Cool Season Vegetables: Public Workshop August 18, 2018. Marcy Nielsen-Berruezo

Slide 1(11): First consider:

- -WHO you are feeding (family, friends, neighborhood, Food Bank) and
- -WHAT you want to eat! Choose varieties for flavor, characteristics, time to harvest, etc. Invest your time, your space and your water wisely.
- -WHERE: Consider your available space and microclimates.
- -WHEN: Then look at planting schedules to plan your steps from seed to harvest. It really helps to keep records, for example, in the UCMG Month-to-Month Garden Guide.
- -HOW: Last, plan to rotate your crops for plant health, soil fertility, and pest management.

Slide 2(12): In your handouts you have two excellent schedules developed to help you plan your Napa vegetable gardens. The first was developed from UCDavis info by Susanne von Rosenberg, the second by Pat Hitchcock, who has taught the Napa County USMG vegetable workshop series for several years. This one is for warm season planting. GO OVER KEY AT BOTTOM OF SLIDE. NOTE: No planting seeds indoors unless you want to protect seedlings from pests. The soil is warm enough for outdoor planting.

Slide 3 (13): and this one is for a cool season garden. (Discuss the key at the bottom of the pages and briefly explore examples)

Slide 4 (14): Strategies for Timing the Harvest: **Exercise: What could I plant right now in my Napa garden, assuming I had the proper microclimate and setting. What seeds should I start indoors for later transplanting?**

Slide 5 (15): One of the challenges many of us face in planning for year-round crop production is limited garden space. Many cool season crops need to be planted or seeded just when summer crops are reaching peak production.

Slide 6 (16): Gourds and small pumpkins share vertical space with scarlet runner beans on the far trellis, and with Blue Lake green beans on the tepee in the foreground. The trellis and the tepee were made from cuttings from a crape myrtle.

Slide 7 (17) LETTUCE: Seedlings?! How do I know what to do? Reputable seed companies include much of the information you need right on the packet. Note: This packet gives great information about planting and harvesting methods, but doesn't mention light, soil and moisture requirements.

Slide 8 (18) KALE: This kale seed packet gives recommendations for soil preparation, light, fertilization, moisture, planting, harvesting, and usage.

Slide 9 (19): Strategies for Extending Harvest

Slide 10 (20): BROCCOLI: Left: Early heading, short time to maturity. Right: long season due to mix of three varieties of broccoli seeds with different times of maturity.

Slide 11 (21): Crop rotation has been practiced for centuries around the world, enabling agrarian societies to reap crops from the same planting area year after year. Where it hasn't been practiced (for example in the tobacco and cotton fields of our own South in the 18th and 19th centuries), crop-specific pests and diseases increased, fields gradually became depleted of nutrients, and crop yields declined, leading to the development of added commercial fertilizers and pesticides.

[Phosphorus (P) first commercially produced in early 19th century, Potassium (K) in Germany in 1861, Nitrogen (N) 1903.]

Slide 12 (22): Rotating crops by families helps to interrupt the life cycles of pests and soil-borne diseases that have evolved to be dependent upon a given plant type. A biotic form adapted to feed upon one member of a plant family will likely feed upon a related

plant. Crop rotation means that particular plant family won't be available for snacking or breeding for a year or more, thus reducing the population viability of the pest. A longer wait is better, and necessary to defend against some pests like verticillium wilt.

Slide 13 (23): A four cycle rotation of legumes, leaves, fruits, and roots.

Slide 14 (24): Playing with Seed Packets: Factors in planning crop rotation: Alternate **Families** (Genus), **Form** (leafy, root, fruit, legume), and **Fertility** effects (What does plant add to or deplete from the soil?).