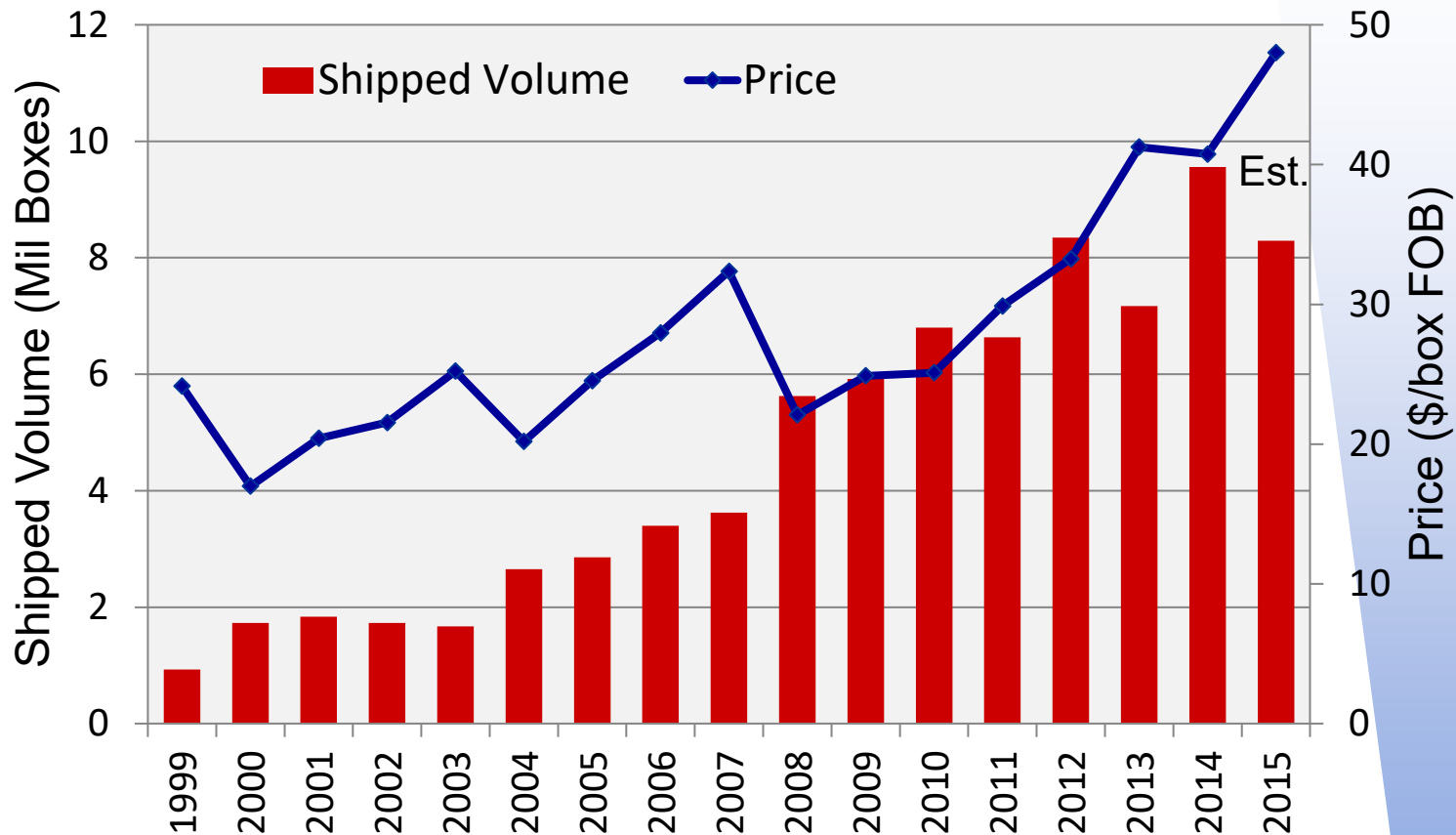
Annual prices are typically reported for a proportion of total boxes shipped rather than total volume of boxes shipped. Data: WVTA & Washington Growers Clearing House; organic season average FOB history; priced boxes all grades, sizes, storage

# Organic Share of Apple Shipments Washington State



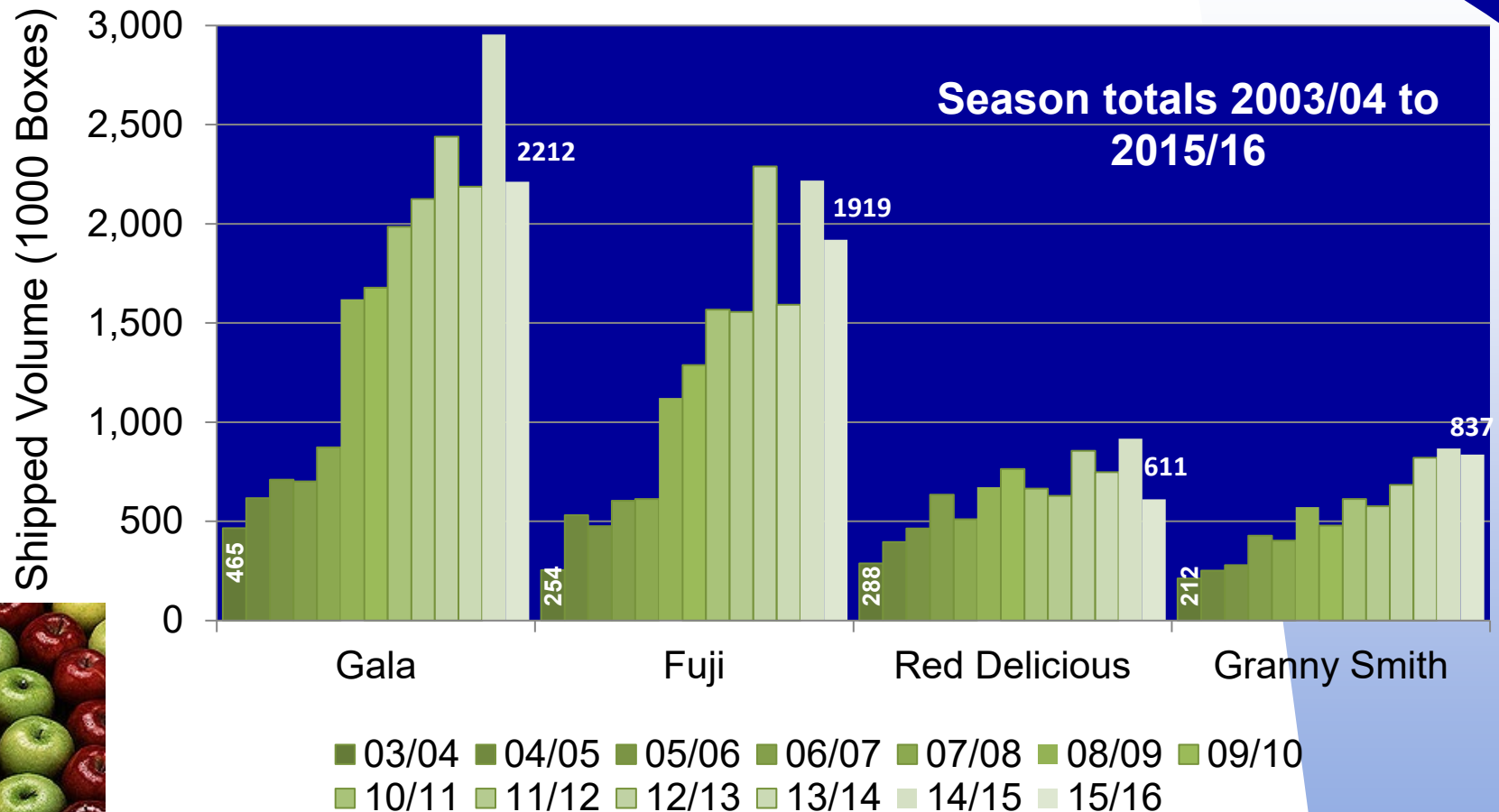
# Organic Apple Sales

## Volume and Price Trends - WA



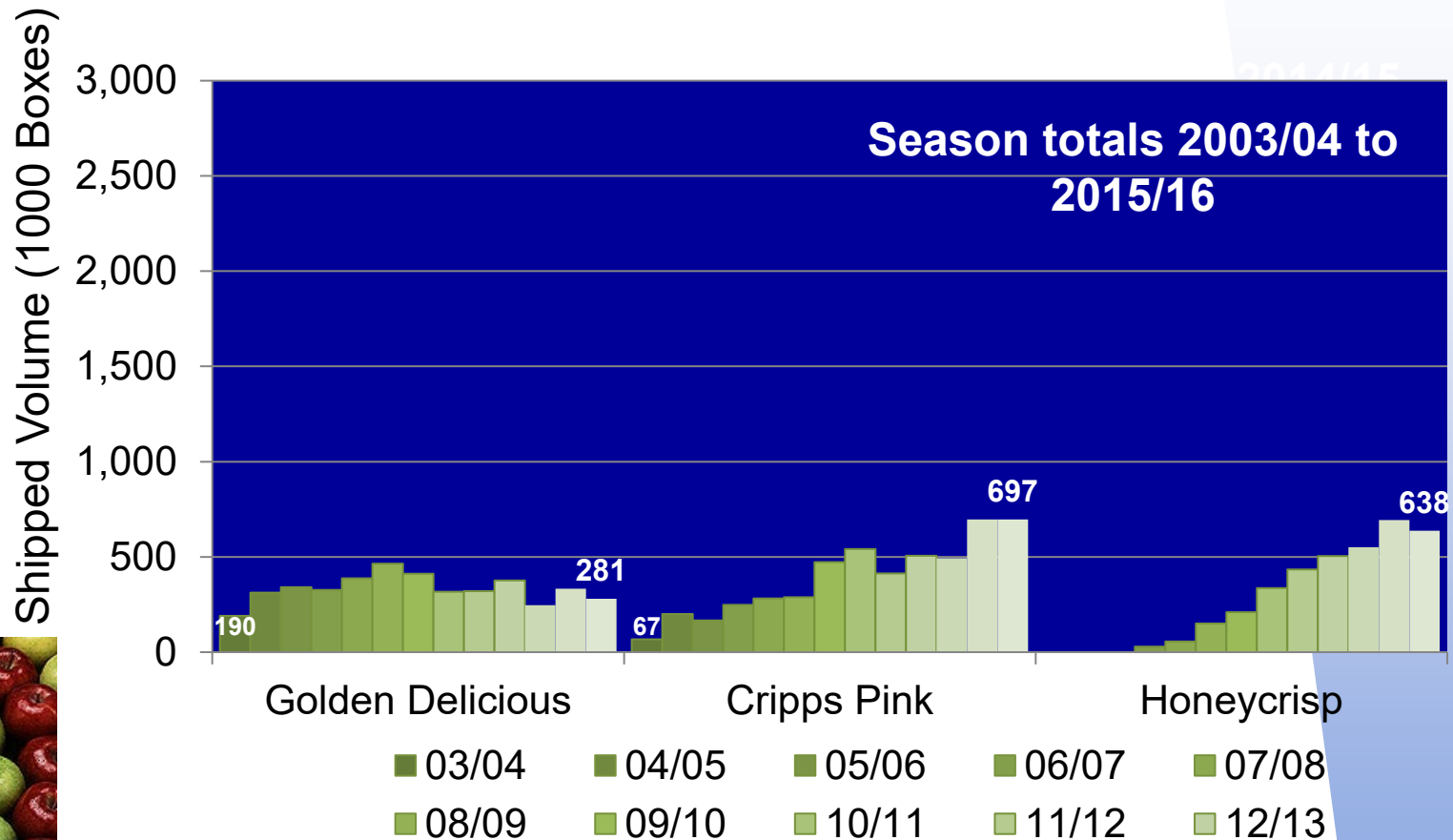
40 lb box. Data: WSTFA, WVTA, WGCH; organic season average FOB history; priced boxes all grades ,sizes, storage

# Total Shipped Organic Volume by year and variety, Washington State



ARS Photo

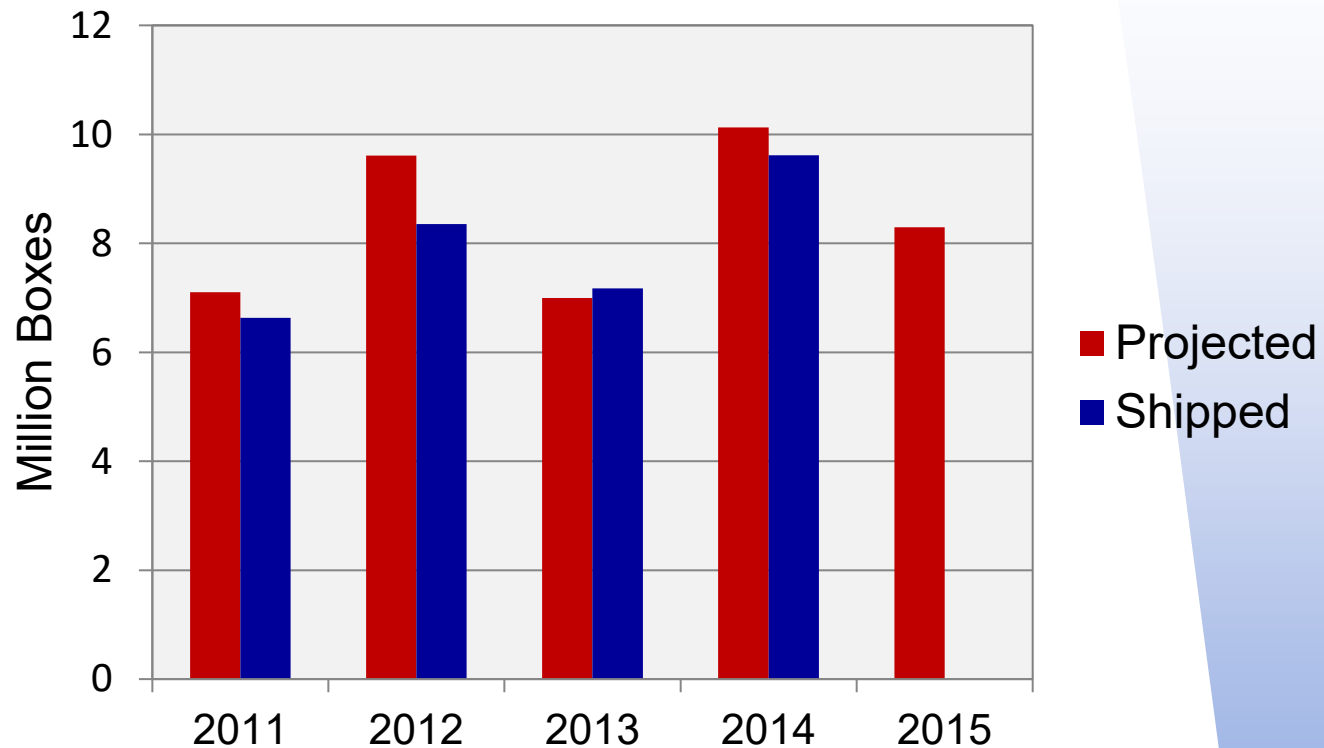
# Total Shipped Organic Volume by year and variety, Washington State





