

All About New York State's Apples

Apples in New York, Fast Facts:

- New York is the second largest apple producing state in the United States
- New York averages 29.5 million bushels of production annually
- In New York State the apple industry provides employment for thousands of workers. Broken down there are:

694 family farms

10,000 direct agricultural jobs

7,500 indirect jobs involved with handling, distribution, marketing and shipping of apple exports.

Conclusion: apples are important to New York!

Where and What Kind of Apples are Produced in New York?

The majority of apples grown in New York are grown on 51,097 bearing acres in six major production districts. Those districts include Champlain Valley, Eastern Hudson Valley, Western Hudson Valley, Central, Lake Country and the Niagara Frontier. More specifically the major apple producing counties are; Wayne, Ulster, Orleans, Niagara, Clinton, Columbia, Monroe, Orange, Onondaga and Dutchess. These regions cover the 694 commercial apple growers in New York State.

The top ten varieties of apples according to production volume are:

1. McIntosh
2. Empire
3. Red Delicious
4. Cortland
5. Golden Delicious
6. Rome
7. Idared
8. Crispin
9. Paula Red
10. Gala, Jonagold, Jonamac

Number of Apple Farms, Trees, and Acres New York State by County — 2001 and 2006 (thousand dollars)

County	2001			2006		
	Farms	Trees	Acres	Farms	Trees	Acres
New York State	695	7,544,740	44,563	697	9,464,203	42,360
Clinton	13	458,654	3,436	10	771,770	3,151
Columbia	34	268,812	1,349	30	441,314	2,018
Monroe	27	191,446	1,103	27	171,772	934
Niagara	46	743,269	4,250	50	570,603	2,985
Onondaga	14	163,671	582	12	174,751	592
Ontario	10	159,367	354	14	224,205	479
Orange	16	78,411	695	13	224,273	1,030
Orleans	61	1,100,076	4,805	50	1,100,441	4,415
Oswego	14	112,182	511	9	129,317	430
Saratoga	12	94,437	506	15	75,893	427
Ulster	56	968,581	5,669	51	864,362	4,915
Wayne	159	2,693,389	17,156	141	4,297,498	17,857
Other	233	512,445	4,147	275	418,004	3,127

There are other, less popular varieties grown in New York State, some of those include; Acey Mac, Ginger Gold, Jerseymac, Macoun, Gala, Fuji, Brabrum and Fortune.

New York's Top Producing Apple Counties



Total Production of Apples by Variety New York State — 1999-2008

Variety	1999	2000	2001	2002	2003(r)	2004	2005(r)	2006(r)	2007	2008
	--- (million pounds) ---									
All Varieties	1,260	995	1,000	680	1,070	1,280	1,045	1,260	1,310	1,250
Cortland	80	65	70	45	75	85	80	105	120	105
Crispin (Mutsu)	65	50	55	35	55	55	60	65	55	45
Delicious	115	80	90	60	95	120	90	135	140	120
Empire	150	135	150	100	155	180	155	190	200	170
Golden Delicious	60	55	70	50	75	100	125	105	115	125
Idared	115	85	65	45	70	65	80	95	60	50
McIntosh	240	210	180	120	185	215	195	215	245	265
Rome	135	90	70	50	80	95	100	90	105	100
Other	300	225	250	175	280	365	160	260	270	270

Weather and its Role in Apple Production



Apples and the Cold

Apple trees do best in a climate that splits half the year between warm and cold months. Many apple varieties require 600-1000 hours below 45 degrees Fahrenheit in the winter months in order to produce good fruit yields. These hours are referred to as chill hours. Typically hardiness zones of at least five meet those chill hour requirements. Hardiness zones 9-10 are considered "low chill" zones only receiving 100-600 chilling hours.

Apples and the Heat

On the other end of the year, when summer months are here, most varieties are located in regions where there are approximately 150 frost free days. These regions are typically a hardiness zone of 5. During their growing periods (the summer months) days above 90 degrees Fahrenheit cause heat damage to apple trees. High heat stops the photosynthesis process and causes what is known as heat stress stunting the growth of a tree. When the spring arrives, early heat waves followed by an unseasonably late spring frost is damaging to an apple crop. The early heat

causes premature budding and the late frost will kill or severely damage the apple buds. This will reduce or ruin the apple crop for the season.

