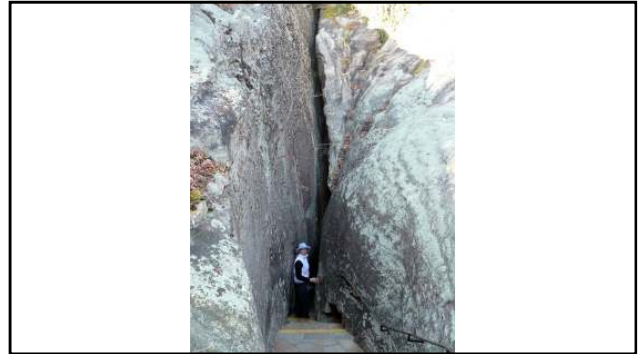


## A Tight Fit: Adding Edible and Other Space Saving Landscape Plants

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1



2



3

### Space Saving Landscaping

- Edible Landscaping
  - Herb gardens
  - Edibles as ornamentals
  - Edibles complementing ornamentals
- Espalier
- Container Gardening
- Dwarf and Upright woody ornamentals

4

### Edible Landscaping

- Practical integration of food plants with an ornamental or decorative setting.
- Many edible have ornamental value as well as being edible.
- Good design is essential and often overlooked.
- Using edibles in landscape design can enhance a garden by providing a unique ornamental component with additional health, aesthetic, and economic benefits.
- Filling the yard with edibles would often produce too much food for most families, not to mention time and work.
- Careful planning and the judicious use of fruits, herbs, and vegetables is a must.
- Careful use will result in a yard that is flavorful, practical, visually pleasing. As a bonus, it's a great topic for conversation!

5

### Pop Quiz

1. What is the average distance that food travels to U.S. cities?
  - A. 100 miles
  - B. 500 miles
  - C. 1500 miles
  - D. 2500 miles



6

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7

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1. If trucking stopped in the U.S., how many days of food does a city have?
- A. 1 day
  - B. 4 days
  - C. 7 days
  - D. 30 days**



8

### Pop Quiz

1. If trucking stopped in the U.S., how many days of food does a city have?
- A. 1 to 2 days**
  - B. 3 to 4 days
  - C. 7 days
  - D. 30 days



9

### Edible Landscaping Challenges

- Light conditions
- Pests
  - Deer, rabbits, and birds
  - Covering plants to protect ripening or mature fruits is not that aesthetically pleasing.



10

### Growing Requirements

- Right Plant, Right Place, Right Reason
  - The keys to healthy plants are choosing the correct plant
- Properly preparing the soil
  - With few exceptions, most edible plant varieties require soils with fast drainage.
  - Soggy soil is the culprit for many failed edible gardens.
  - Annual fruits and vegetables need soil filled with lots of organic matter and a source of nitrogen.
- Light
  - Most edible plants need at least six hours of mid-day sun to produce well and be healthy.

11

### Smart Water Use

- Commercial produce production
  - Average pound of lettuce uses 15 gallons of water
  - Average pound of tomatoes 22 gallons
  - Average pound of potatoes 30 gallons
- John Jeavons, author of the best selling "How to Grow More Vegetables", concluded that the home gardener, using organic techniques to grow edibles, uses between one quarter and an eighth as much water as compared to commercial production.
- Install and use rain barrels
  - Can also add decorative component to garden as well as better water use.

12



13



14



15



16

## Combining Edibles and Ornamentals

- Edible plants can be combined in many creative ways—with other edibles, or with ornamentals.
- For instance; try a cool-season border of lettuces and spinach interplanted with dwarf nasturtiums.
- All types of pepper are striking when combined with dwarf marigolds or a background of tall red salvias.
- In shady areas, try a border of alpine strawberries and curly parsley under a hedge of currants.
- For your dwarf fruit trees try planting them in geometric beds surrounded with a border of culinary herbs; or plant them along the driveway instead of the usual privet or junipers.