The 2014 crop was the largest ever for organic apples, estimated at 10.1 million boxes ([slide 31](#)). The final shipped volume was just over 9.6 million boxes. Many varieties experienced higher demand than there was supply, despite harvested volumes up 20% or more from the previous record. Volume was down for the 2015 crop at an estimated 8.2 million boxes, due to a smaller crop from alternate bearing. The smaller crop led to rapid sales at prices higher than the previous season. A record size crop of 11.2 million boxes is predicted for the 2016 crop.

# Washington Organic Apple Crops



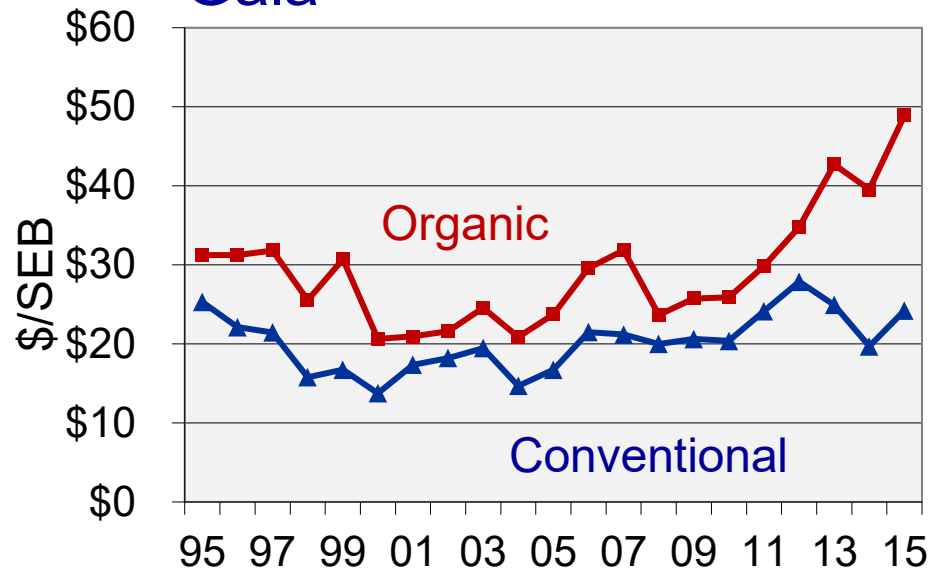
Comparison of recent organic apple crop size estimates (December 1) with actual season-end volume shipped.

*Data: WSTFA, WVTa, WGCH*

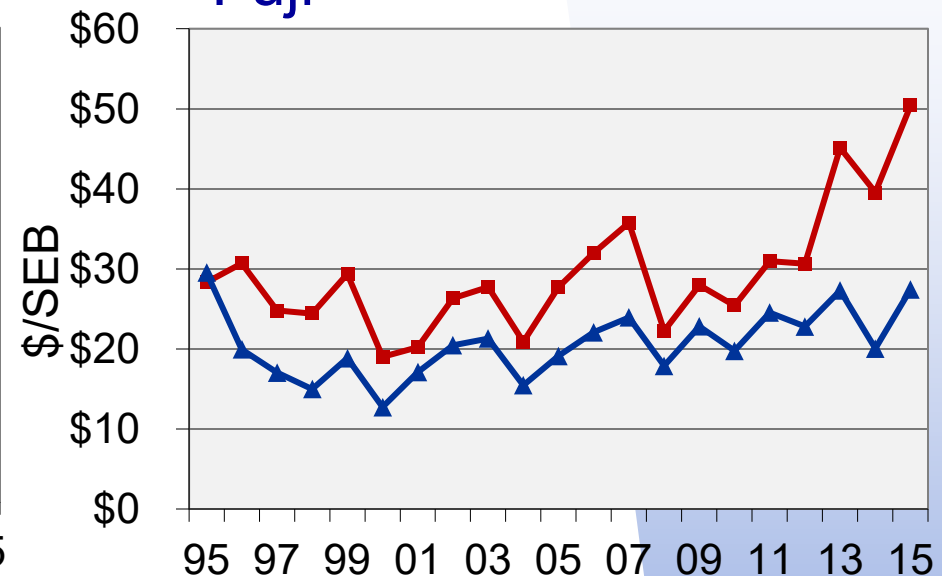
**Prices** for organic tree fruit have been collected by the industry starting in the mid-1990s, and now include most of the crop (reporting is voluntary). Organic prices are almost always higher than conventional, but the magnitude of the difference varies from year to year. However, the direction of price change from year to year was generally the same between the two, until after the 2012 crop, indicating that market forces are becoming less similar. Both organic and conventional experience some alternate bearing which affects supply and price. The prices on the following slides (33-36) are for fresh packed apples (40 lb box) for all sizes and grades, domestic and export. Organic price premiums are plotted in slide [37](#) as both the absolute dollar amount as well as the percent difference. The dollar premium per box has been at record levels for the past three years.

# Price Trends Washington Apples

## Gala



## Fuji

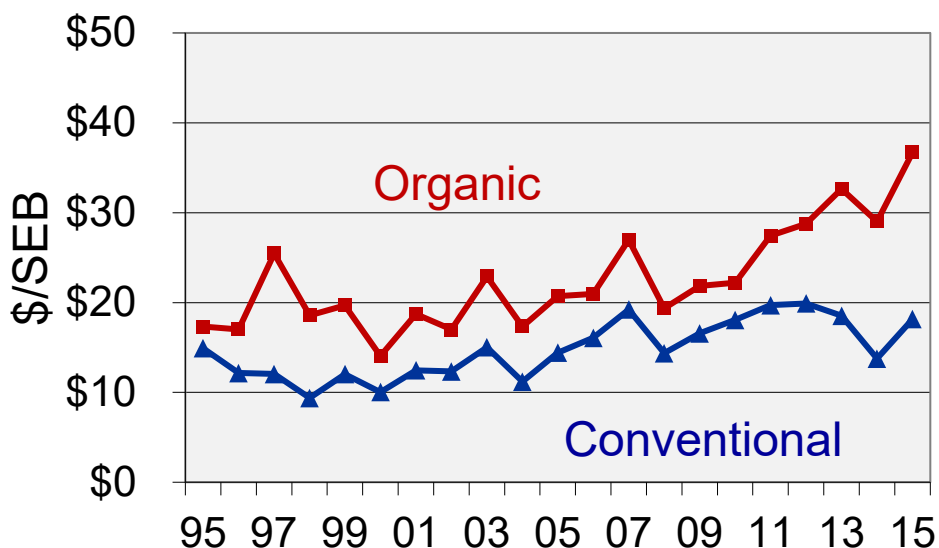


**SEB=standard equivalent box of 40 lb.** Data: WSTFA, WGCH; FOB averages, all storage, grades, sizes. Annual data points represent season averages: season approx. Sept 1 to end of Aug.

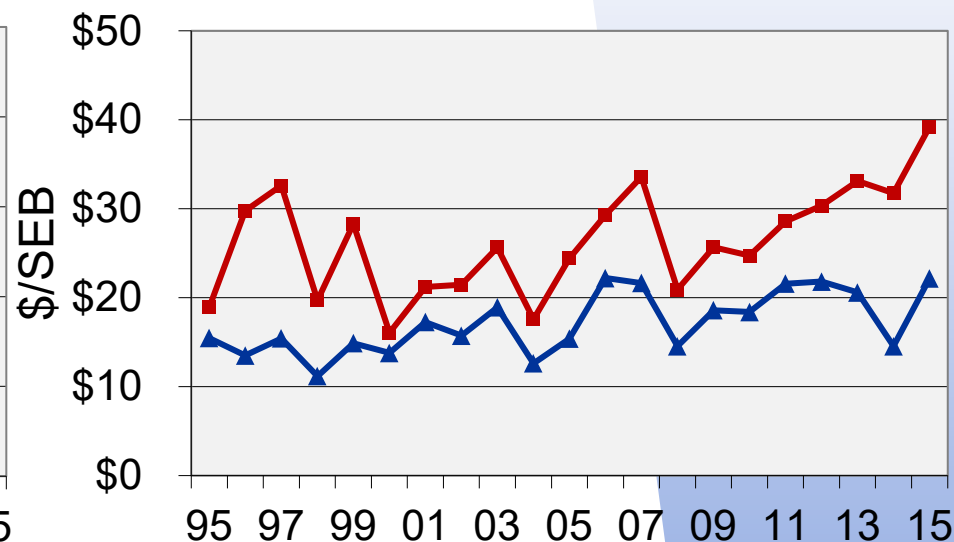


# Price Trends Washington Apples

## Red Delicious



## Golden Delicious



NY Apple Assoc.

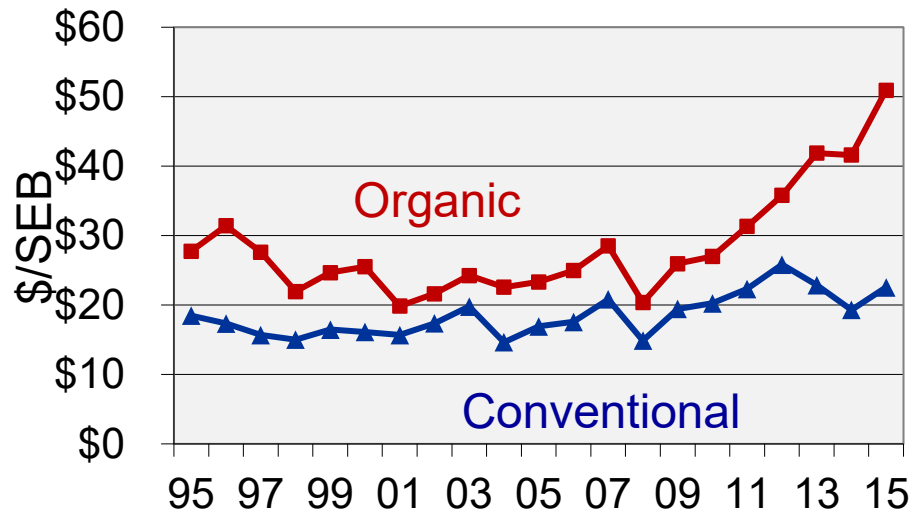
Data: WSTFA, WGCH; FOB averages, all storage, grades, sizes.  
Annual data points represent season averages: season approx.  
Sept 1 to end of Aug.



