

Improving Lives. Improving Texas.

## Fall Vegetable Gardening

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## **Preparation is Key**



### Plan

- Space
- **❖** Soil
- Crop Requirements (light, space, water, etc.)
- Labor Requirements
- **❖** Goals





#### Soil

- Know Your Existing Soil's Characteristics
  - ➤ Nutrient Values (N, P, K, Organic Matter, pH)
  - ➤ Consistency Heavy Clay or Sand????
    - ☐ Heavy soils may require additional amendments to make them more workable (washed sand or gypsum calcium sulfate)
    - □Sandy soils (all soils!) benefit from incorporating organic material in with them (hay, compost rotten grass clippings, leaves 2-3 inches deep and work /till into soil)
    - ☐ SOIL TEST, SOIL TEST!!! -

http://soiltesting.tamu.edu/

#### **Fertilizers**

- Fertilize to meet soil test recommendations
- If no soil test
  - ➤ Utilize generic "slow release" garden fertilizer at 3 pounds per 100 square feet
  - ➤ If alternative fertilizer is used (manure) apply at 20 50 pounds per 100 square feet several weeks before planting
  - > Additional Fertilization use ammonium sulfate (21-0-0)
  - □ cucumbers, cantaloupes, eggplants, okra, peas, beans, peppers, squash and tomatoes will require around 1½ ounces (3 tablespoons) per 10 feet of row after first fruit set, after first harvest, and every 3 4 weeks thereafter
  - □ broccoli, cabbage, cauliflower, collards, lettuce, mustard, spinach and turnip greens will require around 2 ounces (4 tablespoons) per 10 feet of row 2 weeks after transplanting or 4 weeks after sowing seed
  - ☐ Remember sandy soils may require more frequent fertilization than heavy clays and excessive fertilization may reduce yield and lower quality

## **Crop Requirements**

- Different plants require different amounts of space (be careful of vine plants)
- Plant North South to avoid shading lower growing plants out
- Drip irrigation most efficient garden irrigation available



Drip Irrigation









## Light Requirements

- Require 6+ Hours of Sunlight
  - Fruiting Vegetables
    Tomatoes, Peppers,
    Beans & Peas,
    Cucumbers,
    Eggplants, Okra,
    Squash
  - Root Crops Carrots, Beets, Turnips, Onion, Potatoes

- Can Tolerate Partial Shade
  - Cole Crops
     Broccoli,
     Cauliflower, Collards,
     Kale, Brussels Sprouts,
  - Other Leafy Greens Lettuce, Spinach, Cabbage

## Other Tips/Options

- Raised Bed Gardening
- Container Gardening
- Plant Recommended Varieties for "Our" Area
- USE MULCHES!!!
- Keep Records
- Have Fun!!!