17

## Edible Plant Selection

- Purpose
- Size
  - The single biggest mistake all garden designers make—professionals and amateurs alike—is underestimating the eventual size of plants.
- Form
- Texture
  - Coarser texture with larger leaves (Rhubarb) and finer with smaller leaves (Asparagus)
- Color
  - Plants add color to the landscape in a variety of ways—multihued flowers, showy fruit or vivid seasonal foliage—but only for a relatively short period.
  - The leaves, in every hue and intensity of green, help tie the design together, from the rich deep green of strawberry leaves to the bright light green of lettuce to the gray-green of sage.
  - Green becomes the neutral color against which you see all the other colors in a landscape.

18



Not really space saving

19

## Popular Edibles

- Edible flowers
- Greens
- Fruit
- Veggies

20

## Rhubarb

- Rhubarb can be used as a focal point. Its large leaves contrast nicely with the smaller foliage of other woody ornamentals



21



Rhubarb serves as a backdrop for low-growing herbs in the Denver Botanical Garden. The parsley and blooming oregano provide bright green accents against the red of the flowering amaranth and rhubarb stalks.

22

## Swiss Chard

- The brightly colored petioles and wide, dark green leaves are quite attractive and are easily incorporated into the landscape as an annual ornamental foliage plant.
- 'Bright Lights'
  - Swiss Chard "standard"
  - Selection improved for its stem colors. The petioles can be white, yellow, gold, orange, pink, red or striped. This variety is excellent as an ornamental. 55 days to maturity.
- 'Rhubarb'
  - Produces crumpled, dark green leaves with deep red veins. The petioles are bright crimson red and slightly flattened. This attractive 20- to 24-inch plant matures in 60 days and is also nice as an ornamental.
- 'Neon Lights'
  - Five colors that are more intense than 'Bright Lights'



23



Rhubarb Swiss Chard with Edible Pansies

24



## Strawberries



25

## Edible Flowers

- Borage - *Borago officinalis*
  - Annual; half-inch size, blue, star-like flowers
  - Enjoy the cucumber-flavored blue flowers in salads or use them to decorate desserts
- Calendulas - *Calendula officinalis*
  - Annual for cool weather; orange, cream, yellow 2-inch wide flowers.
  - Calendula petals are most often used for their color rather than flavor.
- Chamomile - *Matricaria recutita*
  - Annual for warm weather; small white daisy flowers
  - pleasant pineapple flavor
- Lavender - *Lavandula angustifolia*
  - Perennial, English lavender; tiny lavender flowers
  - strong lemon-perfume taste of the petals is used to flavor lemonade, sugars, shortbread, and ice cream.



26

## Edible Flowers

- Nasturtium - *Tropaeolum majus*
  - Annual; single red, orange, or yellow flowers
  - Mustard-flavored flowers, leaves, and seedpods of nasturtiums are edible.
  - Mince leaves and flowers and incorporate into butters and soft cheeses, or use the petals to flavor oils, dressings, vinegars, or sprinkle them like confetti over a green salad.



27



28

## Edible Flowers

- Squash Blossoms – *Cucurbita* spp.
  - Annual for warm weather; 3 to 4-inch wide, yellow flowers
  - Slightly sweet flowers. (Watch for bees sometimes trapped inside.).
  - If you're making fritters or stuffing them, keep the stems on but remove stamens and pistils.
  - Blossoms can be stuffed with cheeses and meat mixtures; or sliced petals can be added to soups, frittatas, tacos, and salads.



29



30



31



32



Lemon Ricotta stuffed Zucchini Blossoms

33

### Combination Plantings

- **Roses and chives**
  - Garlic is said to repel rose pests. Garlic chives probably are just as repellent, and their small purple or white flowers in late spring looks great with rose flowers and foliage.
- **Tomatoes and cabbage**
  - Tomatoes are repellent to diamondback moth larvae, which are caterpillars that chew large holes in cabbage leaves.
- **Cucumbers and nasturtiums**
  - The nasturtium's vining stems make them a great companion rambling among your growing cucumbers and squash plants.
  - Nasturtiums "are reputed to repel cucumber beetles and provide habitat for predatory insects such as spiders and ground beetles.