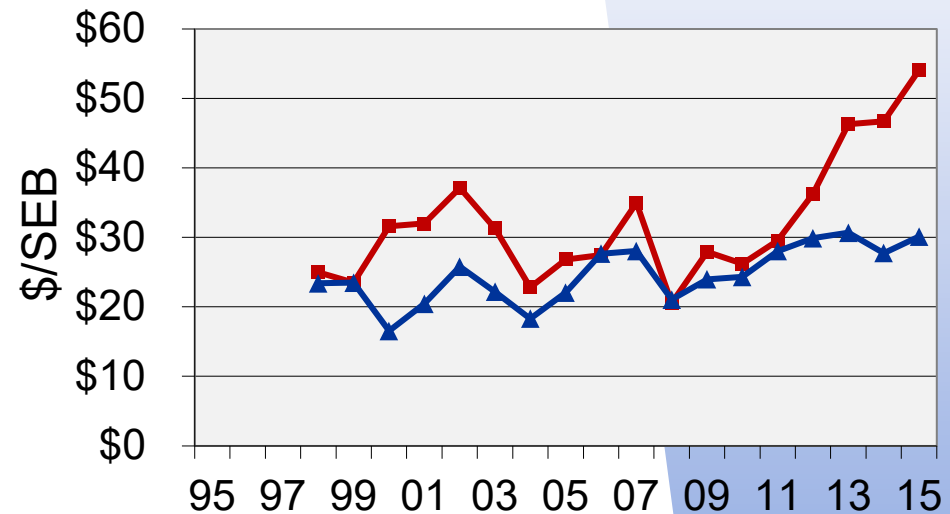
# Price Trends Washington Apples



## Granny Smith



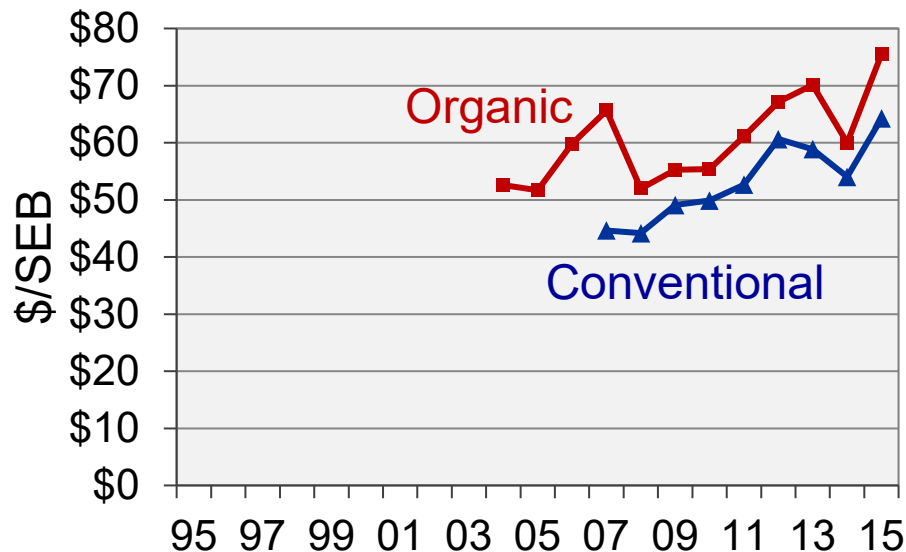
## Cripps Pink



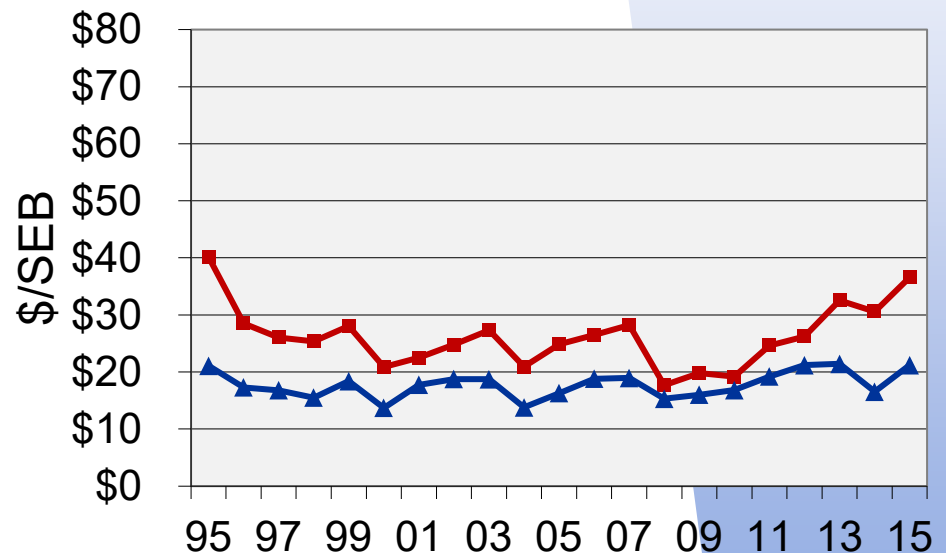


# Price Trends Washington Apples

## Honeycrisp

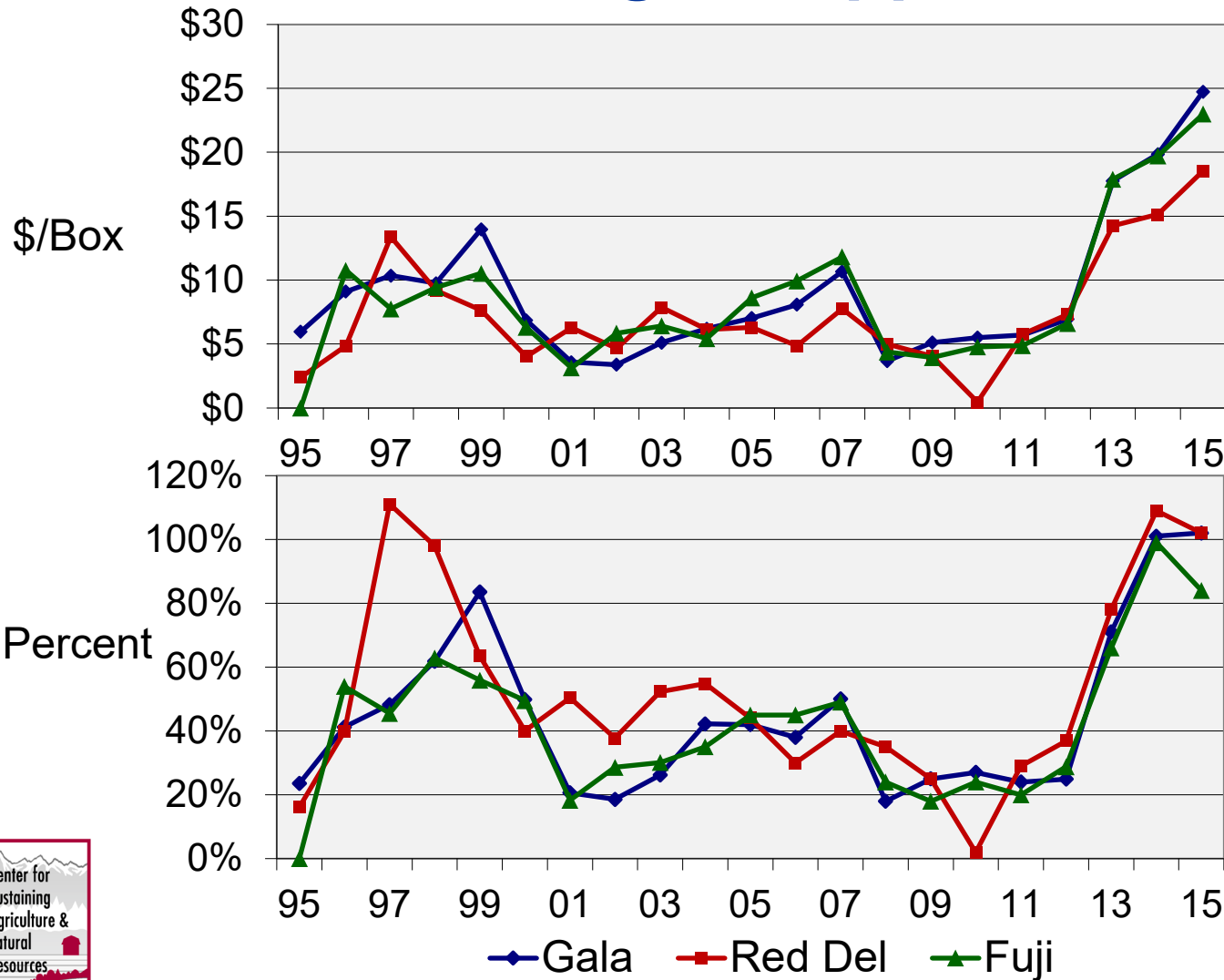


## Braeburn





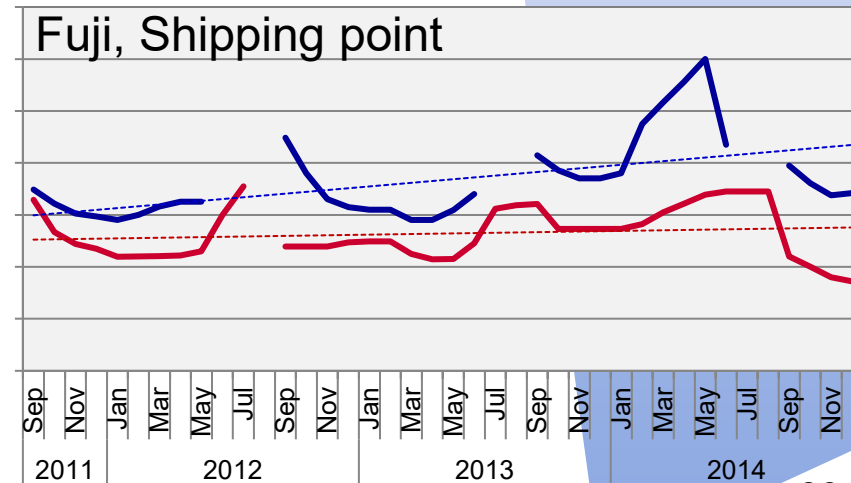
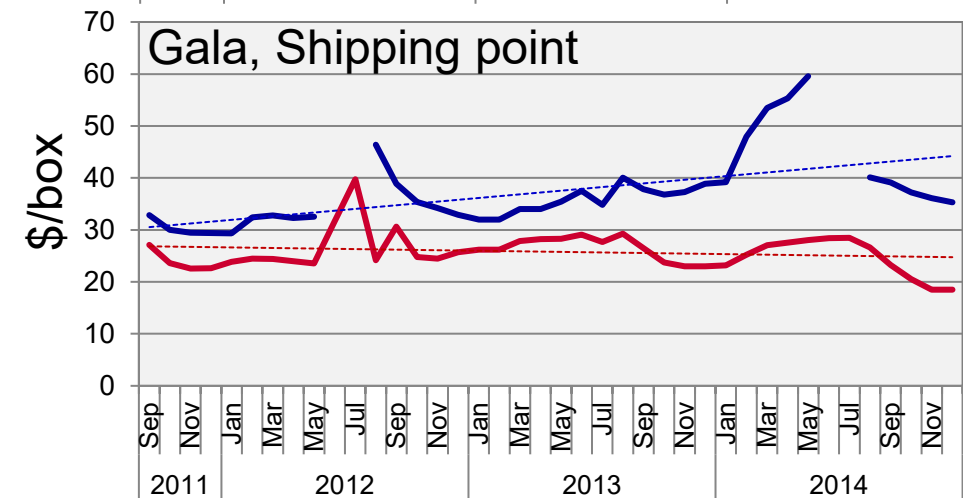
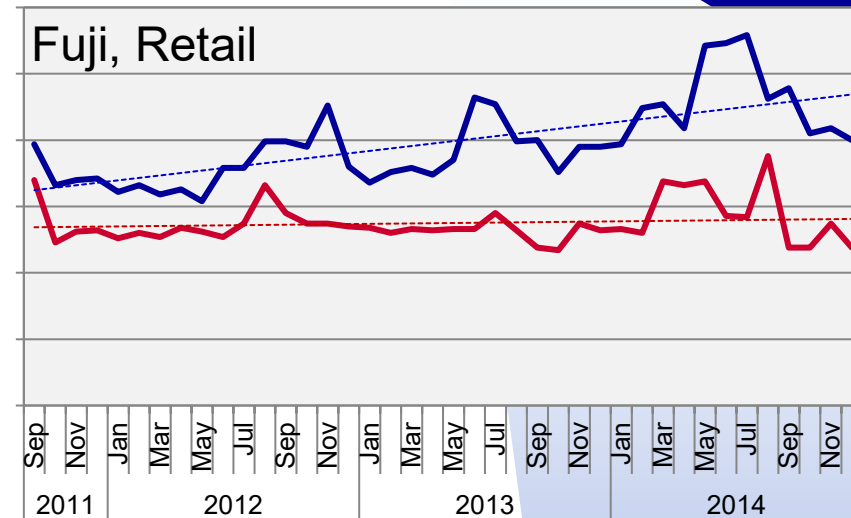
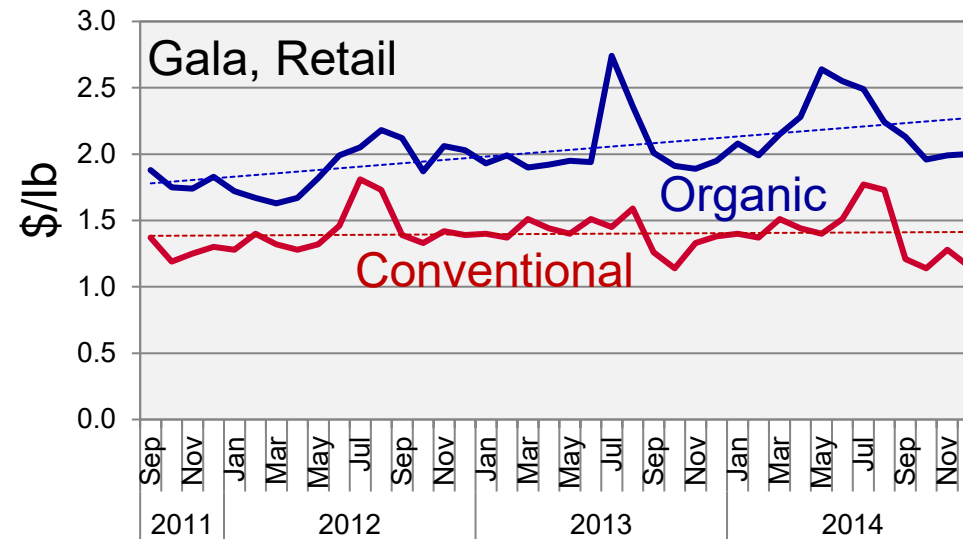
# Organic Premiums Washington Apples



Premiums are expressed as the price difference between organic and conventional, as \$ per box, or as a percent.

The USDA Agricultural Marketing Service (AMS) tracks data reported to them for various commodity prices at the point of shipment (FOB) and the retail price (based on grocery store advertisements). In slide [39](#), monthly price trends over 3.5 marketing seasons are plotted for 'Gala' and 'Fuji' apple, for both conventional and organic. A dotted trend line is also included to make the general trend more obvious. For both cultivars, at both price points, the trends are the same – conventional prices are essentially flat during this period, while organic prices are trending upwards. Given that the cost of production is generally trending upwards, the implication for conventional growers is that prices will no longer cover costs at some point, while organic growers should be able to cover increasing costs. There is no obvious difference between the trends at shipping point and at retail, suggesting that prices at both points are responding similarly to economic factors.

