

Kamloops Community Gardens Policies and Procedures

[Plot Owners manual]

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Policies and Procedures

1. Registration

The City of Kamloops has appointed ICS the management of Community Gardens. In order to have a clear, consistent approach when registering for garden plots each season, the following outlines the process to be followed:

- Registration is held at 765 Tranquille Rd. phone: (250) 376-3660.
- Gardeners will be notified of the registration dates through the newsletter and site cocoordinator will have date information. (Registration scheduled for the end of February, beginning of March 2011) Watch for media announcements.
- Cost of a garden plot, regardless of size is \$30.00 + damage deposit \$30.00
- (Total of 60.00). Damage deposit will be returned at the end of the year, with compliance of the lease agreement and policies. Damage deposit can be rolled over to next year, up to 5 years, after filling out the required form.
- Gardeners must be assigned a garden and a plot number before registering.
- Contact Shelaigh Garson phone: (250) 554-3134 ext. 318 to be assigned a plot.
- There will be 2 Night Registration Dates and 2 Day Registration Dates
- All gardeners must sign-up for a garden chore at registration. The chores include the boulevards and the parking lots that are adjacent to the gardens, which are the responsibility of the community gardens.
- A subsidy of \$10.00 per plot is provided to gardeners with a proven income of less than \$20,000 gross a year.
- Gardeners wishing to access a subsidy must provide the previous years' tax return.
- Checks payable to Interior Community Services.
- Location of garden co-coordinator is 396 Tranquille Rd. phone: (250) 554-3134 ext. 318

2. Start up

In order to clarify what is available during start up and what is permissible the following information is outlined:

- Plots are available for use from March 15 to October 15.
- Any plants left on common picnic tables are left for gardeners use. Please dispose of any unused, disease-free plants in compost area. Remove garbage from area, including used pots, old boards, and old plant supports, (chicken wire), etc. Garbage container is for small items only.
- Any compost that is available to gardeners will be in designated areas.
- Compost and top soil will be limited to 8 wheel barrows per plot, so there is enough for all gardeners.
- For gardens that have rototillers, please see person in charge of renting tiller, for access. There is a small fee to help cover the cost of gas, oil and maintenance of the rototiller. The cost is ten dollars a plot and gardeners are expected to do their own rototilling.
- For persons found not paying for use of rototiller, please refer to policies enforcement.

- All gardeners are responsible for up keep and weeding of pathways connecting their plots.
- Bark mulch or gravel is supplied to gardeners for up keep of pathways.
- Gardeners in-charge of putting up gazebo cover (if applicable) can do so at beginning of season.
- Boards and plant support materials not marked and in common areas are for use by all gardeners on a first come, first served basis.
- It is the responsibility of the gardeners at each location to keep sheds, gazebos, bird houses, etc. in good repair. Materials will be supplied when available (paint boards etc.) for upkeep. This can be done by the gardeners organizing work bees.

3. Maintenance and Care of Gardens

Maintenance and care of your community gardens and pathways are very important. In order to ensure gardens are tended to on an ongoing basis and that there is no confusion over garden equipment, the following applies:

