

Picking and Storing Apples and Pears

R.L. Stebbins, J.L. Olsen, and W.L. Bluhm

A given variety of apple or pear reaches harvest maturity at about the same time each year. In districts with cool growing seasons, fruit usually matures later than in the warmer districts. Within a district, the time of maturity varies slightly from season to season. In order of importance, then, variety, district, and season are the most important factors affecting the time of maturity. Districts in Oregon are:

Early—Jackson County, Milton-Freewater, and Wasco

Midseason—Lower Hood River, Malheur, Douglas County, and Josephine County

Mid- to late—Willamette Valley

Late—high mountains and plateaus and the coast

Early districts often begin harvest about 10 days earlier than midseason districts, and late-season districts about 10 days later.

Apples

The usual period of maturity for apples in the midseason districts is shown in Table 1. Other indicators for determining when to pick apples are color, ease of separation, fruit drop, and softness and flavor.

Color of apples. Color, both outside and under the skin, is a useful indication of maturity. Apples may be yellow, red, green, or combinations of these colors at harvest. When the green has almost completely given way to yellow, a yellow variety is mature. With red blush or striped apples, the area where there is no red color usually changes from green to yellowish at maturity. This does not help with the new red strains, which are red all over long before maturity. The change of flesh color (between skin and core) from greenish to white signifies maturity. The greenish color of spur-type Red Delicious may disappear only after several months of storage.

Ease of separation. Unless a stop-drop spray has been applied, mature apples are rather easily separated from the tree. Do not pull the apple down, but twist it upward with a rotating motion.

Dropping of sound fruit. When a few sound apples drop to the ground, the apples on the tree are nearly mature.

Softness and flavor. These qualities are very useful guides to maturity. When an apple becomes slightly softer and tastes sweet and juicy, it is mature. Some varieties, such as Delicious, become sweeter in storage.

Pears

Unlike apples, most pear varieties do not ripen with good quality while still on the tree. Pears that are allowed to become too mature or to ripen on the tree develop a coarse, mealy texture and often have core breakdown.

Mature pears usually will detach when "tilted" to a horizontal position from their usual vertical hanging

Table 1.—Maturity dates for apples in the midseason districts.

Variety	Dates	Skin color when mature
Yellow Transparent	July 10–25	Creamy yellow
Lodi	July 15–30	Creamy yellow
Chehalis	Aug. 20–30	Yellow
Gravenstein	Aug. 20–25	Yellow with red
Tydemán's Red	Aug. 25–30	Red
Prime Red	Aug. 20–30	Red
Gala	Sept. 1–15	Yellow with red stripes
Red Wealthy	Sept. 10–20	Yellow with red
Jonagold	Sept. 15–Oct. 7	Yellow with red stripes
Elstar	Sept. 17–24	Yellow with red stripes
Arlet	Sept. 17–30	Red
McIntosh	Sept. 20–30	Yellow with red blush
King	Sept. 15–25	Yellow with red blush
Jonathan	Sept. 20–25	Yellow with red blush
Liberty	Sept. 20–Oct. 8	Mostly red
Grimes Golden	Sept. 25–Oct. 5	Yellow
Empire	Sept. 27–Oct 7	Red stripes
Golden Delicious	Oct. 1–15	Yellow
Spartan	Oct. 1–10	Red
Delicious—red strains	Oct. 1–15	Red
Spitzenburg	Oct. 5–20	Yellow with red stripes
Winter Banana	Oct. 5–20	Yellow
Braeburn	Oct. 10–25	Red stripes
Melrose	Oct. 15–30	Red stripes
Fuji	Oct. 15–Nov. 1	Red
Winesap	Oct. 20–25	Red
Rome Beauty—red strains	Oct. 25–Nov. 10	Red
Northern Spy	Nov. 5–15	Yellow with red stripes
Yellow Newtown	Nov. 10–20	Green
Granny Smith	Nov. 10–20	Green

Robert L. Stebbins, Extension horticulture specialist emeritus, Jeff Olsen, Extension agent, Yamhill County; and Wilbur H. Bluhm, Extension agent emeritus, Marion County, Oregon State University.



position. Bosc pears always are difficult to separate from the spur.

Maturity in pears is that stage of development when, if picked, the fruit will ripen satisfactorily following an appropriate period of cold storage, if the variety requires it. Pears picked when slightly immature will ripen with better quality than pears that are overmature when picked. As with apples, knowing the usual period of maturity is first in importance.

Table 2.—Maturity dates for pears.