34

### Combination Plantings

- **Lettuce and tall flowers**
  - Nicotiana (flowering tobacco) and cleome (spider flower) give lettuce the light shade it grows best in.
- **Potatoes and sweet alyssum:**
  - Sweet alyssum has tiny flowers that attract delicate beneficial insects, such as predatory wasps. Plant sweet alyssum alongside bushy crops like potatoes, or let it spread to form a living ground cover under arching plants like broccoli. Bonus: The alyssum's sweet fragrance will scent your garden all summer.

35

### Herb gardens



36



37



38



39

### Plant Choice

- Plant what you will use:
  - Basil
  - Parsley
  - Mint
  - Oregano
  - Cilantro
  - Rosemary
  - Sage
  - Lemon Verbena
- All herbs have ornamental value as well based on color, size and texture of plant.

40

Purple Leaf Basil  
Dark Opal or Purple Ruffles



41

Sage



42

Chocolate Mint



Has fragrance and taste that's a lot like Girl Scout Thin Mint Cookies

43

Pineapple Mint



44

Espalier



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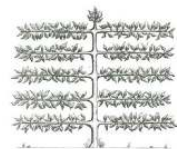


46

Common Espalier Types



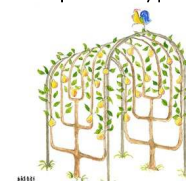
Fan or Palmette Espalier  
Plums and Apricots



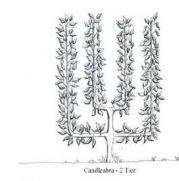
Horizontal Cordon  
Apples, Pears

47

Other Espalier Types



Arbor  
Apples, Pears



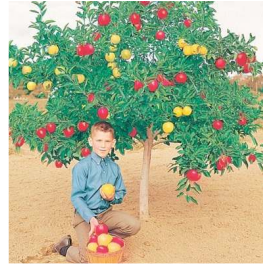
Candleabra  
Apples, Pears

48



## Cocktail tree

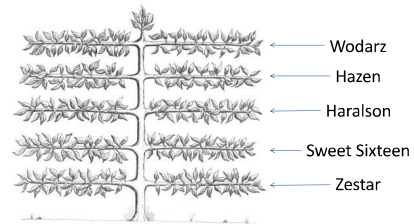
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52

## Columnar Apple Trees

- A choice of four varieties in the Urban™ Columnar Apple Series developed by Dr. Jaroslav Tupy of the Czech Republic ensure a wide selection of flavor, plus good cross-pollination and fruit set.
- Hardy zone 4?????
- **Tasty Red™** is a bright red apple with a sweet, juicy flavor
- **Blushing Delight™** produces a blush of reddish green fruit with a slightly sweeter taste
- **Golden Treat™** greenish-gold apples are tart in early fall, but get sweeter the longer they are on the tree
- **Tangy Green™** lime green apples add a crisp, tart flavor to the series



53

## Types of fruit

54

Apple Varieties				
Maturity dates given vary from year to year due to season and location. Home storage conditions affect keeping quality of fruit. R = recommended for general planting T = recommended for trial G = graft on branches of hardy tree (for example on Dilego Crab). Be sure to plant at least two varieties to ensure pollination.				
Variety	Hardiness Zone A B C	Reaction to Fireblight	Description	
Marlet	R R R	Susceptible	Yellow, stripe and blushed with red. Medium size. Excellent quality. Hardy and productive. Fresh and juicy. Matures August 25. One week storage.	
Red Duchess	R R R	Moderately Resistant	Red. Medium size. Reliable, hardy. Pies, sauce, jelly. Matures August 25. Two weeks storage.	
Hazen	R R R	Moderately Resistant	Dark red. Bears when young. Fresh and cooking. August 25. Stores one month. Semi-clear tree.	
Dilego Gold	R R R	Resistant	Yellow apple. Good for eating out of hand, for sauce, pies. Very hardy. Matures in late August. Annual bearer. Fruit are large and do not store well.	
State Fair	R T T	Moderately Resistant	Bright red. Pleasant acid flavor. Medium size. Fresh or cooking. September 1. Stores one to two months.	
Sweet Sadown	R T T	Moderately Resistant	Red striped. Dessert apple. Medium size. Matures mid-September. Stores two months.	
Goodland	R R R	Moderately Resistant	Washed red over creamy green. Good for storage and excellent eating. Productive, annual bearer. Ripen mid-September.	
Red Baron	R RT T	Moderately Resistant	Bright red. Medium size. Stubby shaped. Fresh and cooking. Matures mid-September. Stores three months.	
Honeycrisp	R T T	Moderately	Red/yellow apple with a sweet, exceptionally crisp and juicy flavor and texture. Ripens October 5. Stores four to five months.	
Wonder	R R R	Resistant	Very sweet. Stores well. Hardy tree. Yellow fruit with a red blush. Matures in late September.	
Hansel	R R R	Moderately Resistant	Red selection of Heralon. Earlier and sweeter than parent. Matures early October. Stores four to six months.	
Heralon	R R R	Moderately Resistant	Red. Medium size. Fair to good quality. Stores well. Proven variety. Matures early October. Stores four to six months.	
Redbell	R T T	Moderately Susceptible	Bright red. Slow to come into bearing. Fresh and cooking. Matures early October. Stores three months.	