- Plots must be kept in a neat and tidy manner at all times.
- A minimum of 90 per cent of the plot area is to be utilized for the production of edibles. (80% of the plot needs to be in use each season).
- All raspberry and blackberry canes that fruited during present growing season are to be cut to the ground and removed at the end of the season. Strawberry beds are to be maintained and not allowed to "mat".
- Plots must be weeded on a regular basis, including removal of grass; weeds must be removed before they go to seed.
- Basic community tools will be provided by ICS(Rake, shovel, hoe, wheel barrel) Gardeners must supply their own hand tools, hoses, watering tools, seeds, plants, organic fertilizers (see organic use below), weed control, plant supports, etc. All tools, equipment and piles of weeds must be kept within gardener's own plot, not on pathways or other gardens.
- Gardeners are responsible for keeping pathways clear of weeds, debris, garden tools.
- Plant supports cannot be higher than 6 feet in height, so sunlight will not be blocked from neighboring gardens.
- Gardeners are responsible for marking of personal garden tools. Unmarked tools and equipment will be subject to being removed or added to community tools.
- If plots are next to the fence, weeding must be done on the inside and outside of the fence, to ensure that the weeds do not enter the garden.
- Plots that appear unattended for longer than 2 weeks will be sent a notice (See Policy Enforcement). This includes: produce not picked, produce left to rot, plot not watered, over growth of weeds. Plot lease will be cancelled if no action is taken.
- Gardeners are responsible for insuring that someone will care for their plot while on vacation or illness, etc. It may be possible to have a neighboring gardener to help out.
- Gardeners are not to leave sharp objects on their plot unattended, such as knives.
- Gardeners are responsible for replacing the boards surrounding their plots. Boards for this purpose along with stakes will be dropped off at the gardens at the beginning of the season. They are available on a first come first served basis. Boards are to be used for outlining plots only.
- Produce grown on the plots, is for personal use only and not to be grown for sale.

4. Not allowed in garden or plot

- Barbed wire.
- Tents or buildings, other than existing buildings.
- Animals of any kind, other than Seeing Eye dogs.
- No smoking or alcohol, or drug use.
- No vehicles (other than motorized handicap devices).
- No fires of any kind.
- No area in the garden is to be used as a bathroom.

5. Resources provided by ICS and City of Kamloops

ICS and the City of Kamloops are supportive of community gardening and to this end the following is provided, as part of the program:

- Gravel and bark mulch for pathways when available.
- Compost from Cinnamon Ridge when available.
- Access to water.
- Shed with some tools marked with orange paint.
- Workshops on gardening when available. Watch for upcoming workshops and clinics by Master Gardeners
- Garden co-coordinator and site leader liasson.

6. Liability (damage and theft)

As damage and/or theft are beyond the control of ICS or The City of Kamloops, the following policy is in place:

• ICS and the City of Kamloops will not be responsible for any damage done to plot holder's garden produce or personal property left on site due to vandalism, negligence, or theft; nor will the City of Kamloops or ICS be responsible for any personal injury that may result to garden plot users.

7. Health and Safety

In order to ensure those who garden at our Community Gardens have a safe and enjoyable experience the following must be adhered to:

- No unsupervised children.
- No sharp objects left on un-attended plots (scissors, knives, etc).
- Hoses that reach across the pathways must be buried under the pathways to prevent tripping. PVC piping may be used to insert hoses in before burying.
- Gates and sheds are to be closed at all times. Gates and sheds are to be locked when you are the last person leaving the garden.

- No supports or equipment are to lean on fence that could be used for unauthorized entrance into garden by climbing the fence.
- Pathways are to be kept clear of equipment or garden debris at all times to ensure no tripping hazards are present.

8. Community Work (work bee)

It is important to have a well tended community garden for the enjoyment of gardeners. In order to accomplish this, a chore will be assigned individually to each gardener. If gardeners decide that they prefer to complete their chores as a group by having a regular maintenance "work bee" this is acceptable. Ultimately, each gardener is responsible for completing their assigned task in a timely manner. Chores can be chosen at registration. 3 seasonal "work bees" per garden will be scheduled. Gardeners will be required to attend a minimum of 2 of the work bees during the gardens season. The work bees will be organized around special events in the individual gardens.

9. Communication Notices

To keep gardeners informed of upcoming events and gardening related activities and interests; information notices will be posted on a bulletin board on your garden shed, by your site leader or the Manager of Community Gardens. Information will also be provided in the Community Gardens newsletter and posted on the upcoming website. Each garden will have a dedicated bulletin board for notices; this can also be utilized by gardeners for communication.

10. Gardener Questions

In order to ensure questions are answered or concerns are addressed in a timely manner, the following outlines the procedure for requesting information or action. The request should first be forwarded to your site leader verbally or in writing. If information is not received or the matter is not resolved then it should be directed to the Co-coordinator of Community Gardens.