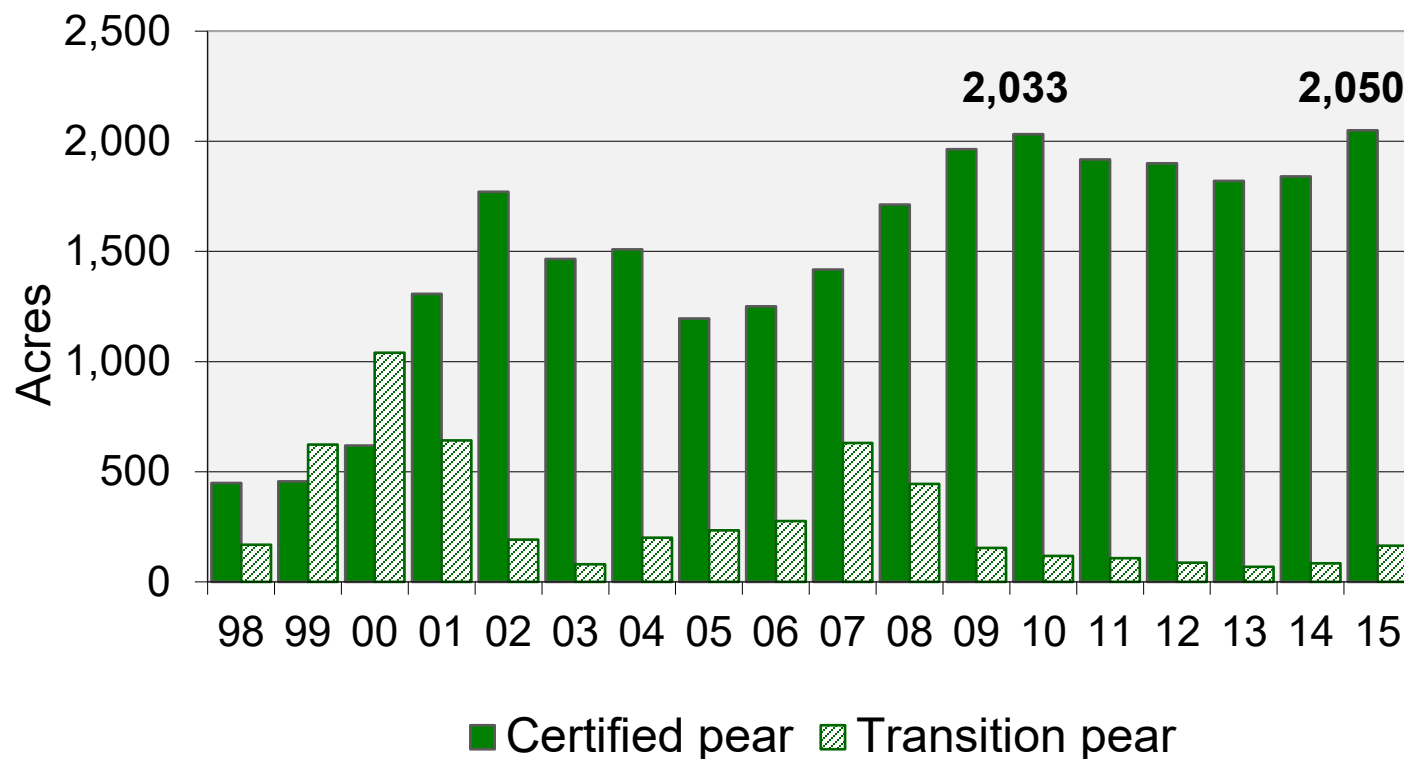
# National Apple Retail vs WA Shipping Point Price



Dotted lines are linear trends

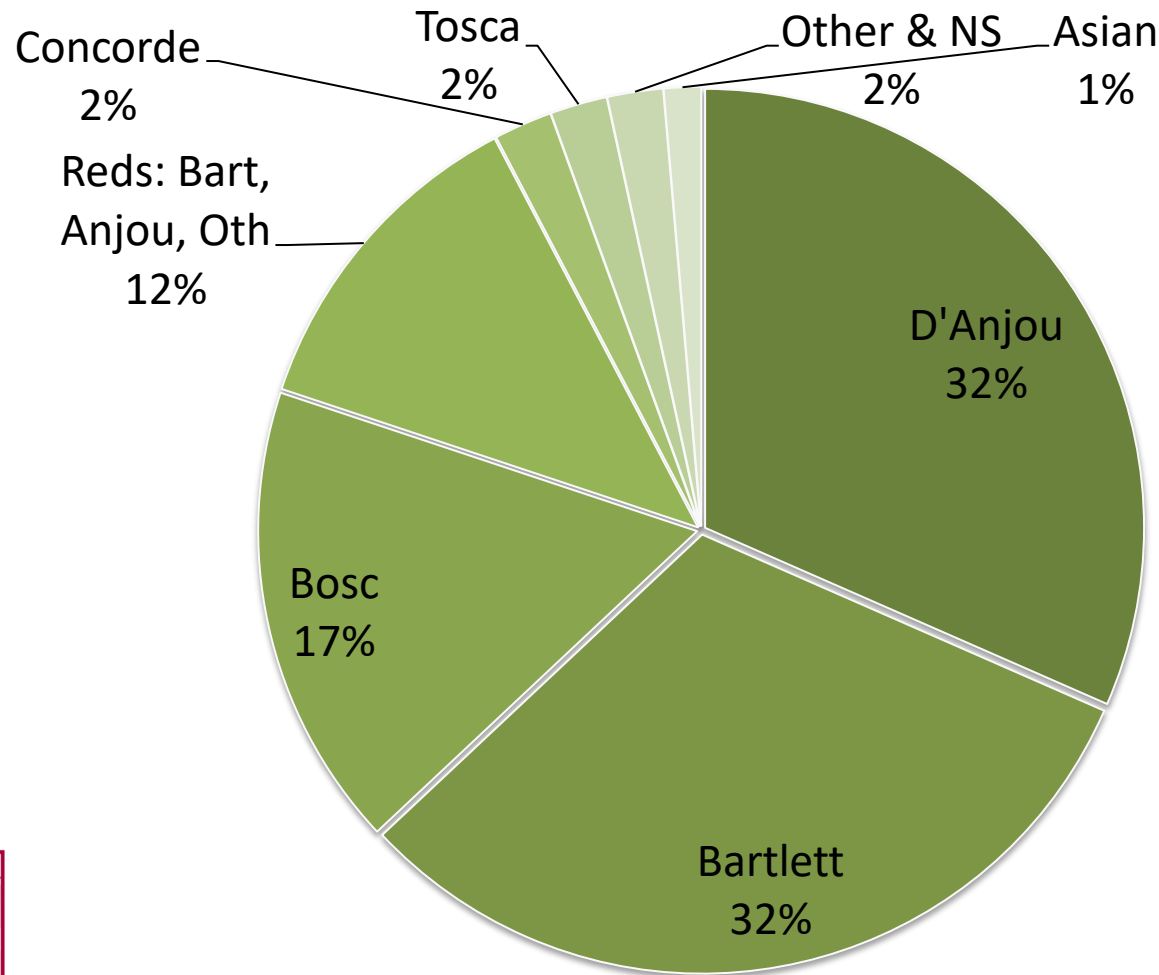
Similar data as for apple are presented for **organic pear** in Washington in the next slides ([41-48](#)). Organic pear area has tended to be more stable over time than apple or cherry. Only a few pear varieties are currently in demand by the market, and pear consumption in general in the U.S. is much lower than apple. Pear orchards tend to be kept in production for many years (over 50 years is not uncommon) and renewal to the hottest new variety or planting system is still limited. While fire blight is a serious threat to all pear producers in Washington, it is relatively less so than in most other parts of the country, leading to a large percent of all organic pears being produced here or in California. Washington is the leading producer of conventional and organic pears in the U.S. Organic pear prices and volume have risen since 2009 in a pattern similar to apple.

# Organic Pear Acreage Washington State



2015 organic = 9.6% of total WA pear acreage  
(based on WA-NASS 2014 value of 21,300 pear acres)

# Organic Pear Acres by Variety Washington 2015





# Organic Pear Variety Trend Washington State

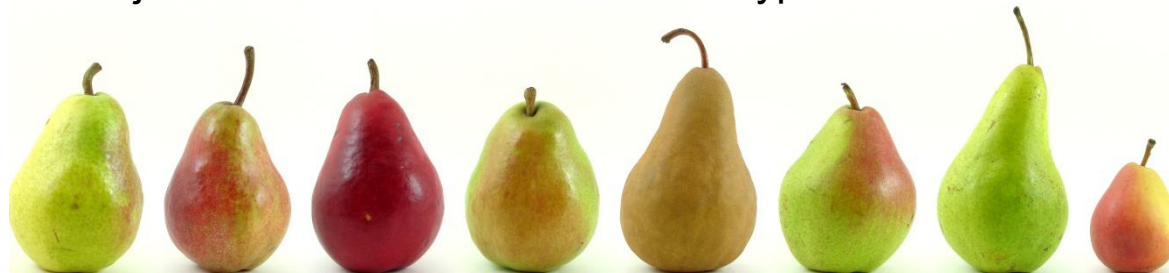
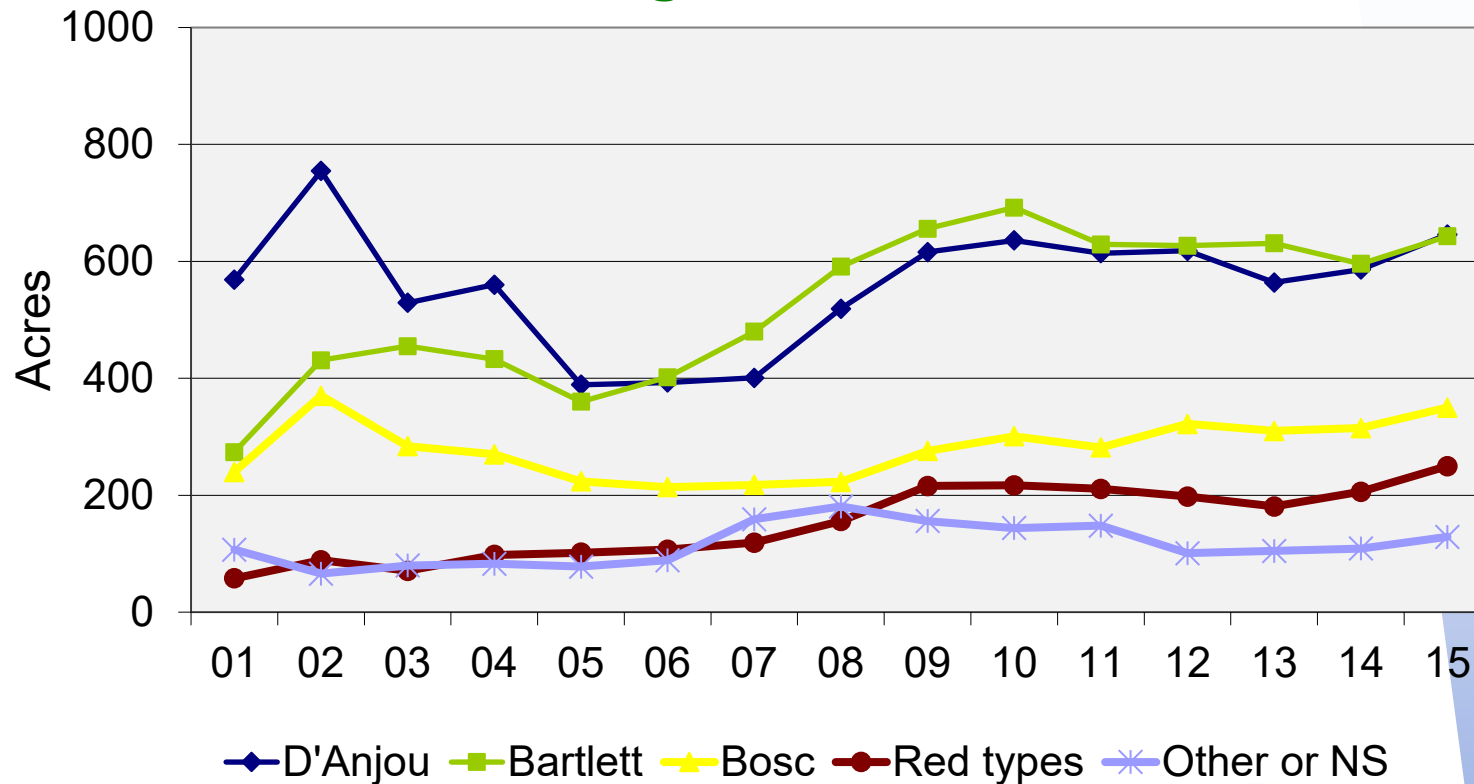