Variety	Dates	Cold storage before ripen
Clapps Favorite	Early Aug.	None
Bartlett	Aug. 10–20	None
Seckel	Late Aug., Sept.	None
Bosc	Early to mid-Sept.	None
D’Anjou	Early to mid-Sept.	2 mo
Comice	Late Sept.	1 mo
Packham’s Triumph	Late Sept., Oct.	1 mo
Forelle	Late Sept.	1 mo
Winter Nellis	Early Oct.	1 mo

Color and size of fruit are other indicators for determining when to pick pears.

Color. With Bartlett, D’Anjou, Comice, and other yellow pear varieties, a slight change in skin color to a lighter shade of green occurs at maturity. The flesh becomes whiter, and juice will appear on a cut surface.

Size of fruit. Size is one indication of maturity. Pears except Seckel should be at least 2 inches in diameter at the widest portion of the fruit. Pick the largest fruit first, and leave the smaller ones for another week.

Picking, storing, and ripening

Do not shake the fruit from the tree. Segregate bruised and damaged fruit and use it rapidly because it is unfit for storage. Store only sound fruit.

Store apples and pears in clean wooden or cardboard boxes that are ventilated to allow air circulation. Do not line the boxes with paper or individually wrap the fruit. An old but still serviceable refrigerator makes a good fruit storage place. Ideally, storage temperature should be 30 to 32°F, but

such conditions are difficult to achieve at home. An unheated garage, shed, or basement may be satisfactory if temperatures below 30°F and above 45°F can be avoided. An insulated box, storage cabinet, or dug-out underground room that can be ventilated at night for cooling makes a good storage place.

Maintain high humidity in storage by placing the fruit in unsealed or perforated plastic bags. Placing an open pan of water in the storage place will increase the humidity. Shriveling of Golden Delicious apples can be avoided by storing them in loosely tied plastic bags.

Store fruit immediately after it’s picked. Do not store fruit with onions, potatoes, or other strong-smelling items because the fruit will absorb flavor volatiles from them. Inspect regularly for mold, flesh breakdown, freezing, or excessive ripening.

Storing ripe fruit with pears will cause the pears to ripen. Partly frozen pears often can be salvaged if thawed slowly, but freezing usually ruins apples.

The storage life of apples and pears varies according to the variety and storage temperature. Pears held beyond their normal storage life will not ripen after removal from storage. Apples held too long will be soft and mealy and may have internal breakdown.

Some varieties of pear (D’Anjou, Comice) will not ripen unless they have been held 8 to 10 weeks in cold storage. If these varieties are exposed to ethylene gas either as stove gas or as that given off by other ripe fruit, they will ripen without cold storage.

Before pears are ready for consumption, they should be ripened. Remove the fruit from cold storage and place it in a room at a temperature of 60 to 70°F, with humidity fairly high, for 3 to 10 days. D’Anjou pears are greenish-yellow when ripe. Other yellow varieties lose almost all of the green skin color during the ripening process.

For canning, pears should be soft enough that they can be dented with the thumb and still be slightly resilient. In this “firm-ripe” condition, they will peel

Table 3.—Approximate storage life of apples and pears.

Variety	Days storage life at:	
	30–32°F	40–42°F
Pears		
Bartlett	30–45	15–20
Bosc	50–70	30–40
D’Anjou	120–140	70–80
Comice	79–90	45–55
Winter Nellis	160–180	90–100
Apples		
Gravenstein	60–80	40–50
Tydemans’ Red	60–80	40–50
McIntosh	*	60–80
King	120–180	90–105
Golden Delicious	130–150	75–85
Delicious (red strains)	120–180	90–105
Rome Beauty (red strains)	120–180	90–105
Yellow Newtown	120–180	90–105
Melrose	120–180	90–105

*Subject to cold temperature injury. Hold at 38 to 42°F.

easily. The flesh color of Bartlett pears should have changed from greenish to ivory white, but not yet to creamy yellow or dull. The flesh of other varieties still may be somewhat greenish.

Problems with pears

Handle pears carefully while picking and storing. Internal browning and soft spots, not evident from the outside, may be caused by bruising in handling or from ripening off the tree at temperatures above 70°F.

Pears that become soft after canning probably were overripe. Pink color sometimes appears in canned fruit. More rapid cooling after canning will reduce the amount of this harmless coloration.

Hard-end (a hardening and blackening of the end opposite the stem) occurs with fruit grown on certain rootstocks. Grittiness may be caused by the stony pit virus. Prevention of hard-end or grittiness requires replacing the tree. Fruits with stony pit virus or grittiness are not harmful if eaten.

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Revised October 1997. Reprinted June 1998.