## Raised Bed Construction





## Caldwell County Recommended Varieties



#### **VEGETABLE VARIETIES**

Feb 200

#### FOR CALDINELL COUNTY

ARTICHOKE GREEN GLOBE

ASPARAGUS

UC 157 JERSEY GIANT JERSEY GEM

**BEANS** 

BUSH

CONTENDER DERBY FLORENCE GREENCROP

PROVIDER ROMA II TENDERCROP

TOPCROP POLE LANDFRAUEN

LANDFRAUEN McCASLAN NORTHEASTER

NORTHEASTER

LIMA

DIXIE BUTTERPEA

FORDHOOK

HENDERSON

JACKSON WONDER

**BEETS** 

CHIOGGA DETROIT RED PACEMAKER RED ACE

BROCCOLI

CALABRESE EMERALD GREEN COMET PACKMAN PREMIUM CROP

BRUSSELS SPROUTS

JADE CROSS PRINCE MARVEL

CABBAGE

EARLY JERSEY WAKEFIELD
GOLDEN ACRE
RUBY BALL
SAVOY EXPRESS

VEGETABLE CATEGORY VARIETY

CHINESE JADE PAGODA

> MEI QING CHOI MICHILI MONUMENT TWO SEASONS

CANTALOUPE

AMBROSIA HALES BEST MAGNUM 45 MAINSTREAM TAM LIVAL DE

CARROTS

CHANTENAY RED CORE
DANVERS 126
LITTLE FINGER
NELSON

NANTES CALILIFI OWER

SNOW CROWN SNOWBALL Y

CHARD, SWISS

RD, SWISS

BRIGHT LIGHTS

FORDHOOK

LUCULLUS

RHUBARB RED

COLLARDS

GEORGIA SOUTHERN VATES

CORN

HOW SWEET IT IS KANDY KORN MERIT HYBRID SILVER QUEEN

CUCUMBER,

UCUMBER,
PICKLING
CALYPSO
CAROLINA
SLICING
ASHLEY
DASHER II
POINSETT 76
SUYO

STRAIGHT EIGHT SWEET SUCCESS SWEET SLICE

EGGPLANT

BLACK BEAUTY BLACKNITE FLORIDA MARKET ICHIBAN NEON PING TUNG LONG

GARLIC

ELEPHANT TEXAS WHITE

GREENS, SPECIALTY
COOL SEASON
ARUGULA

MEGAL

CORN SALAD/MACHE
CURLY ENDIVE
FRISEE
RADICCHIO
TATSOI
WARM SEASON
LAMB'S-CUJARTER
MALABAR SPINACH
MOLOKHIA
NEW ZEALAND SPINACH
VEGETABLE AMARANTH

KALE

DWARF BLUE CURLED VATES RED RUSSIAN TOSCANO LACINATO

KOHLRABI

EARLY PURPLE VIENNA EARLY WHITE VIENNA GRAND DUKE

LEEKS

AMERICAN FLAG KING RICHARD LETTUCE

HEAD GREAT LAKES LEAF& BIBB

BLACK SEEDED SIMPSON
BRONZE MIGNONETTE
BUTTERCRUNCH

ERMOSA LOLLA ROSSA OAKLEAF

PARRIS ISLAND COS ROMAINE RED SAILS RUBY RED

RUBY RED SALAD BOWL TANGO

TANGO WINTER DENSITY

MUSTARD

FLORIDA BROADLEAF OSAKA PURPLE MIZUNA TENDERGREEN

OKRA

BABY BUBBA
CAJUN DELIGHT
CLEMSON SPINELESS
COWHORN
EMERALD

ONION

IION
BULBING
GRANO 1015Y
WHITE GRANEX
RED GRANEX
RED BURGUNDY
BUNCHING
BELTSVILLE BUNCHING
EVERGREEN WHITE

PARSLEY

CHAMPION MOSS CURLED
ITALIAN FLAT LEAF

PEAS

ENGLISH

LITTLE MARVEL

WANDO

SNAP

SUGAR BON SUGAR SNAP SNOW SNOW GREEN

OREGON GIANT
SOUTHERN
BLACKEYE #5
MISSISSIPPI SILVER
PURPLE HULL

ZIPPER CREAM TEXAS PINKEYE CREAM 40

PEPPER HOT

HABANERO HUNGARIAN WAX MEXIBELL

MUCHO NACHO JALAPENO NUMEX JOE PARKER SENORITA MILD JALAPENO

TAM JALAPENO SERRANO

VERA CRUZ JALAPENO SWEET

BIG BERTHA
CALIFORNIA WONDER
JUPITER

KEYSTONE GIANT SWEET BANANA YOLO WONDER

POTATOES, IRISH

OTATOES, IRISH

KENNEBEC (WHITE)