Photo: Agyle

# Organic Specialty Pears

## Washington State 2012

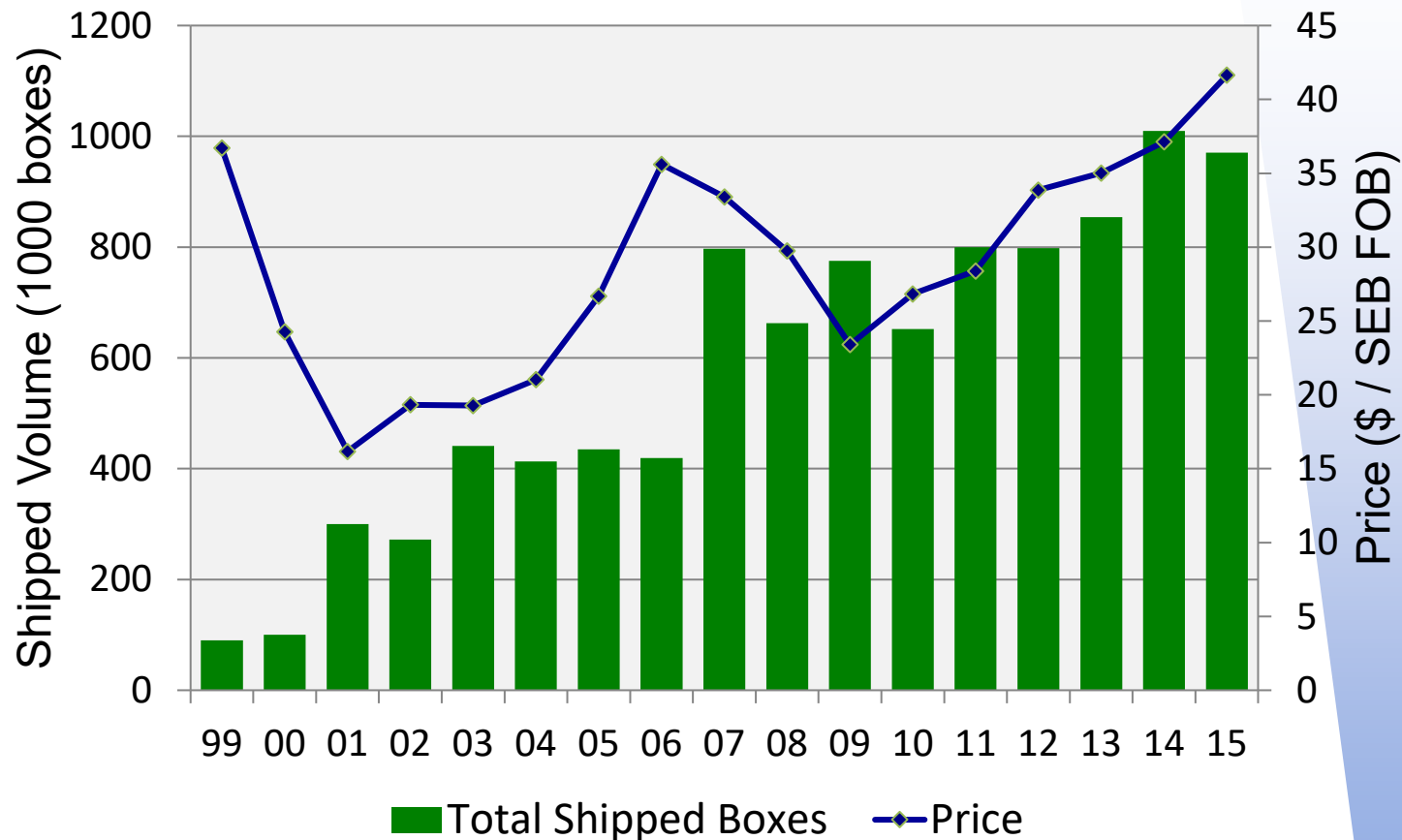
- Over 25 varieties of organic pears and Asian pears grown in WA, from small to larger quantities.
- >25 ac: Concorde, Starkrimson, Tosca, Asian
- Acreage unknown: Comice, Forelle, Perry, Red Clapp, Seckel, others
- Varieties show on WSDA producer list:

[http://agr.wa.gov/FoodAnimal/Organic/docs/wsda\\_cert\\_org\\_producers.pdf](http://agr.wa.gov/FoodAnimal/Organic/docs/wsda_cert_org_producers.pdf)



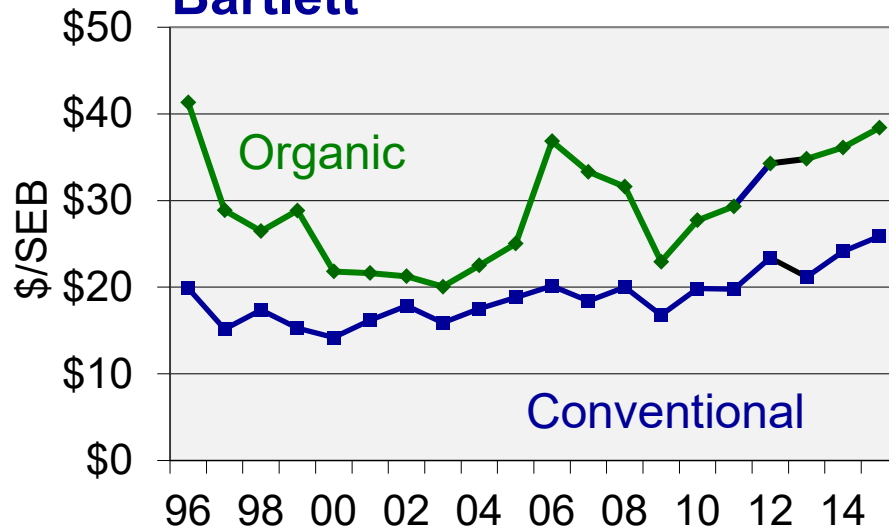


# Organic Pear Sales Volume and Price Trends

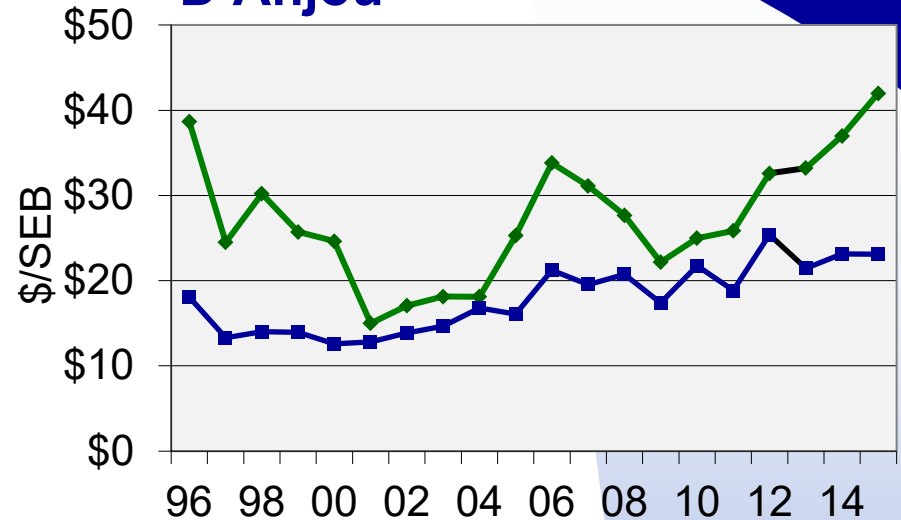


# Price Trends Washington Pears

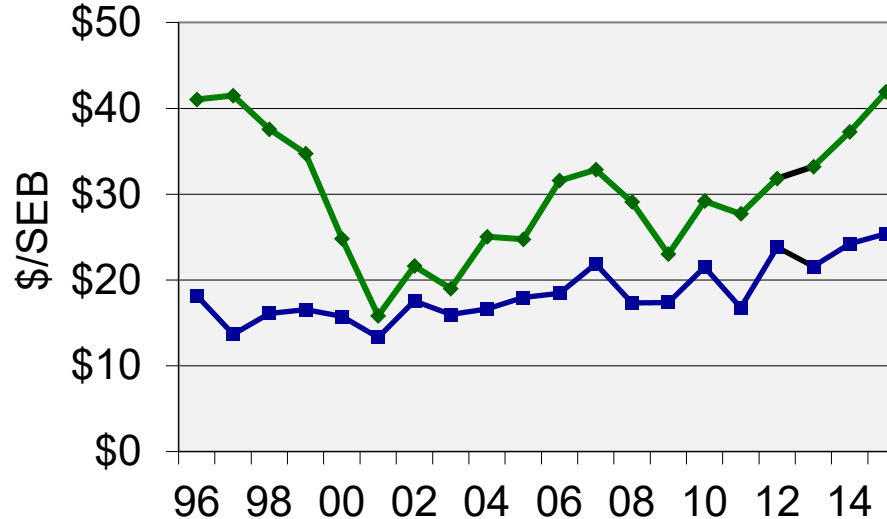
**Bartlett**



**D'Anjou**



**Bosc**



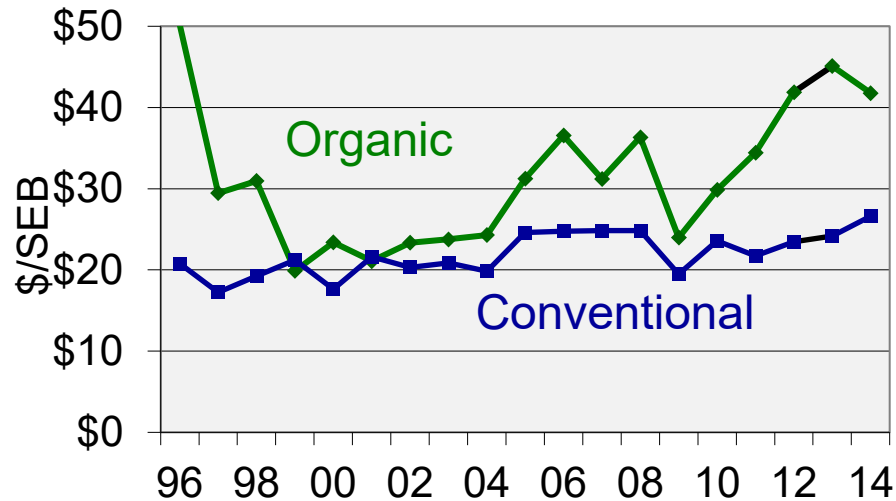
*Bosc photo: US Pear*

SEB = Standard Equivalent Box; Data: WSTFA, WGCH.  
Annual data points represent FOB season price averages.

