

# Karls Hall Greenhouses

## Bench Space Fee Schedule, Plant Rental Fees, and Operating Procedures

### Introduction

The Darr School of Agriculture's Karls Hall Greenhouses are located on top of the Karls Hall building on the MSU campus in Springfield. The facility features four separate electronically climate-controlled greenhouse rooms. Greenhouses are used for research and teaching needs of the School of Agriculture faculty and staff.

In an effort to recuperate costs for operation of the facility in an equitable manner, space fees have been implemented for all non-School of Agriculture users beginning Aug. 1, 2011. The fees are based on the amount of space used, measured in square feet, as well as consumable materials, time required for greenhouse staff to care for plant materials and the areas they occupy, and other costs.

To request bench space, all potential users, including those within the School of Agriculture, must submit a Service and Space Request Form at least two weeks in advance of the expected project start date. The form is available by contacting Dr. Clydette Alsup-Egbers, Greenhouses Supervisor, 417-836-5095, clydettealsup@missouristate.edu. Contact Dr. Alsup-Egbers with questions regarding the operation of the greenhouses.

Projected start and finish dates, the plant(s) to be grown, type of containers, labels and other materials, cultural information needed for care of the plants, name of a contact person, and others who will be associated with the project, plus the signature of the responsible faculty or staff person are required on the form.

### Greenhouse Space and Use Fees for Non-School of Agriculture MSU Personnel

\$5.00/square foot/month with a minimum 1 month time period

The fee includes:

- Allocated space in the greenhouses
- Lights, operation of greenhouse equipment (fans, vents, heating, etc.)
- Watering (including on weekends and holidays)
- Fertilizing (through irrigation water) using our standard fertilizer source
- Insect, disease and weed control by methods deemed appropriate by greenhouse staff
- Sanitation including washing and sterilizing used containers
- Normal greenhouse room clean-up done by the greenhouse work crew
- Time required for supply inventory, and project consultation with the greenhouse supervisor
- Materials: *reused/recycled* containers, labels, label markers, office supplies used for greenhouse purposes (users may supply their own containers and labels if desired).

The fee **does not include the following but these can be provided for an additional fee:**

- Seed or plant material
- New and non-recyclable containers (such as inserts into flats)
- Soil, pre-packaged soilless mixes, fertilizers that we do not normally use, and other soil/media amendments
- Special chemicals or other materials not normally available in the greenhouse, the labor required to order those items, or the cost of traveling to obtain them
- Removal/composting of plant material once the project is completed

In addition, the fee **does not include** potting or transplanting. Arrangements for those services can be made for a supplemental fee of \$20 per person per hour.

The above fees apply only to university faculty, staff or students for not-for-profit activities. Commercial users will be charged \$15 per square foot per month, plus the specified fees for additional materials or services.

### **Allocation of Greenhouse Space**

Bench space is allocated on a first-come, first-serve basis. Priority is given to the Darr School of Agriculture faculty, staff and students for teaching and research activities. No space will be assigned to a user permanently. Space assignment is for up to three months per request. For ongoing projects, users may reapply for the same space. If a project cannot be completed within three months, the user should notify the greenhouse supervisor and complete another Service and Space request form. User adherence to greenhouse policies stated in this agreement will affect subsequent requests for greenhouse space. Any user is responsible for paying the fees for his/her allocated space for the project prior to starting any work in the greenhouse.

If the assigned space is not used within one month of the projected start date, it is subject to re-assignment.

The project and users are limited to those users listed on the original Service and Space Request. Users may not sublet or reassign greenhouse space to other users. Greenhouse rooms are not storage areas for pots and other cultural supplies. No items are to be stored under the benches without permission. Any clutter left in the greenhouses or access corridors will be removed without notice by the greenhouse staff. Personal plants are not allowed in the greenhouse to be cared for over vacation periods, personal leaves, or for any other reason. All unauthorized plants will be discarded without notice.

Once space is approved, users need to submit payment to the William H. Darr School of Agriculture by cash, check or budget transfer prior to starting any activities in the greenhouse.

## Greenhouse Policies for Users

All plant material brought into the greenhouse must be disease and pest free. The greenhouse supervisor must be notified BEFORE any plant material is brought into the greenhouse. Special care must be taken when plant material is brought in with soil attached to its roots. The potential to contaminate greenhouse soil supplies is high in these cases. If serious pest problems are detected on new plant material coming into the greenhouse, you may be asked to remove these plants until the pests are controlled. If this prevents you from using the greenhouse space, the rental fee will be refunded.