• Questions can be directed to Co-coordinator of Community Gardens, Shelaigh Garson Phone: (250) 554-3134. Ext. 318

11. Pests and Disease

Given Community Gardens and ICS is supportive and wants to promote organic gardening therefore; no pesticides or chemicals are allowed for use on, in or around garden plots including common areas, and fencing. See the Appendix re: Least Toxic Pesticides.

• Workshops will be advertised in the newsletter to address the organic methods of pest and weed control.

12. Wastes and Compost

ICS and the City of Kamloops are supportive of composting and the orderly disposal of waste. Therefore please adhere to the following:

- It is preferred that gardeners compost on their plots to enhance the soil fertility with the "return to earth method". For plants that do not break down easily, such as sunflower or corn stalks, there is a designated compost area on site that the City of Kamloops will pick-up and compost.
- Plants and grass out of place are considered a weed.
- Gardeners are expected to keep weeds from the pathways that connect their plots.
- All weeds are to be removed including roots, they can be composted if they haven't gone to seed.
- Plants that have gone to seed must be placed in a plastic bag and disposed of separately.
- Chores will be assigned for the up keep of weed removal of common areas, including boulevards that are the responsibility of the community gardens.
- Turf-type and weed grasses are to be dug out and removed.

13. Organic Methods

ICS and the City of Kamloops have deemed the Community Gardens to be Organic, the following will apply:

- In order to educate and promote organic practices workshops will be held on a periodic basis.
- Workshops will be advertised in the Community Gardens newsletter.
- Bought plants and seeds used do not have to be labeled organic.
- Pest control, (weeds, insects, diseases and other organisms) refer to the least toxic pesticide list, attached.
- No chemical fertilizers allowed.
- Only aged composted manure allowed
- List of natural, slow-release fertilizers attached.

14. Watering

In order to promote sensible use of water and to comply with the City of Kamloops Water Restriction Program the following must be adhered to:

- Watering may be done on odd or even days, but no sprinkling or irrigation between 11 am and 6pm on any day.
- Hand watering may be done at any time using cans, hoses with spring-operated nozzles.
- Watering is to be confined to the gardener's plot only and gardeners need to be careful not to water adjacent plots.
- Water is not to be left unattended if it appears there is pressure fluctuation.
- Gardeners using timing devices need to check their equipment and water pressure periodically.

15. Parking

In order to make the gardens available to all who wish to garden, we ask that gardeners be considerate of others in how they park. Gardeners are expected to comply with the following:

- Ensure walkways and entrance ways are not blocked.
- Gardeners are expected not to block vehicle access in or out of the parking lot.
- Bicycles must be stored in common areas, not on pathways. Bicycles can be chained to picnic table.
- Motorized chairs must be parked in common areas and not on pathways.

16. End of Season

To prepare the garden plots for next year a number of clean up items must be taken care of, at year end. To receive your deposit back ensures the following:

- Tools must be removed from plot and stored in shed after being marked with your name on them or taken home.
- Boards, sticks and rug pieces can be stored on plot in orderly fashion on one corner of plot.
- All weeds and plants on plots must be removed or composted other than perennial flowers and herbs.
- Weeds on paths connecting plots must be removed.
- Chores must be accomplished.
- Root vegetables being harvested during the winter can be left in plot. A bale of hay needs to cover them to prevent them from freezing and rotting.
- Raspberry and blackberry canes need to be pruned and weeded. Strawberry beds need to be unmated and weeded.
- A garden work bee will be organized to ensure that all fall clean up, harvesting and "putting the garden to bed for the winter" has been completed by seasons end.

17. Policy Enforcement

To ensure there is a fair method to deal with those who do not comply with community gardens policy the following outlines the steps that will be taken when there is non adherence:

- 1st warning Plot leasers will be verbally approached and given two weeks to comply
- 2nd warning A written warning about lack of maintenance, or non adherence to the lease agreement. They will be given one week to comply. The plot lease will be cancelled if no action is taken.
- 3^{rd} A final written notice will be issued. Plot lease will be cancelled.