Apples and Water

Apple trees are not drought tolerant plants. They require regular watering every 7-10 days of 114 cm of water from April through August. This is considered the critical period. While apple trees are not drought tolerant, excess water causes damage as well. Saturated roots will lead to increased pest damage, damage to the foliage as well as root rot.

Apple Variety Information:



Empire Apple

Hardiness zone range: 4-7

Bloom date: Mid April

Ripening date: September

Approximate growing season length: 138 days.

Empire apples are very crisp, juicy apple with a creamy white flesh. They are a blend of sweet and tart.



Red Delicious Apple

Hardiness zone range: 4-7

Bloom date: Mid April

Ripening date: Mid September

Approximate growing season length: 153 days.

Red Delicious apples are sweet and juicy fruit with a crisp yellow flesh.



McIntosh Apple

Hardiness Zone Range: 4-7

Bloom Date: Mid April

Ripening Date: Mid September

Approximate Growing Season Length: 153 days

McIntosh apples are excellent for eating, they are sweet with a tart tang. Their flesh is tender and white.



Crispin (Mutsu) Apple

Hardiness zone range: 5-9

Bloom date: Mid April

Ripening date: Early October

Approximate growing season length: 138 days

Crispin apples are very sweet apples. They are super crisp, very juicy as well as very refreshing.



Fuji Apple

Hardiness zone range: 6-9

Fuji apples have a high heat tolerance

Bloom date: Mid May

Ripening date: October

Approximate growing season length: 137 days

The fuji apple has a crisp, cream colored flesh. It is very sweet and very juicy.



Gala Apple

Hardiness Zone Range: 4-10

Gala apples are a heat resistant variety

Bloom Date: Mid to Late April

Ripening Date: Late August

Approximate Growing Season Length: 138 days

Gala apples have a mild sweet flavor. Their flesh is crisp and yellow colored. As well the Gala is a very juicy apple.



Idared Apple

Hardiness zone range: 5-8

Bloom date: Mid April

Ripening date: Late October to Early November

Approximate growing season length: 213 days

The idared apple is a sweetly tart and juicy apple. It has a firm, pale, yellow greenish flesh that is sometimes tinted pink.



Granny Smith Apple

Hardiness zone range: 6-9

Granny Smith apples are a heat resistant variety

Bloom date: Late May

Ripening date: Middle –Late October

Approximate growing season length: 142 days

Granny smith apples are extremely tart. They are crisp and juicy.



Rome Apple

Hardiness zone range: 4-8

Bloom date: Mid May

Ripening date: Mid October

Approximate growing season length: 153 days

This mildly tart apple has a firm greenish, white flesh. It is perfect for making sauce and pies.



Golden Delicious Apple

Hardiness zone range: 5-10

Bloom date: Mid April

Ripening date: Mid September

Approximate growing season length: 153 days

Golden Delicious apples have a mild sweet flavor. Their flesh is yellow, crisp and provide the apple with its juicy quality.



Cortland Apple

Hardiness zone range: 4-7

Bloom date: Mid April

Ripening date: Mid September

Approximate growing season length: 153 days

With their tender snow white flesh the Cortland apple is a juicy variety. It is a sweet apple with a hint of tartness.

Sources for this fact sheet:

"Apple Varieties." Apple Country New York State. New York Apple Association, 2010. Web. 14 Jul 2011. <<http://www.nyapplecountry.com/varieties.htm>>.

"Apple Varieties." Orange Pippin. Orange Pippin Ltd, 2011. Web. 14 Jul 2011. <<http://www.orangepippin.com/apples>>.

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New York State Department of Agriculture and Markets, Agricultural

Nutrition Facts

Serving Size 1 medium apple
(154g / 5.5 oz.)

Amount per Serving

Calories 80 **Calories from Fat 0**

% Daily Value*

Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Potassium 170mg	5%
Total Carbohydrate 22g	7%
Dietary Fiber 5g	20%
Sugars 16g	

Protein 0g

Vitamin A 2%	•	Vitamin C 8%
Calcium 0%	•	Iron 2%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

		Calories: 2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary fiber		25g	30g

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4