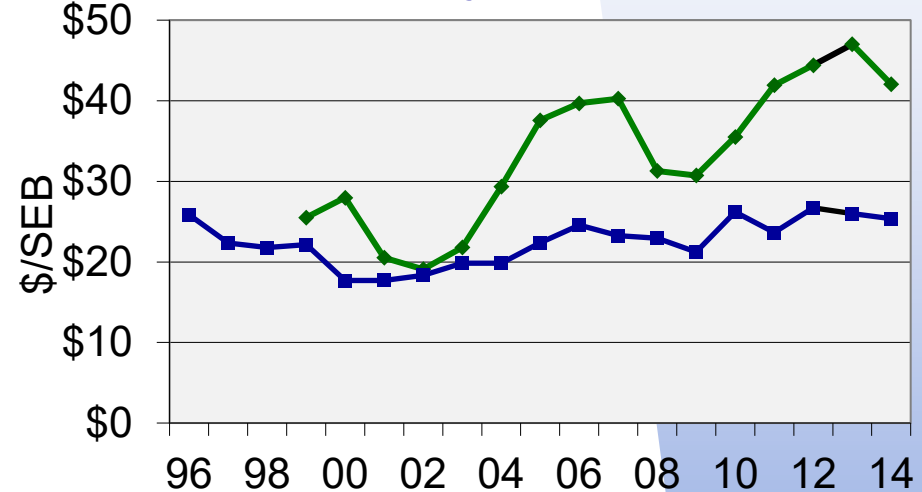


# Price Trends Washington Pears

## Red Bartlett



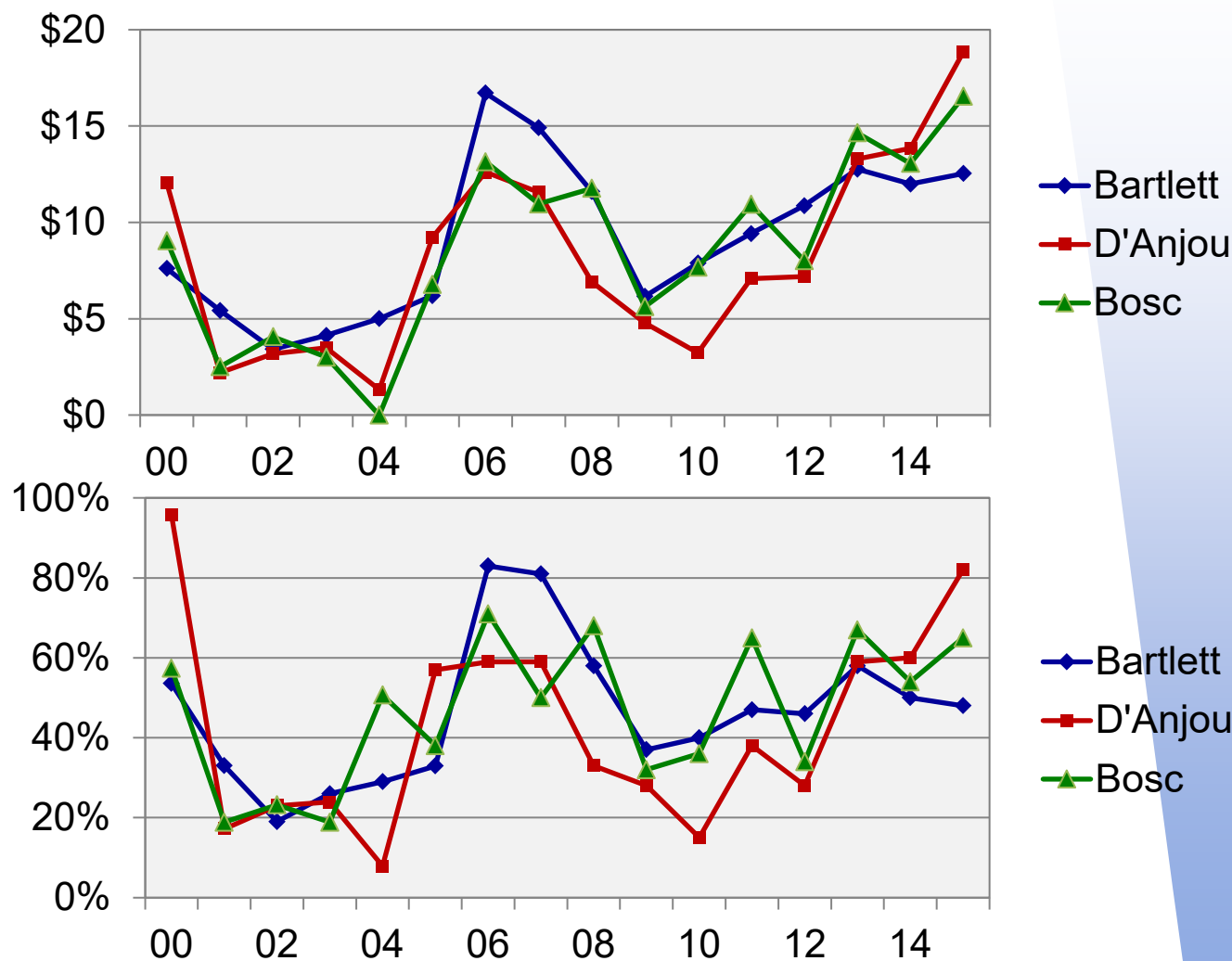
## Red D'Anjou



# Organic Premiums Washington Pears



\$/box

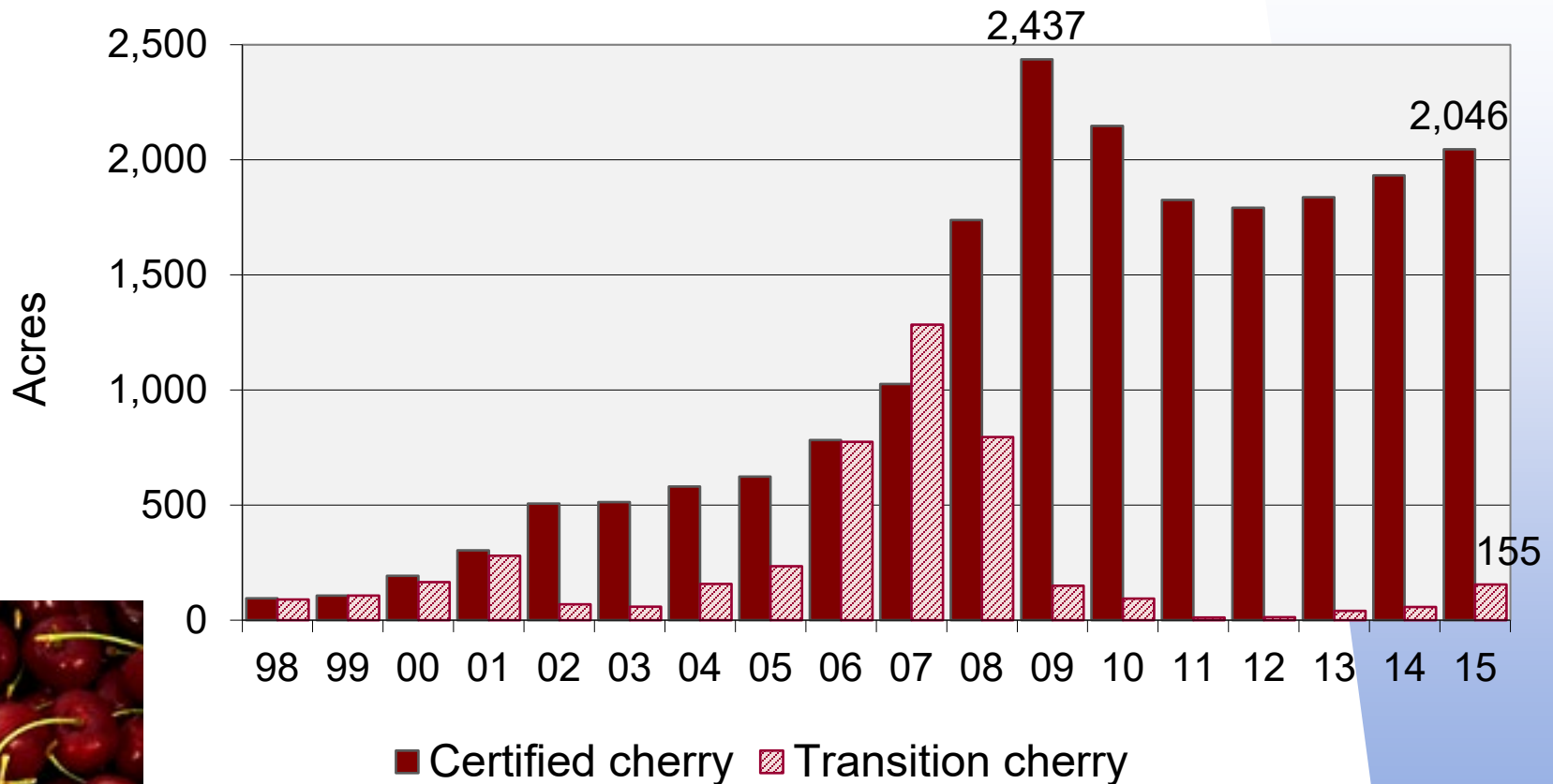


SEB = Standard Equivalent Box; Data: WSTFA, WGCH.  
Annual data points represent FOB season price averages.

Washington leads the nation in **sweet cherry** production, both for conventional and organic. A key quarantine pest, the western Cherry Fruit Fly, was a major barrier to organic cherry production for many years. The development of the GF-120 control protocol (a biologically based insecticide) by Tim Smith, WSU Extension, led to major increases in organic cherry area in the mid-2000s. In 2008, the new pest, Spotted Wing Drosophila, was found in the state for the first time and has expanded statewide. This pest was not controlled by GF-120 and thus organic pest management was seriously disrupted. Growers rely on Entrust® insecticide and reliance on this sole product poses risk of resistance.

Similar data as for apple and pear are presented for organic sweet cherry in Washington in the next slides ([50-53](#)). Slide [54](#) shows the area trend for other organic soft fruit (peaches, etc.); no other data were available. Washington is second to California in the production of most of these other organic soft fruits.

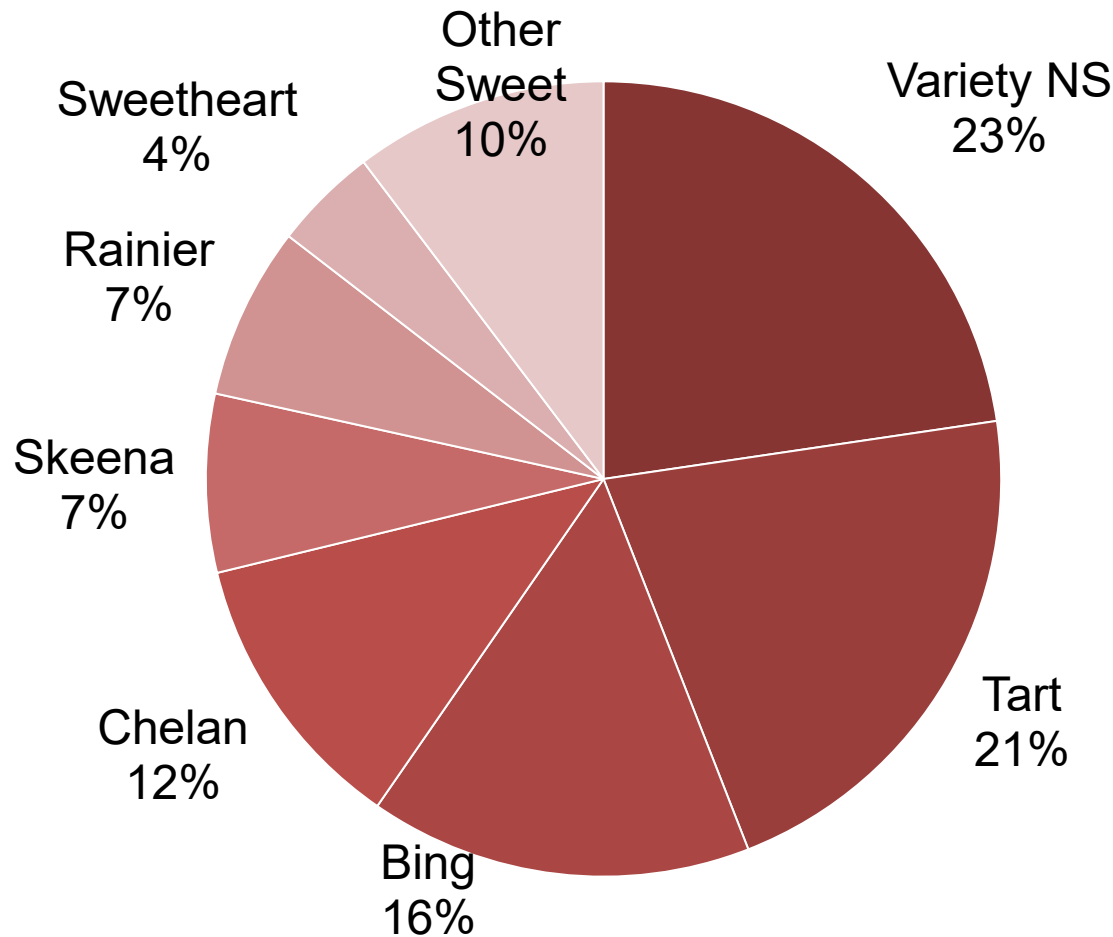
# Organic Cherry Acreage Washington State (sweet + tart)



2015 organic = **5.8%** of total WA cherry area  
(based on 2014 WA-NASS estimate of 35,000 acres)



# Organic Cherry Variety Acres Washington State 2015



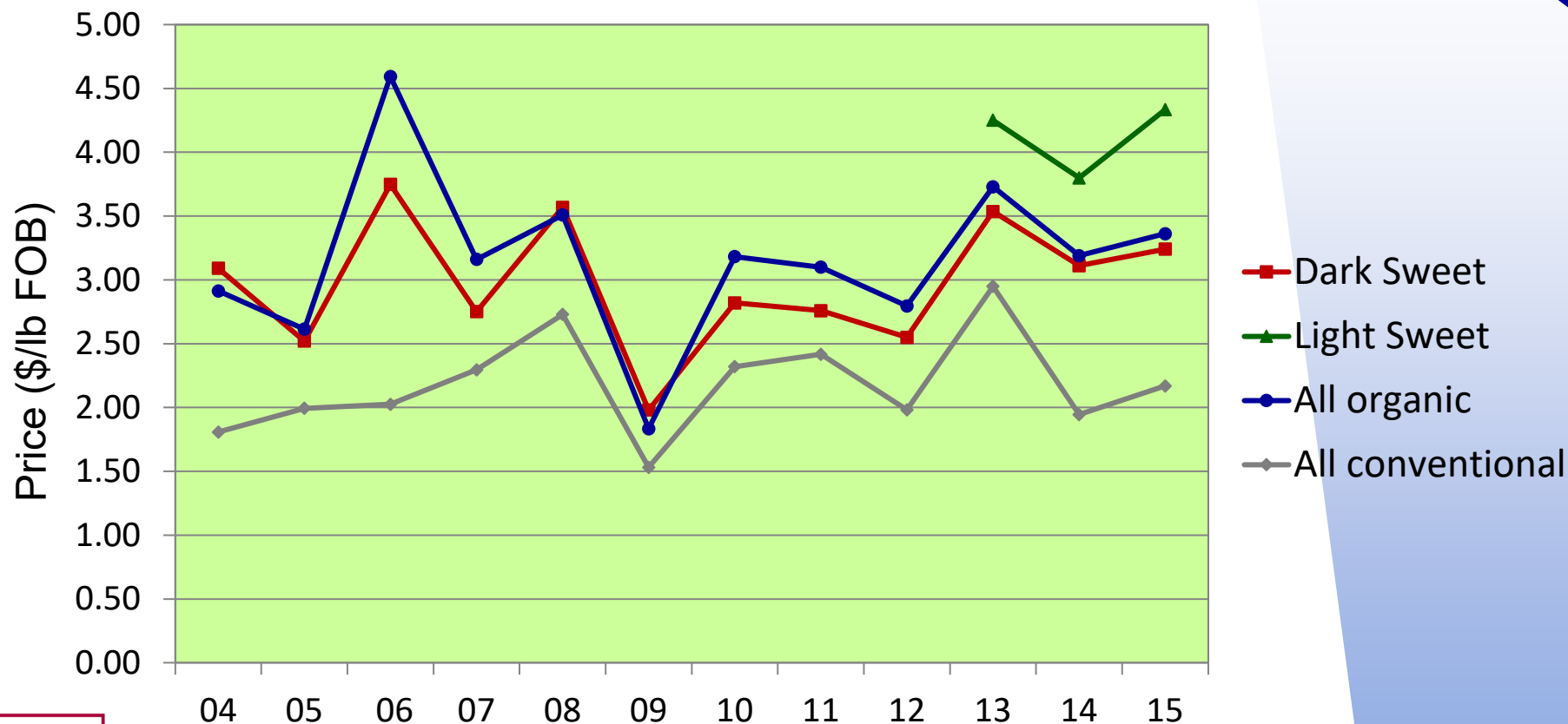
23% of cherries not reported by variety in 2015  
compared to 57% in 2008

Combined certifier data; 51  
NS = not specified



Photo: OMAFRA

# Cherry Price Trends Washington State



Data: WSTFA, WGCHA; Conventional prices are from season FOB avg. price histories and may include organic for 2008-2010. Organic prices are from season FOB histories, all grades and sizes. Dark Sweet are 'Bing' prior to 2014.