18. Organic Methods for the Community Gardens

It is no wonder some people raise their hands in despair when choosing fertilizers and amendments. Did you know there is a difference between the two?

Fertilizers provide food for plants while amendments improve the soil structure and increase the availability of nutrients and moisture to plants.

Organic fertilizers not only add nutrients to the soil, they may also improve the soil structure. These include bone meal, blood-meal, bat guano, animal manures, compost, fish fertilizers, lime, peat and leaf mould.

Fortunately, there are now a multitude of organic amendments and fertilizers on the market to make organic gardening so much easier.

Be careful not to overdo it. You actually can add too much organic matter to the soil. A general rule is to dig no more than 4" of organic material into the top 8"-12" of soil per year.

If using manure or compost, it should be well-decayed and should look like healthy, dark soil. Do not use any organic material if it gives off a foul odor or is hot. These signs indicate that it is not yet properly cured and ready for use.

The following is a list of organic fertilizer and soil amendments, their uses, pH and nutrient values:

Organic Fertilizers

Most Organic Fertilizers should be applied as you prepare planting beds. Why organic? Your plants better absorb the nutrients they need in organically prepared soil. Organic gardening also reduces the probability of harmful insect populations and diseases, plus attracts helpful earthworms.

Fertilizers are often recognized by the three main ingredients:

Nitrogen (N)	• Necessary for green rapid plant growth as it permits plants to produce more	
	chlorophyll, sturdy plant growth (vegetative growth).	
	· A deficiency shows as weak, yellowish, pale green growth.	
Phosphorus (P)	· Necessary for root, fruit, flower development, and seed development.	
	· Some disease resistance.	
	• A deficiency shows as a purplish tinge on green leaves.	
Potassium (K)	(K) · Necessary for root and stem development.	
	· Aids in plant resistance to drought, disease.	
	· Increases winter hardiness.	
	· Prevents water loss during hot weather.	

Fertilizer labels show N-P-K. Each letter represents the above elements. Number represents the % by weight in the container.

Example: N-P-K 6-8-6 there is 6%N, 8% P, and 6%K, in the container. The remaining 80% may be a combination of fillers that allows the fertilizer to be easily spread, and micronutrients such as sulphur (S), calcium (Ca), magnesium (Mg), boron (B), iron (Fe), zinc (Zn).

Organic fertilizer sources:

Manure - animal eg: sheep, steer, rabbit, worm casting.
Manure - green cover crop dug under prior to planting
Compost - soil amendment from decomposed plant/animal material. Source of nutrients, strengthens soil structure. Increases soil texture, breaks down slowly to release nutrients and aids in beneficial soil organisms habitat.

Soil pH:

pH (potential hydrogen) refers to the amount of hydrogen in the soil and governs plant growth, determining absorption of these vital nutrients. For flower and vegetable beds between 6.0 and 7.5 is suitable. For acid-loving plants like potatoes, blueberries, azaleas, rhododendrons, and hydrangeas a soil toward the acid side is best.

pH ranges from 1.0 to 14.0. Neutral is 7.0. Readings below 7.0 are acidic. Above 7.0 soil is alkaline. To determine pH you can use a simple home soil test kit or take a soil sample to your local garden center.

Soil Nutrients:

Nitrogen (N) animal manures, fish emulsion, dried blood meal, cottonseed meal (lowers pH), chopped or shredded leaves, composted grass clippings, alfalfa meal.

Phosphorus (P)

Bone meal (raises pH), phosphate (crushed limestone).

Potassium (K)

Langbeinite mineral, greensand (mineral glauconite), granite dust, seaweed, wood ashes/potash (raises pH)

Magnesium Dolomite / Dolomite lime (raises pH)

Sulphur (lowers pH)

Increases crop protein and used sparingly as fungicide. Use with potatoes to help prevent scab.

