

Lucia Crest Park Community Orchard Management Plan

September 2014



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**DEDICATED TO A NEW GENERATION OF GARDENERS,
REGARDLESS OF AGE.**

Introduction

The purpose of the Lucia Crest Park Community Orchard is to establish an orchard that is open to the public and maintained as both a practical and aesthetic addition to the park. With this in mind, the management plan includes policies and plans for both the management of the trees and plants and for outreach activities. These events will be advertised in the Sunset Village Community newsletter and serve to educate, build community, and to assist in ongoing maintenance of the orchard.

By working together at our site and communicating with other orchards and community gardens, we hope to support and encourage food production in urban areas as a small step to encourage sustainability. We will be part of, and work to strengthen, a network of community gardens, supporters of edible landscaping, local food production and home gardeners. Examples of existing community orchards in Madison include Wingra Park and Midvale Elementary, both established in 2010.

Site Maintenance Guidelines

The volunteers who are managing the site during the growing season will check the following items weekly:

- (1) Remove any weeds or dead plants from the plant beds. If seed pods have not formed, leafy weeds will be laid on the surface of the soil and allowed to dry and act as mulch.
- (2) Remove fruit or other materials containing seeds and woody materials from the site for off-site composting on a daily basis during fruit season. No putrescible materials will be left at the site.
- (3) Water the plants/trees if the soil is dry at a depth of 1 to 2 inches. This involves connecting a hose long enough to reach the site from one of the three adjacent neighbors who have agreed to supply water.

Site Management Policies

1. Tools, hoses, and other implements will not be stored on- site.
2. Foliage and fruits will be checked periodically for any patterns of growth indicating a lack of nutrients. Appropriate soil amendments may be added. Soil testing can be done every 2 to 3 years to determine soil fertility.
3. Pruning guidelines. For all group work parties involving knives or sharp objects, eg, pruning shears, a first aid kit will be kept on the premises during the event. Training will be provided through horticulturists or other experienced individuals. All pruning shears, knives and saws will be disinfected before and after working on each tree to prevent transfer of disease. Each type of plant may have different pruning patterns. All plant material will be properly disposed of to prevent the transfer of diseases
4. During the winter and spring, protective materials such as trunk wrap will be used to prevent damage by rodents, especially rabbits. During the first five years of tree establishment, temporary fencing will be used to protect the dwarf fruit trees and canes
5. Fallen fruit will be removed daily to reduce unwanted pests.
6. The site will incorporate permaculture principles in a portion of the plot and will support and encourage other garden and orchard installations outside the park.

The Lucia Crest Park Community Orchard will:

- be maintained by volunteers in accordance with Madison City Parks Division policies and directions,
- encourage interaction between diverse members of the city and the neighborhood through site maintenance and harvesting activities,
- educate a new generation of gardeners,
- demonstrate methods such as permaculture plantings and organic pest control methods that can be used safely in home gardens and orchards, and
- enhance the public's enjoyment of the area during regular park hours.

Budget

The City of Madison has provided a \$2000 grant from their annual Neighborhood Grant Program to help fund the project. Additionally, the Sunset Village Community Association (SVCA) supports the project and has allocated \$250 for start-up expenses. Trees, shrubs and canes will be purchased as bare root (if available) stock in the spring of 2015. Remaining expenses will be supplies, tools, and special events.

Five-year Plan

Year One (2014)

Objectives: To establish a community orchard and neighborhood support for the long-term management and enjoyment of a community orchard.

Spring/Summer

- Gather neighborhood support for the orchard-garden concept from park neighbors, the Sunset Village Neighborhood Association, and City of Madison Parks Department.
- Establish orchard site plan and planting design.
- Obtain signature approval from Lucia Crest Park neighbors, and distribute informational letter to doors of surrounding neighbors.
- Apply for Neighborhood Grant to fund initial plantings.
- Consult experts on cultivated varieties of dwarf and semi-dwarf apple, cherry, peach, pear and plum trees suitable for local growing and climate conditions. Preference will be given to varieties that have known disease resistance to common diseases and pests.
- Update the 2010 list of "Urban Fruit Recommendations for Edible Landscaping in Madison Parks" with the new information.
- Develop list of interested volunteers to help with site preparation, planting, and future maintenance.

Fall/Winter

- Prepare the site in the northwest corner of Lucia Crest Park:
- Clean up existing invasive shrubs.
- Prepare a mulched area where the 14 trees will be planted.
- Complete the agreement with the City of Madison, including approval of newly recommended varieties of fruit trees, and add any additional information to the Management Plan.

Year Two (2015)

Objectives: Establish plantings; expand volunteer base, and promote Community Orchard activities on site.