RED LASOTA

RED PONTIAC

RUSSIAN BANANA FINGERLING

POTATOES, SWEET

CENTENNIAL

PUMPKINS

APKINS
ASPEN
BABY BEAR MINI
BIG MAX
CONNECTICUT FIELD
JACK-B-LITTLE MINI
JACK-O-LITE
SMALL SUGAR PIE

**RADISH** 

CHERRY BELLE
EARLY SCARLET GLOBE
MISATO ROSE RED MEAT
WHITE ICICLE
DAIKON
MIYASHIGE

SPINACH

BLOOMSDALE HYBRID 7 MELODY OZARKA II

SQUASH

SUMMER
BUTTERSTICK
COSTATA ROMANESCO

DIXIE
EARLY YELLOW CROOKNECK
KUTA
MAGDA ZUCCHINI
MULTIPIK
PRESIDENT ZUCCHINI

PRESIDENT ZUCCHINI
SUNBURST PATTY PAN
WHITE BUSH SCALLOP

WINTER
BLACK FOREST KABOCHA

BUTTERCUP KABOCHA CARNIVAL ACORN DELICATA

EARLY BUTTERNUT SWEET DUMPLING SWEET MAMA KABOCHA

TABLE ACE ACORN
TABLE QUEEN ACORN

VEGETABLE SPAGHETTI WALTHAM BUTTERNUT

21447055

TOMATOES

BETTER BOY
CARNIVAL
CELEBRITY
CHAMPION

DONA EARLY GIRL FIRST LADY

FIRST LADY FLORAMERICA GREEN ZEBRA HEATWAVE

JACKPOT MERCED PRESIDENT

YELLOW STUFFER
CHERRY
JULIET

JULIET
RED CHERRY
RED CURRANT
RED PEAR
SMALL FRY
SWEET MILLION

SWEET MILLION SWEET 100 YELLOW PEAR PASTE

*ASTE* ROMA VIVA ITALIA

TURNIP

PURPLE TOP SEVEN TOP SHOGOIN TOKYO CROSS

WATERMELON

BLACK DIAMOND
CHARLSETON GRAY
CRIMSON SWEET
GOLDEN CROWN
JUBILEE
SUGAR BABY

## **Great Planning Resource**

<a href="http://aggie-">http://aggie-</a><a href="http://aggie-">horticulture.tamu.edu/publications/guides/E-</a>502 home vegetable guide.pdf

#### Fall Frost Date

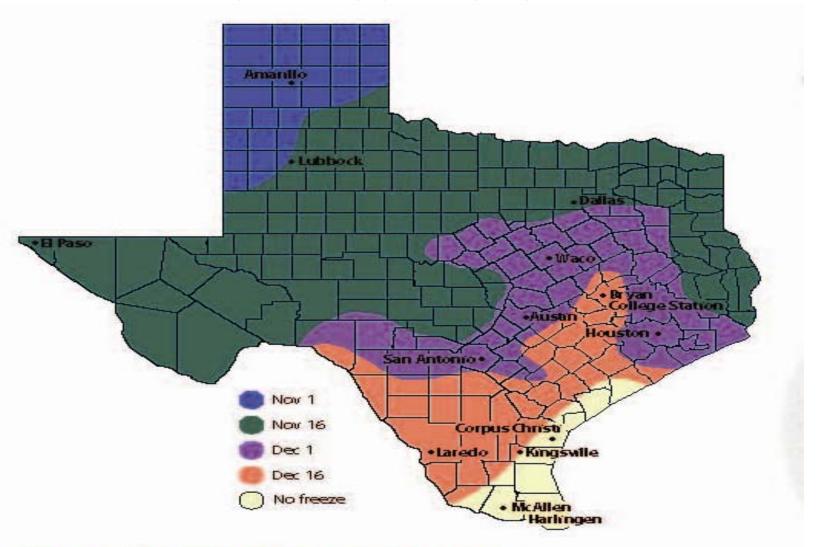
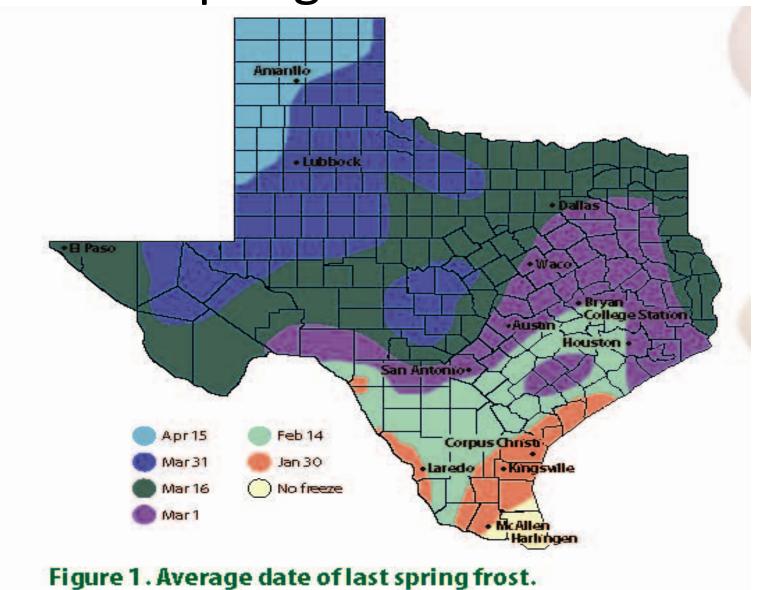