19. Least-Toxic PESTICIDES

I) INSECT CONTROL

Bacillus Thuringiensis (Kurstaki) [Safer's BtK Biological Insecticide].

Contains a common species of soil bacteria, which produce spores and protein crystals that infect and kill caterpillars. Non-toxic to other insects, animals and people. Non-persistent, breaks down in a few days. Used on leaf-eating caterpillars in green houses, and gardens. Spray foliage while caterpillars are actively feeding, caterpillars stop feeding immediately but may not die for 2-5 days.

Horticultural (Supreme) Oils: Dormant and Summer Oils [Green Earth, Safer's, Wilson's brands]

Contains highly refined petroleum oil, or canola oil; acts upon contact, by suffocation and by disrupting other physical processes; no residual effects.

Dormant oil is for overwintering eggs of aphids, some moths, mealy bugs, pear psylla, pear and rose slugs, scales, spider mites. Summer oil is for mealy bugs, rust mites, scales, spider mites, whiteflies. Dormant oils used on deciduous woody plants after leaves drop, or before growth starts; summer oils on shrubs and trees in growing season.

Always check labels for list of plants that cannot tolerate oil sprays.

Insecticidal Soap: [Safer's, Green Earth, Origins brands; Safer's Trounce + pyrethrins]

- Contains biodegradable fatty acids; acts upon contact against insects and mites; no residual effects.
- Used on aphids, earwigs, mealy bugs, pear and rose slugs, psyllids, scales, spider mites, whiteflies and other insects; outdoors and indoors.
- Thorough spraying required; repeat applications may be necessary.
- Limit number of times soap applied to the same foliage as it can damage leaves. Phototoxic to some plants (check labels).

Silicon Dioxide (Diatomaceous Earth) [Chem-Free Insectigone; Green Earth Bug and Slug Killer]

- Contains ground up fossilized shells of diatoms mined from natural deposits.
- Acts upon contact against insects by causing them to dry up; kills most insects that contact it. Non-toxic to people, animals, birds, fish, earthworms.
- Long residual effects, if kept dry and not dispersed, best for structural pests, kills beneficial insects; limit use on outdoor plants to spot treatments.

ii) WEED CONTROL

Fatty Acid Herbicide [Safer's Top gun; Safer's Superfast Patio Killer]

- Naturally occurring fatty acid compound acts on contact to kill foliage of most plants; non-residual.
- Controls annuals and provides suppression or top-kill of some perennials.
- Apply in spring or summer to actively growing weeds, less than 13 cm tall.
- Avoid spray drift on desirable plants.

Acetic Acid Herbicide [Ecoclear; President's Choice Weed Controller]

- Contains the same naturally occurring acid as in vinegar; acts on contact to kill foliage; non-residual.
- Uses and timing are the same as fatty acid herbicide (above).

Corn Gluten Meal Pre-emergent Herbicide [Turf Maize]

- Non-toxic, animal feed source; also sold as a natural fertilizer.
- Suppresses germination of seeds; registered to control dandelion and smooth crabgrass in lawns.
- Controls only germinating seeds, not established weeds; should not be used on new lawns until after the first mowing.

iii) DISEASE CONTROL

Sulphur [Later's, Wilson's, Green Earth, Green Cross, C-I-L brands; Safer's Defender]

- Sulphur particles bind with spores to prevent germination; broad-spectrum control of fungi, also a miticide; no residual effects.
- Used on foliage for black knot, black spot, leaf spots, powdery mildew, rusts, apple and pear scab and others; also controls russet and rust mites.
- Use only on plants tolerant to sulphur or extreme injury may result (check labels).
- Low toxicity to mammals, bees, birds, but toxic to beneficial mites.

Lime Sulphur [Later's, Green Earth, Green Cross, C-I-L brands]

- Contains a calcium sulphur compound; controls fungi, also mites and some insects; no residual effects.
- Used as dormant spray or growing season spray for fungal diseases; also for scales, spider mites, rust mites, aphids, mealy bugs, peach borers.
- Phototoxic to most actively growing plants; use growing season spray only on plants listed on label and at the correct dilution.