55

Hardy Plum Varieties				
Variety	Hardiness Zone A B C	Description		
Pembina	R R R	Medium size. Red, yellow flesh, sweet and juicy. Late August.		
Underwood	R R R	Large size. Medium dark red. Juicy, sweet. Very good quality. Fresh and cooking. Mid-late August.		
LaChassant	R R R	Medium size. Yellow skin, yellow flesh. Juicy, tender. Delicious flavor. Excellent quality. Late August.		
Altamira	T T T	Large size, burgundy red. Fresh yellow, medium soft, sweet. Good quality. Mid-late August.		
Waneta	R R R	Very large size. Yellow overlain with dark red. Yellow flesh. Sweet, juicy. Good quality. Early September.		
Pipestone	R T T	Large size. Red, skin, yellow flesh. Sweet, juicy. Very good quality. Early September.		
Superior	T T T	Large size. Red, skin, yellow flesh. Sweet, juicy. Very good quality. Early September.		
Toka	R R R	Medium size. Red skin, yellow flesh. Freestone. Good pollinator. Sweet with spicy, tangy flavor. Matures early September.		

Be sure to plant at least two varieties to ensure pollination. Some varieties are noted as good pollinizer varieties.

Black Ice



Waneta



56




Pears				
Variety	Hardiness Zone A B C	Description		
Summer Crisp	T T T	Fruit is 2½-3 inches in diameter and 5-7½ inches long. Harvest in mid-August when crisp and still green with a red blush. Fruit harvested at that time is sweet and crisp, and may be stored up to 2 months.		
Parker	T T T	Large size for hardy pears. Medium yellow. Borderline hardiness. Susceptible to fireblight. Mid-September.		
Luscious	T T T	Large size. Fruit is very juicy and sweet. Borderline hardiness. Requires a pollinator such as Parker. Late September.		
Gourmet	T T T	A good, dessert pear. Medium in size, greenish yellow to yellow. Skin thick but tender. Flesh yellowish, crisp, juicy and sweet. Fruit matures in late September.		
Ure	R R R	Small fruits with a creamy white flesh. Delicious for fresh eating and processing. Pick before fully ripe. Matures in mid-September.		

Pears lack winter hardiness and should be tried only in well protected areas. Due to their susceptibility to fireblight, they should be planted apart from apples and crabapples.



57

Honeyberry (Haskap) <i>Lonicera caerulea</i>	
	
	
<ul style="list-style-type: none"> <li>Extremely cold hardy plant as a plant and the fruit is very healthy.</li> <li>Requires cross-pollination and Polar Jewel Honeyberry is the best pollinator currently known.</li> </ul>	

58

Serviceberry (Juneberry or Saskatoon) <i>Amelanchier alnifolia</i>	
<ul style="list-style-type: none"> <li>Blueberry substitute</li> <li>Nice ornamental</li> </ul>	
  	

59

Autumn Magic Black Chokeberry <i>Aronia melanocarpa</i> 'Autumn Magic'	
<ul style="list-style-type: none"> <li>Type: Deciduous</li> <li>Hardiness: 3-7</li> <li>Height: 3-5'</li> <li>Spread: 2-4'</li> <li>Sun: Full</li> <li>Water:</li> <li>Maintenance:</li> <li>Tolerates: Variable soil types</li> <li>Use: Accent</li> <li>Native</li> </ul>	
 	

