

Flower Farming School Online: Growing Cut-Flower Crops in Hoop and Greenhouses

by Steve & Gretel Adams of Sunny Meadows Flower Farm

Course Classes:

Welcome

Introduction: Steve & Gretel talk about how SMFF was built

PART 1: DECISION MAKING AND PLANNING

Week 1: Structure types, location, deconstruction, and construction

- Session 1: Low tunnel/ caterpillar tunnel & our version of the “Wollam” House
- Session 2: Hoop houses/ high tunnels aka “Hoopties”- 3 or 4 season structures
- Session 3: Heated Greenhouses & Gutter Connects
- Session 4: Considerations: ventilation, automation, utilities available, monitoring system, location, drainage, etc.
- Session 5: Where to buy and tips for deconstruction of a used structure
- Session 6: Steps for construction part 1
- Session 7: Steps for construction part 2
- Q & A Session

Week 2: Creating a successful plan of action- Crop planning, sales outlets, & seed starting

Handouts: Flats to bed ft cheat sheet, GH schedule 2020 sample sheet, GH plan example

- Session 1: Considerations for crop decision making
- Session 2: Crop planning first steps- sales projections & budgeting
- Session 3: Crop scheduling & greenhouse planning
- Session 4: Sales outlets & pricing
- Session 5: Enterprise budgets
- Session 6: Seed starting, plant popping, & recording
- Session 7: Propagation
- Q & A Session

PART 2: CROPS TO GROW

Week 3: Spring Blooms- both heated and unheated production

Handouts: Ranunculus, Anemones

- Session 1: Ordering & sourcing ranunculus
- Session 2: Ranunculus growing & harvesting
- Session 3: Anemone growing & harvesting. Corm saving!
- Session 4: Ornithogalum & prechilled tulips

- Session 5: Snapdragon
- Session 6: Stock (*Matthiola incana*)
- Session 7: Dusty
- Session 8: Poppies, delphinium
- Session 9: Sweet peas & our early sunflower trials
- Q & A Session

Week 4: Blooms for Summer & Fall

- Session 1: Lisianthus- seeds, plugs, & ordering
- Session 2: Lisianthus- potting up, transplanting, & netting
- Session 3: Lisianthus- harvesting, bunching
- Session 4: Lilies programmed
- Session 5: Eucalyptus & begonias
- Session 6: Heirloom Chrysanthemums
- Session 7: Dahlias- early & late
- Session 8: Post frost flowers
- Q & A Session

PART 3: GREENHOUSE MANAGEMENT

Week 5: Caring for the plant's environment

Handouts: Reducing Humidity in the Greenhouse, *Growing For Market*- Nov/Dec 2020 Greenhouse environment

- Session 1: Setting up the seed house- maximizing space & time
- Session 2: Bed Prep
- Session 3: Watering & irrigation
- Session 4: Netting
- Session 5: Cover crop & resting beds, rotation
- Session 6: Maintenance & ventilation
- Session 7: Dealing with the elements
- Session 8: Sanitation
- Session 9: What we've learned about humidity & venting from our Conservation Innovation Grant
- Q & A Session

Week 6: Pest, Disease, & Soil Management

Handouts from SMFF: IPM plan 2020 for sharing, Pest Cheat Sheet SMFF, ASCFG Grower Grant Report- Steaming, *Growing For Market*- Nov/Dec 2015- Downy Mildew

Handouts from University & other sources: Purdue Downy Mildew, Mealybugs Insect IPM Mgmt Guide, Aphid Insect IPM Mgmt Guide, Scale Insect IPM Mgmt Guide, Whitefly Insect IPM Mgmt Guide, Fusarium lisianthus, Phytophthora, Soil Solarization California, *N. cucumeris*, *Dalotia coraria*, *Aphidius colemanii*

- Session 1: Diseases: Phythophora, Fusarium, Botrytis
- Session 2: Diseases part 2: Downy Mildew, Powdery Mildew, Rhizoctonia
- Session 3: Pests: Aphids, Fungus Gnats, Whiteflies, Scale, Mealybugs
- Session 4: Pests part 2: Thrips, Cabbage Loopers, Cutworms, Slugs, etc.
- Session 5: Our worst weeds & weed cultivation
 - Chickweed, sow thistle, bindweed, thistle, lamb's quarter, galinsoga
- Session 6: Integrated Pest Management: Scouting & beneficial insects
- Session 7: IPM part 2: Spraying with organic practices in mind
- Session 8: Soil tests & amendments
- Session 9: Soil steaming for disease & weed management
- Q & A Session

Week 6: Wrap-up video: Words of encouragement from Steve & Gretel