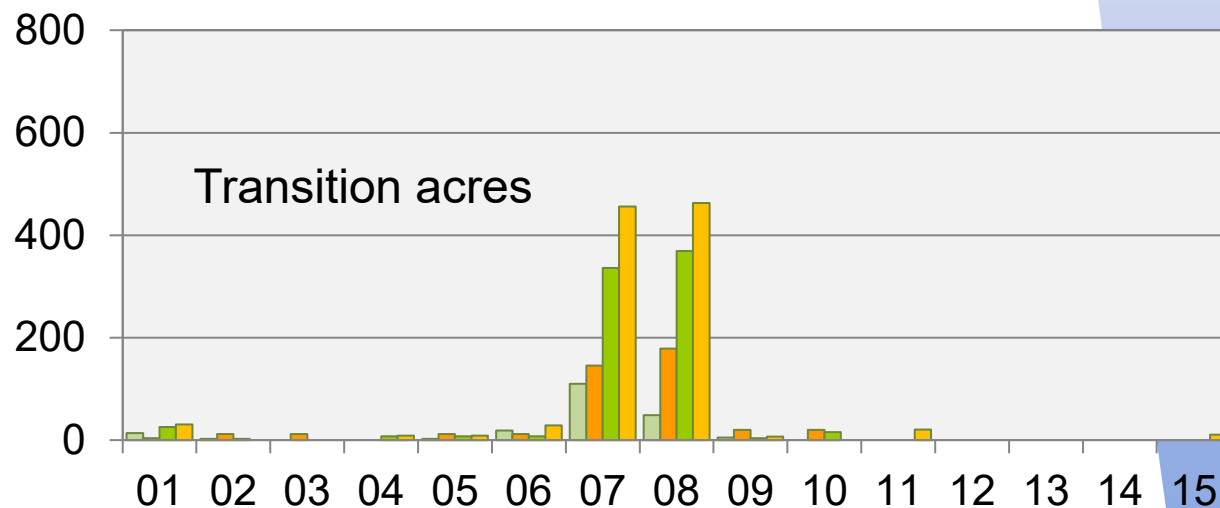
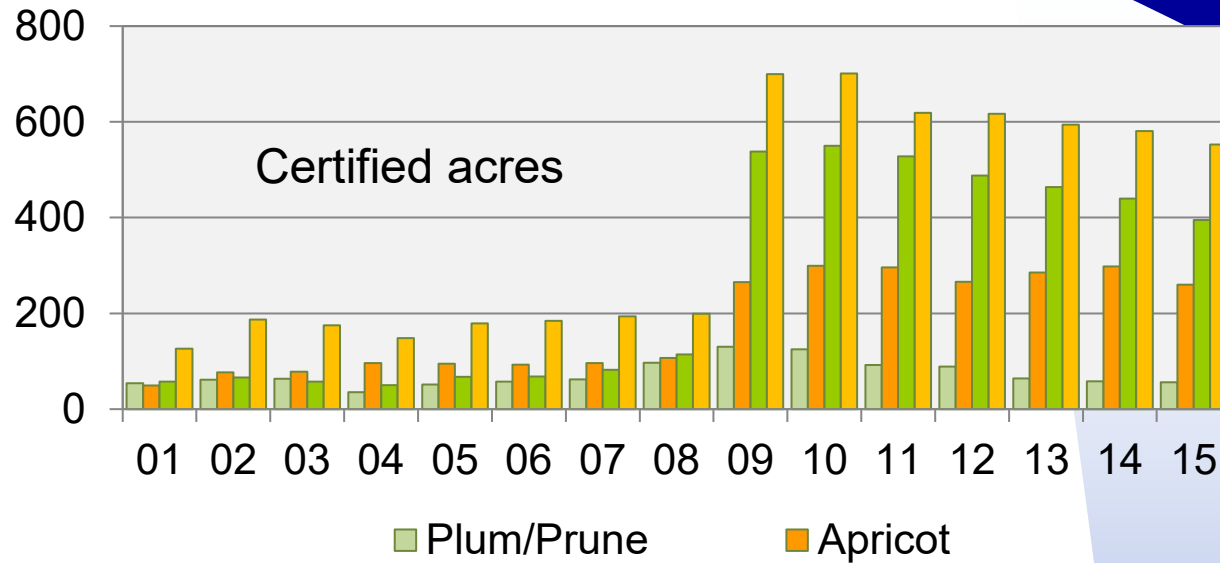


# WA Organic Cherries

	2013		2014		2015	
	ORG	CONV	ORG	CONV	ORG	CONV
<u>Dark Sweet</u>						
Volume (1000 box*)	232	11,992	352	19,428	361	16,646
% of crop	90	93	98	94	89	94
<u>Light Sweet</u>						
Volume (1000 box*)	34	1,237	61	1,786	60	1,517
% of organic	10	7	11	6	11	6
Organic Share of all, %	2.0		1.9		2.3	
Ave. Yield (lb/ac packed)	2,809		4,122		3,970	

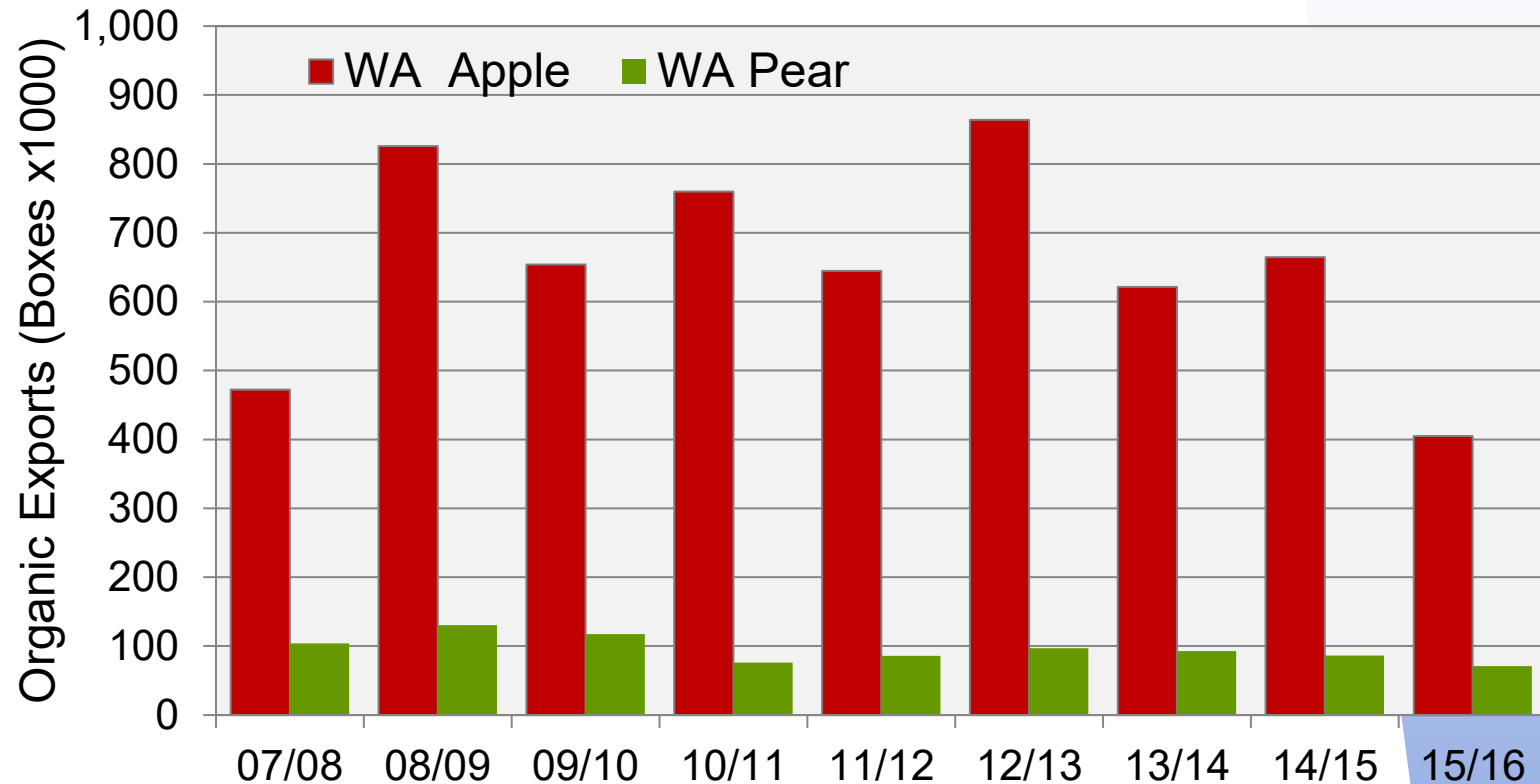
\*Standard Equivalent Box: Dark Sweet = 20 lb; Light Sweet = 15 lb.

# Washington State Other Stone Fruit Trends

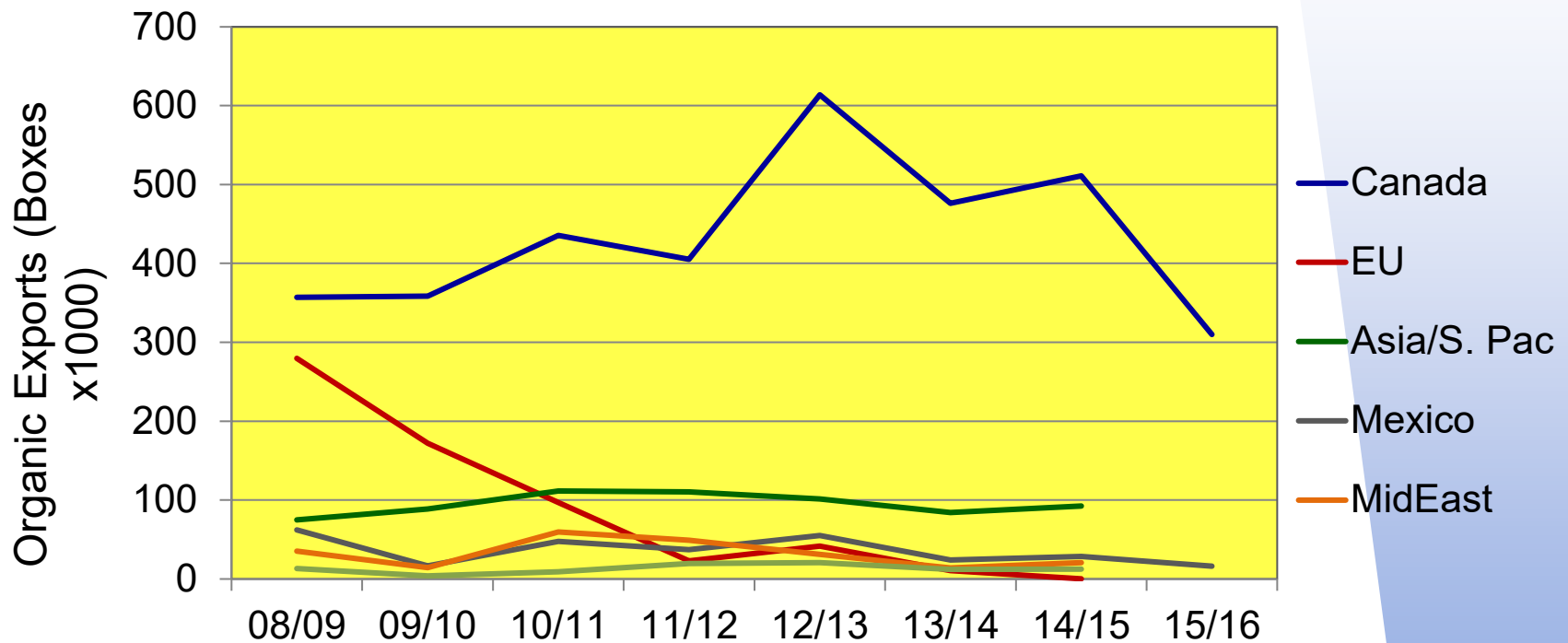


**Exports** of organic tree fruit from Washington have occurred for years, and have been relatively stable (slide [56](#)). But markets have changed (slide [57](#)). Considerable volumes were shipped to Europe, especially the UK, in previous years, but that has virtually ceased. Canada is by far the largest export destination for organic tree fruit from Washington, accounting for 76% and 84% of all organic apples and pears exported for the 2015 crop, respectively. Exports represented ~6% of both the 2015 organic apple and pear crops. 'Gala' apple and 'd'Anjou' pear are the leading organic tree fruit exports by volume (slides [58](#), [59](#)).