Figure 2. Average date of first fall frost.

## **Spring Frost Date**



Cool Season Vegetables



### Asparagus

- Plant mid January to February
- Need well-drained soil high in organic matter
- Use high nitrogen fertilizer
- Short harvests in spring and fall
- Size of spears indication of plant vigor

#### **Planting Asparagus**



#### Beets

- Plant mid September to October and mid-January to February
- Quick Maturing (30-60 days)
- Frost Tolerant



#### Broccoli

- Plant mid-August to mid-September and mid-January to February
- Easy Transplanter
- Moderate Maturing (60-80 days)
- Frost-Tolerant



## **Brussels Sprouts**

- Plant end of August to mid- September and mid-January to February
- Slow Maturing (80+ days)
- Frost Tolerant



## Cabbage

- Plant mid-August to mid-September and mid-January to February
- Slow Maturing (80+ days)
- Frost Tolerant



#### **Carrots**

- Plant mid-August to first of September and mid-January to February
- Seeds need light to germinate
- Thin out stands
- Love regular light applications of N
- Moderate Maturing (60-80 days)



#### Cauliflower

- Plant mid-August to mid-September
- Slow Maturing (80+ days)
- Frost Tolerant



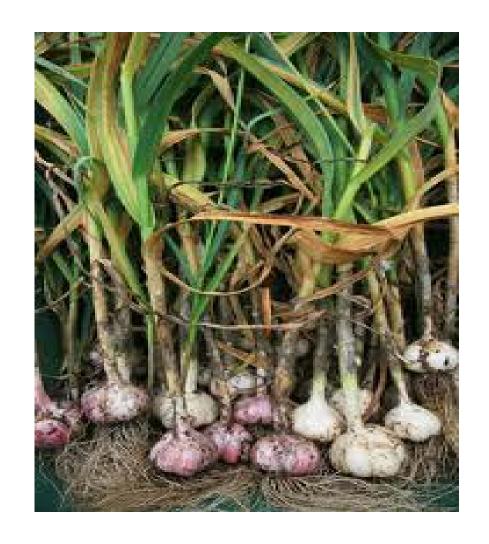
## Collards/Kale

- Plant first of September to first of October and mid-January to mid-February
- Moderate Maturing (60-80 days)
- Frost Tolerant



#### Garlic

- Plant mid-October to first of November
- Plant cloves 4-6 inches apart
- Love small frequent applications of N
- Harvest roots and tops as needed
- Slow Maturing (80+ days)