60



- Aronia berries can be eaten fresh, used for baking, jams, and juice.
- High in antioxidants



61



Low Scape Mound™

62

- Low Scape Hedger® ('UCONNAM166')
  - 3-5', dense
  - Perfect for hedging or screening, prune tolerant
  - Non-suckering



63

### Carmine Jewel Cherry

- *Prunus cerasus* 'SK Carmine Jewel'
- *Prunus cerasus* x *P. fruticosa*
- Dark purple skin and flesh, small pits
- Good for fresh eating and processing, best pie cherry
- Fruit weighs about 4 gram, 15-17 Brix
- Early harvest, ripening first in the season, late July-early August in the north
- 9-12' height, 7+ width
- Low suckering
- Self-pollinating
- Usually produces a few berries in 3 years, rapidly increasing to 25+ lbs at years age
- Zones 2-8



64

### Crimson Passion Dwarf Cherry

- *Prunus x kerrisii* 'Crimson Passion'
- *Prunus cerasus* x *P. fruticosa*
- Dark red fruit, flesh firmer than other cultivars
- Excellent for fresh eating, high sugar content
- Fruit weighs about 6 gram, 22 Brix
- 8-10' height and 7+ width
- Lowest suckering of all the dwarf sour cherries
- Not as vigorous as Carmine Jewel the first year but seem to do well once established in many locations.
- Self-pollinating
- May yield a few berries after 3 years, increasing to 20+ lbs yield after 6 years, but may not bear well every year
- Zones 2-8



65

### American Elderberry *Sambucus canadensis*



66



European Elderberry – *Sambucus nigra*Black Tower – 'Eiffel01'  
8 x 4'

Black Beauty – 'Gerda'



Black Lace – 'Eva'

67



68

Bailey Select Purpleleaf American Hazelnut  
*Corylus americana* 'Purpleleaf Bailey Select'

- Hardy zone 3
- 8 x 8'
- Purple-green foliage
- Burgundy fall color
- Edible nuts
- Native



69

## Other Space Saving Ideas:

70

## Hanging Planters???



71



72



### Raised Bed Gardens

- Raised beds are more space-efficient if the tops are gently rounded to form an arc, rather than flat.
- A rounded bed that is 5 feet wide across its base, for instance, will give you a 6-foot-wide arc above it.
- In a 20-foot-long bed, for example, rounding the top increases your total planting area from 100 to 120 square feet which is a 20 % gain.



73

### Trellis Gardens



74



75



76

### Wire Trellis



77

### Trellis Plants

- Wisteria (*W. frutescens* var. *macrostachya*)
  - 'Blue Moon'
  - First Editions® Summer Cascade™ ('Betty Matthews')



78

### Trellis Plants

- Clematis (*C. x jackmanii*) – 10 – 12'



79

### Trellis Plants

- Trumpet Honeysuckle – *Lonicera sempervirens*



80

### Trellis Plants

- Grape



81

### Dwarf and Upright Ornamentals

82

Dakota Pinnacle® Asian White Birch  
*Betula platyphylla* 'Fargo' (PP10963)



83

First Editions® Parkland Pillar Birch  
*Betula platyphylla* 'JefPark'



84



85



86

Taylor Upright Eastern Redcedar  
*Juniperus virginiana* 'Taylor'

- Hardiness 3-9
- Narrow columnar form
- 25 x 4'
- Semi-soft blue-green foliage
- Full sun
- Great privacy hedge
- Deer resistant



87

Fine Line® Buckthorn  
*Rhamnus frangula* 'Ron Williams'



88

Purple Spire Crabapple  
*Malus x* 'Jefspire'



15 x 6', slow growing, low flower number

89

Northern Empress® Japanese Elm



Outstanding fall color changing from apricot to burgundy red.

PHOTOS BY BLOOM & FARM

90



Cinnamon Curls® Dwarf  
Korean Birch  
*Betula costata* 'CinDak'



91

Lavaburst® Ohio Buckeye  
*Aesculus glabra* 'LavaDak'



92

THANK YOU!



93