Winter/Spring

- Order fruit stock (bare root stock if available), with preference to local nurseries and stock sources.
 - 6 x apple (William's Pride, Golden Russet, Cortland, Tolman Sweet, Haralson, and Duchess of Oldenburg)
 - 1 x plum (Mt Royal)
 - 3 x pear (Ubileen, Sekel, Moonglow)
 - 2 x cherry (Meteor, Northstar)
 - 2 x peach (Madison, Contender)
 - 3 x hazelnut
 - blackberries, elderberries, currants
- Plan a planting party for late April / early May.
- Raise awareness of the Lucia Crest Community Orchard (LCCO) through the Sunset Village newsletter. Engage volunteers and children.

Summer/Fall

- Water plants as needed until the growing season ends, ensuring new plantings are well hydrated going into dormancy.
- Install a sign with information about the site.
- Install trunk guards and/or fencing as needed to prevent rodent damage during the winter.

Winter

- Evaluate the activities at the orchard in terms of successes and areas for change and improvement next year.
- Add fencing to the dwarf trees prior to snowfall to protect branches from girdling.
- Plan activities for following year's maintenance and harvest activities.

Year Three (2016)

Objectives: Grow and manage the volunteer base and train members to manage the site; conduct annual evaluations for all fruit varieties planted and assess for hardiness and fruit production; diseased trees will be removed and replaced as necessary for overall orchard health; continue partnering with the City of Madison to determine the feasibility of establishing orchards in other parts of Madison, especially where neighborhood associations may not be active.

Winter/Spring

- Assess tree health and need for pest or disease control.
- Prune trees and canes as needed.
- Shred pruned materials for use as mulch or dispose of off-site.
- Provide annual report on the orchard for a Sunset Village Community Association (SVCA) meeting and solicit comments.

Spring/Summer

- Monitor soil moisture and water plants as needed.
- Coordinate with other scheduled SVCA events such as Earth Day Park Clean-up.
- Apply mulch to the area, remove weeds and water the plants as needed.
- Establish weekly volunteers who will patrol and do maintenance of the site starting in July.
- Hold an annual fruit and ice cream event in July when cherries ripen as a visibility and volunteer recruitment/reward event. Cherries will be purchased from outside sources until orchard trees begin to bear.
- Remove the old fruiting raspberry canes after they bear fruit.

Fall/Winter

- Clip new growth raspberry canes back to 3 to 4 ft.
- Plan for apple harvest and fall clean-up
- Plan for peach, plum, plum harvest and fall clean-up
- If necessary, fence the canes to protect from rabbit damage during the winter.
- Add fencing to the dwarf trees prior to snow accumulation
- Evaluate orchard management and outreach activities and identify areas of success and areas for improvement and adjust outreach and maintenance accordingly.

Year Four (2017)

Objectives: Continue to evaluate outreach activities and to collaborate with other edible landscaping and gardening groups; conduct annual evaluations for all fruit varieties planted and assess for hardiness and fruit production; diseased trees will be removed and replaced as necessary for overall orchard health; determine whether Lucia Crest Community Orchard is eligible for approval under new policy for edible landscaping projects ; evaluate and update the management plan if needed; plan for modest fruit production until trees are established.

Winter/Spring

- Assess tree health and need for pest or disease control.
- Hold a planning session to collect new ideas, suggestions and comments.
- Prune trees and canes as needed. Note that peaches need to be pruned harder than cherries once they begin to bear fruit.
- Either shred the pruned materials for use as mulch or dispose of off-site.
- Consider holding a grafting/pruning workshop with other orchard groups.
- Provide a report on the orchard to the annual SVCA meeting.

Spring/Summer

- Water plants during any dry periods.
- Coordinate with other scheduled SVCA events such as Earth Day Park Clean-up.

Summer

- Apply mulch to the area, remove weeds and water the plants as needed.
- Establish weekly volunteers who will patrol and do maintenance of the site starting in July.
- Purchase bird netting if needed to protect ripening cherries.
- Hold an annual fruit and ice cream event in July when cherries ripen as a visibility and volunteer

recruitment/reward event. Cherries will be purchased from outside sources until the trees begin to bear substantial amounts of fruit.

- Remove the old fruiting raspberry canes after they bear fruit.

Fall/Winter

- Clip new growth raspberry canes back to 3 to 4 ft.
- Transplant new plants farther apart to provide adequate growing room. If necessary, fence the canes to protect from rabbit damage during the winter.
- Evaluate the activities at the orchard in terms of successes and areas for change and improvement.
- Plan for fruit harvest and fall clean-up.
- Prepare trees for winter (trunk-wrap, fencing)
- Evaluate the activities at the orchard in terms of successes and areas for change and improvement.