• Moderate toxicity to mammals, bees, birds, toxic to beneficial mites.

iv) SLUG CONTROL

Ferric Phosphate [Safer's Slug and Snail Bait]

- Contains a food-grade iron supplement, mixed in a pasta bait.
- Metal ions cause slugs & snails to stop feeding, dry up and die in 3-6 days.
- Non-toxic to people, pets, birds, insects, earthworms and other wildlife
- Remains active for a week even in heavy rain.
- Studies showed 85-100% kill of common slug species; use instead of metaldehyde.

v) HOMEMADE PESTICIDES

Some gardeners turn to using household ingredients as pesticides in the belief that these will be safer than the pesticide products from the store. Two common misconceptions about homemade sprays are:

Misconception #1: Homemade sprays **are not pesticides.** According to the federal Pest Control Products Act, a pesticide is any material sold <u>or used</u> to destroy or repel pests.

Misconception #2: **Homemade pesticides are safer than commercial pesticides.** Sprays made from food ingredients are undoubtedly safer for people than many registered pesticides. However, this does not mean they are safe for plants or beneficial insects. Regardless of the ingredients, if a pesticide has the desired effect *on pests*, it is likely to harm other organisms. Home recipes featuring stronger ingredients, such as tobacco, salt, bleach, gasoline or rubbing alcohol are certainly not safe to use as pesticides. Not only can they harm plants and kill beneficial insects, some are toxic to people and can cause environmental damage.

The following ingredients are the safest of the ingredients most commonly listed in home recipes:

Plain water: Strong sprays of water are an effective control for aphids, pear slugs and rose slugs. Washing these insects off of plants has been shown to be just as effective as using other insecticides. For best results, spray water at least twice, a couple of days apart. Weekly water sprays have also been shown to control powdery mildew. Applying boiling water works well to control weeds in crevices in sidewalks and other hard surfaces.

Soaps: Safer's built an entire range of pesticide products from a particular kind of soap. Unlike those products, however, dish soap and laundry powder contain perfumes, whiteners and other ingredients. These should not be used on food plants and some may damage leaves. Most soap spray recipes call for a 1% solution of pure soap and water (about 3 tablespoons per US gallon of water). Higher concentrations are likely to damage plants. If you try homemade soap sprays, always test spray a few leaves first. Wait a couple of days to make sure the leaves were not burned before treating the whole plant.

Baking Soda: Cornell University researchers found that a mixture of 0.5% of baking soda plus 0.5% of

horticultural oil controlled powdery mildew on cucumbers. A 0.5% solution is approximately 1 tablespoon baking soda and 1 1/2 tablespoons of oil per US gallon of water; 1/4 teaspoon of soap is usually added as a spreader. Some gardeners use baking soda sprays on their roses. Note that higher concentrations (2%) of baking soda damages leaves; also, if baking soda builds up in the soil from frequent use, it can stunt plants.

Oils: Vegetable oils, mixed at 1% concentration (3 tablespoons per US gallon of water, with 1/4 teaspoon soap as a spreader) have been shown to control fungal diseases on plants. Oils are tricky, however, as they readily burn plant leaves, so beware of any recipe that calls for a more concentrated mixture. Always test spray before risking an entire plant or crop.

Garlic, hot pepper, aromatic herbs: None of these ingredients are likely to cause problems on plants regardless of the concentration. The most common method of making a spray is to put the ingredients in water in a blender, whiz for several minutes, then strain out the juice and mix with a larger amount of water to make a spray. Most recipes call for a few drops of soap per gallon of spray to act as a spreader. Active ingredients in garlic have been shown to have some fungicidal effects and the active ingredient in hot pepper, capsaicin, has been shown to repel some insects.

Milk: A 10% solution of milk and water (1 part milk: 9 parts water) has been shown to be effective against powdery mildew on squash and cucumbers. Spray in the morning and always test a few leaves first.