#### Kohlrabi

- Plant first of August to first of September and mid-January to mid-February
- Moderate Maturing (60-80 days)
- Frost Tolerant



#### Lettuce

- Plant end of August to September and mid-January to mid-March
- Wait for soil to cool
- Seeds need light to germinate
- Quick Maturing (30-60 days)



#### Mustards

- Plant mid-August to mid-September
- Quick Maturing (30-60 days)
- Frost Tolerant



#### **Onions**

- Plant PLANTS end of December to February
- Plant SEED end of September to first of October and first of January to mid-January
- Sweet Onions Need LOW Sulfur Soil
- Love Small Applications of N



## **English Peas**

- Plant first of September to mid-November
- Need Moderately Fertile Soil
- Trellis???
- Moderate Maturing (60-80 days)



#### Radish

- Plant first of October to end of November and mid-January to end of March
- Quick Maturing (30-60 days)
- Frost Tolerant



### Rhubarb

- Start seeds in September
- Plant transplants in October
- Protect from hard freezes



## Spinach

- Plant end of July to mid-November and first of January to end of February
- Quick Maturing (30-60 days)
- Frost Tolerant



## **Turnips**

- Plant first of September to mid-November and mid-January to mid-February
- Quick Maturing (30-60 days)
- Frost Tolerant



Warm Season Vegetables



# Green (Snap) Bush Beans/Lima (Butter) Bush Beans



- Plant mid-September to the first of October
- Need moderately fertile soil
- Best to harvest snap beans when pods are young and tender; butter beans when pods are fully mature

## Green (Snap) Pole Beans/Lima (Butter) Pole Beans



- Plant first of August to end of August
- Moderately fertile soil
- Best to harvest snap beans when pods are young and tender; butter beans when pods are fully mature

#### **Sweet Corn**



- Plant end of August to first of September
- Fertilize at planting, 1 foot tall, and at tassel with 21-0-0 ½ 1 cup per 10 foot of row
- Remember 90% will be harvested the same day
- Plant in multiple rows

#### Cucumbers



- Plant first of September to end of September
- Moderate fertility
- Trellis?
- Harvest for pickling when fruit reaches desired size

# Eggplant



- Plant first of August to first of September
- Slow maturing (80+ days)
- 2 − 3 plants per person

#### Melons



- Plant first of August to end of August
- Moderate fertility
- Trellis? melons require large spaces
- Harvest when tendril at base turns brown

#### Okra



- Plant first of August to first of September
- Moderate fertility
- Best to harvest when pods are small and tender
- Moderate maturing

### Peppers



- Plant first of August to first of September
- Moderate maturing
- 3 5 plants per person
- Length of harvest around 90 days

#### Southern Peas



- Plant first of September to end of September
- Prefer warm soil
- Moderate fertility
- Harvest when pods are mature (start to yellow)
- Build Deer Blind

#### Irish Potato



- Plant first of August to end of August and mid-January to February
- Slow maturing (80+ days)
- 50 100 foot of row per person

# Summer/Winter Squash



- Plant end of August to first of September
- Moderate fertility
- Harvest winter squash when mature (rind hard)
- Harvest summer squash when tender and immature

### **Swiss Chard**



- Plant first of August to first of September and end of January to mid-February
- Quick maturing (30-60 days)
- 3-5 plants per person

#### **Tomato**



- Plant end of August to first of September
- Slow maturing (80+ days)
- 3-5 plants per person
- Tomato Problem Solver

   http://aggie horticulture.tamu.edu/
   publications/tomatopro
   blemsolver/

# In Closing

 Always group plants of similar maturity and harvest lengths together so these plants can be removed when they have completed growing season. Leaving these plants can lead to additional disease/insect issues.

THANK YOU! Questions???

### Additional Resources

http://aggie-horticulture.tamu.edu/

http://aggie-horticulture.tamu.edu/travis/

http://caldwell-tx.tamu.edu/