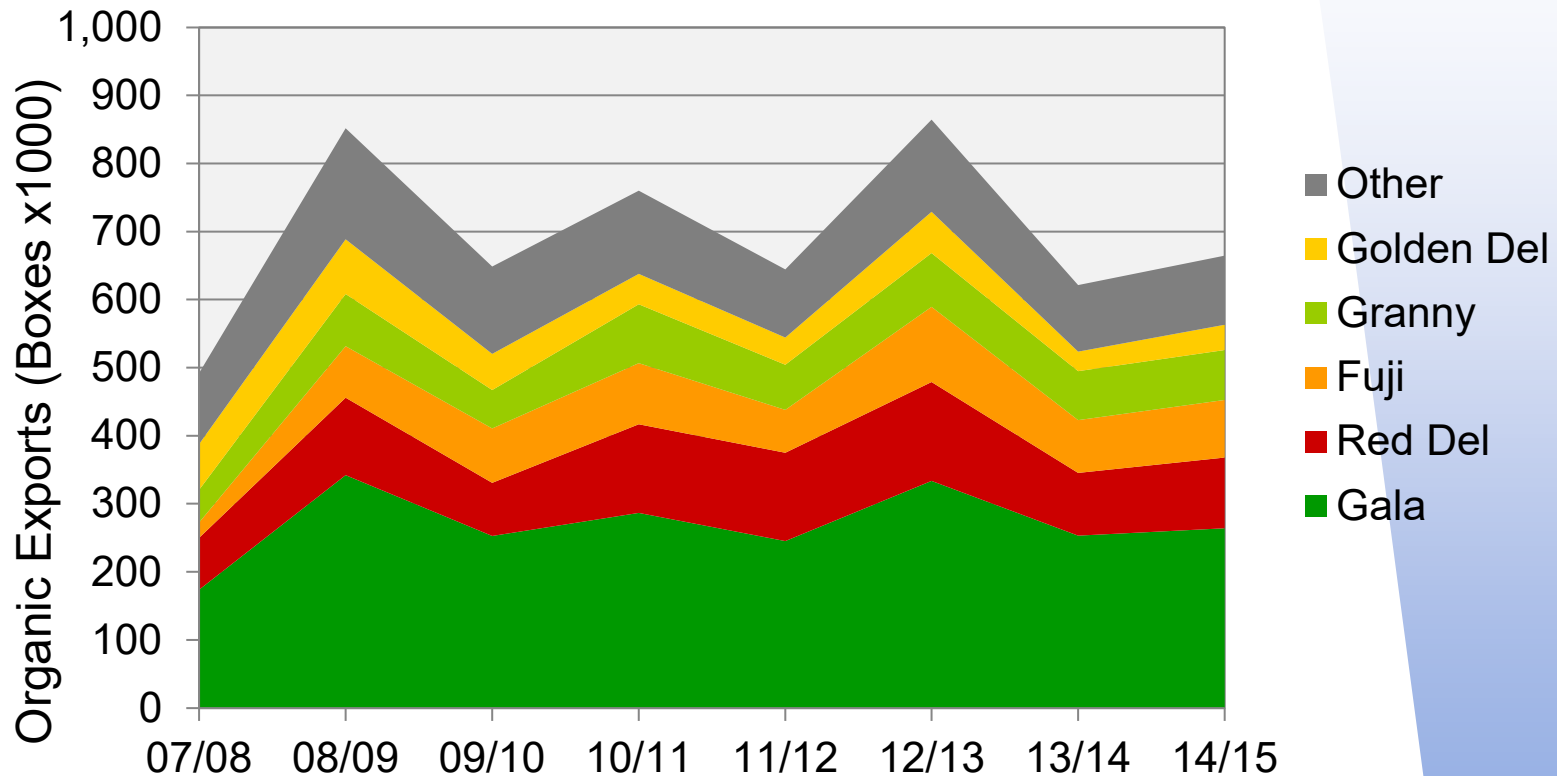
# Organic Apple and Pear Exports Washington State



# Washington Organic Apple Top Export Destinations



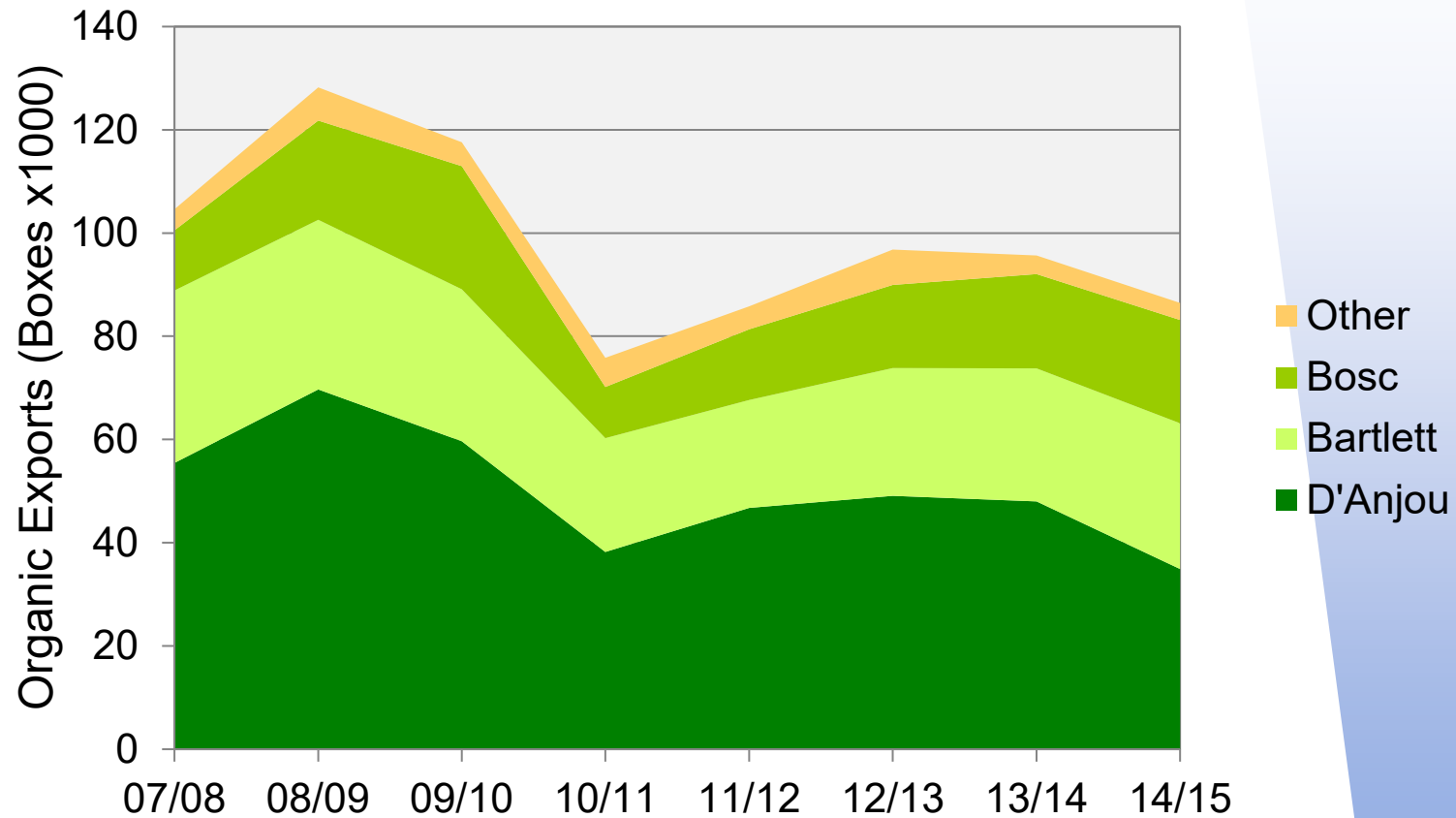
# WA Organic Apple Exports by Variety



35-40% of exports = Gala

Data source: WSTFA, WVTA

# WA Organic Pear Exports by Variety



Additional data on the **U.S. organic temperate fruit** situation are presented in slides 61-63. These are estimates derived from the USDA-NASS organic survey as well as data directly from certifiers. Slide [61](#) shows that the U.S. has about 5% of the global organic grape area, 10% for apples and other tree fruits, and 11% for all berries.

The high concentration of organic fruit production (based on volume of product, not area) in WA and CA is clear from slide [62](#), with over 90% accounted for in these two states for many fruits.

The change in U.S. certified organic apple area is shown graphically in slide [63](#). National area is almost identical to the area in the western states, and the pattern follows that of Washington State.



## US Organic Temperate Fruit

- Total certified area >32,000 ha (2014)
- >90% in semi-arid western U.S.
- CA, WA are leading states
- 8% apple, 40% blueberry of global organic area in U.S.
- Cannot accurately track national growth with current data; 2014 NASS data – incomplete, some errors.



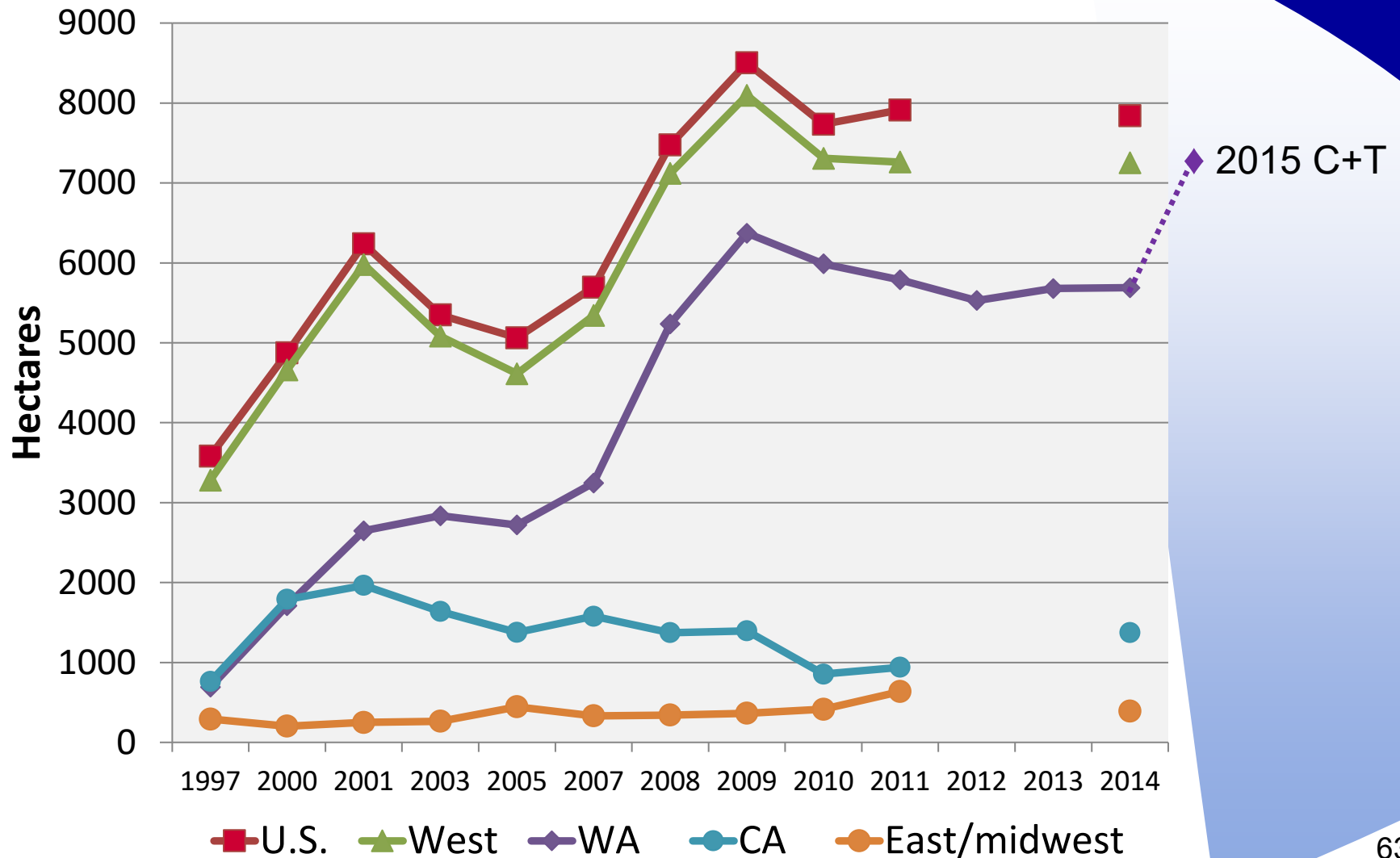
### Estimated U.S. Area of Temperate Fruits

	<u>ha</u>	% global
Grapes	15,000	5
Apples	7,850	} 10
Other tree fruit	4,000	
Berries	5,000	11

# Concentration of U.S. Organic Fruit

2014	U.S. Cert Ha	% of U.S. Production	
		<u>WA</u>	<u>CA</u>
Apple	7,842	76 (93 F)	7
Pear	1,246	79	19
Cherry	1,121	94	4
Peach/Nect	1,751	17	75
Wine grape	5,678	8	85
Blueberry	1,983	53 F	37 F
Raspberry	237	4	89
Strawberry	1,199	<1	96
F=fresh		(USDA-NASS, 2015)	

# U.S. Organic Apple Area



USDA-ERS, USDA-NASS, combined certifiers



More information on Washington organic tree fruit statistics  
is available on-line at:

[http://csanr.wsu.edu/pages/Organic\\_Statistics](http://csanr.wsu.edu/pages/Organic_Statistics)  
[http://www.nass.usda.gov/Statistics\\_by\\_State/Washington/Publications/  
Fruit/FruitTreeInventory2011.pdf](http://www.nass.usda.gov/Statistics_by_State/Washington/Publications/Fruit/FruitTreeInventory2011.pdf)

**Citation:** Kirby, E. and D. Granatstein. 2016. Recent trends in certified organic tree fruit: Washington State 2015. Organic Trend Series, Center for Sustaining Agriculture and Natural Resources, Washington State University, Wenatchee, WA.  
[http://csanr.wsu.edu/pages/Organic\\_Statistics](http://csanr.wsu.edu/pages/Organic_Statistics)