Year 5 (2018)

Objectives: Evaluate management objectives and update if needed; conduct annual evaluations for all fruit varieties planted and assess for hardiness and fruit production; diseased trees will be removed and replaced as necessary for overall orchard health; continue outreach and education activities; expect first substantial fruit harvest.

Winter/Spring

- Assess tree health and need for pest or disease control.
- Hold a planning session to collect new ideas, suggestions and comments.
- Prune trees and canes as needed. Note that peaches need to be pruned harder than cherries once they begin to bear fruit.
- Remove pruned materials and shred for mulch or dispose of off-site.
- Consider holding a grafting/pruning workshop with other orchard groups.
- Provide a report on the orchard to the annual SVCA meeting and solicit comments.

Spring/Summer

- Water plants during any dry periods.
- Coordinate with other scheduled SVCA events such as Earth Day Park Clean-up.
- Apply mulch to the area, remove weeds and water the plants as needed.
- Establish weekly volunteers who will patrol and do maintenance of the site starting in July.
- Hold an annual fruit and ice cream event in July when cherries ripen as a visibility and volunteer recruitment/reward event.
- Host harvest events that include volunteers and neighbors. Can also tie in with annual SVCA Ice Cream Social in August.
- Plan to protect the peaches from predation by chipmunks or squirrels using netting.
- Remove the old fruiting raspberry canes after they bear fruit.

Fall/Winter

- Clip new growth raspberry canes back to 3 to 4 ft. Transplant new plants farther apart to provide adequate growing room. If necessary, fence the canes to protect from rabbit damage during the winter.
- Plan for fruit harvest and fall clean-up.

- Prepare trees for winter (trunk-wrap, fencing)
- Add fencing to the dwarf trees if snow accumulates > two feet.
- Evaluate the activities at the orchard in terms of successes and areas for change and improvement.

Harvesting and Fruit Management

Objectives

1. Harvest fruit as it becomes ripe
2. Remove ground fruit daily and dispose of off-site.
3. Select dwarf or semi-dwarf trees to aid in ease of harvesting and tree maintenance
4. Use Integrated Pest Management and horticultural Best Management Practices for maintaining tree and orchard health.
 - Monitor and identify any disease or pest outbreaks and establish a management plan.
 - Prune trees annually to promote tree health and fruit production
 - Protect trees from animal foraging in winter
 - Water trees as necessary throughout the growing season.

Raspberries: bear fruit from July through September. Ripe fruit drops from the canes and is generally eaten by ants, insects and birds. Volunteers will be encouraged to pick up any surplus fruit that is on the ground in order to prevent any nuisance.

Cherries: bear in early to mid-July. Trees will likely need to be temporarily protected with netting as the cherries ripen to allow a harvest. Volunteers will pick the fruit and also remove any fruit from the ground beneath the dwarf trees and compost those materials off-site.

Peaches: highly prized by squirrels and chipmunks and tree should be protected with netting. Any fruit that is not harvested by volunteers should be removed from the site and composted.

Apples: can be early (late summer) or late season (fall) bearing. Fruit is attractive to a variety of animals and insects, on the tree or on the ground. Harvesting of ripe apples and removing ground apples will reduce unwanted animal and insects. Apple trees are prone to a variety of diseases, including apple scab and fire blight, in addition to insects. Disease resistant varieties are often resistant to scab and blight, but insects will still need to be monitored. Any fruit that is not harvested by volunteers should be removed from the site and composted.

Pears: like apples, bear fruit in late summer and are also prone to fire blight and are attractive to animals and insects. Disease resistant varieties are often resistant to scab and blight, but insects will still need to be monitored. Any fruit that is not harvested by volunteers should be removed from the site and composted

Management of Orchard and Garden Pests

Objectives

1. Utilize Integrated Pest Management (IPM) strategies to control unwanted and beneficial insects/pests.
 - Monitor and identify pests
 - Identify and implement control measures
 - Prevent disease and pest outbreaks through best management practices
2. Use established horticultural practices and best management practices in the care and maintenance of trees and fruit.
 - Timing of pruning
 - Disinfecting tools between use
 - Selecting stock suitable to local growing conditions
 - Selecting disease resistant varieties
3. Conduct site management activities to promote orchard health
 - Maintain orchard
 - Remove debris
 - Harvest fruit
 - Remove fallen fruit and dispose off-site
4. Integrated Pest Management strategies and horticultural Best Management Practices will be used to reduce and prevent disease and pest outbreaks. No insecticide or pesticide sprays will be used.

References

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