Report any insect or disease problems to the greenhouse personnel so that spread of pests can be contained.

Users may not apply chemicals without permission from the greenhouse supervisor, to ensure any chemicals are compatible with other plants in the greenhouse.

Users must comply with all safety regulations for personal protective equipment and adherence to MSDS requirements for chemical application.

If chemicals are used during a project, they must be removed and properly stored when not in use.

Do not leave projects, equipment, supplies or samples in the headhouse, or in any areas not included in allotted bench space without prior permission of the greenhouse supervisor.

Do not move your plant materials to other areas of the greenhouse without requesting permission from the greenhouse supervisor.

Do not move or rearrange plant materials of other users without permission from the greenhouse supervisor. The other plants may be part of a research project requiring that specific location and arrangement.

Use of transgenic plants or invasive species must receive approval from the greenhouse supervisor. Any waste materials from such materials must be placed in plastic autoclave bags which are available in the headhouse, closed and labeled with the user's name, and placed in the bin labeled "waste for autoclaving."

Users may not make changes, deletions or additions to the permanent facilities without approval from the greenhouse supervisor.

Respect other users, their plants and their space. Do not move or rearrange plant materials of other users without permission from the greenhouse supervisor. The other plants may be part of a research project requiring that specific location and arrangement.

Stay within allocated space with all plants and associated materials. Do not move your plant materials to other areas of the greenhouse without requesting permission from the greenhouse supervisor.

When needed for greenhouse maintenance activities or class projects, your plants and/or materials may need to be moved to another area of the greenhouse. You will still be allocated the same amount of space and specified environment, and you will be contacted about this ahead of this need, whenever possible, so you can be involved in moving the plants, if desired. For emergency situations, you will be contacted as soon as possible after the move, and will be notified where your plants are now located.

If automatic irrigation is provided, it is your responsibility to check crops on a regular basis for correct irrigation and schedule. Avoid overwatering.

Do not fill trash containers with materials so heavy that it will be a burden for maintenance personnel to empty them. Instead, pull out and tie shut a liner and replace it with a fresh liner for disposal of additional materials.

**The greenhouse user will in general be expected to do the following:**

- Assist with the acquisition of unusual seeds or plant material required for the greenhouse project.
- Carry out all experimental treatments and make all experimental measurements.
- Label all plant material, including project leader's name.
- Maintain an active role in the progress of the greenhouse project.
- Harvest all plant materials required for experimental purposes.
- Maintain clean aisles in greenhouses and clean up work and potting areas in greenhouse potting area and headhouse, and not leave any unattended materials on potting benches or greenhouse.
- Follow the sanitation, safety, equipment and disposal procedures outlined in this document.
- Notify the greenhouse staff promptly at the end of a greenhouse project. Assist with the disposal of unneeded plant material and the removal of equipment at the completion of the experiment.
- Remove all dead or dying plant material promptly.

**Services provided by the greenhouse staff include:**

- The staff is available to assist with problems or special needs that may arise during the course of a greenhouse project.
- Watering (including weekends and holidays) and fertilization of plants at the request of the user. The greenhouse staff will not assist with any watering and/or fertilizing which are part of experimental treatments.

- Disease and pest control programs, usually after consultation with the user.
- Growing plant materials for class and research use.
- Assist with the acquisition of common seeds, plants or other materials as required for greenhouse projects.

### **Greenhouse Access**

Hours of operation are normally 8 a.m. to 5 p.m. Monday through Friday, and it is recommended that all non-Agriculture personnel complete their activities during this time. If it is essential that you have access to the greenhouse outside these times, and when no students or workers are present, please contact Dr. Alsup-Egbers or one of the School of Agriculture staff in 201 Karls Hall to arrange access to the greenhouses.

Access to the greenhouses is limited to authorized faculty, staff and students. Visitors must be accompanied by a faculty member, staff member or student while in the greenhouse area. Children must be under the direct supervision of an adult at all times.

The storeroom will often be locked. If you need supplies when the storeroom is closed, please contact the greenhouse supervisor in advance.

### **First Time Users**

All first time users of the greenhouse facilities are encouraged to schedule an orientation session with the greenhouse supervisor. This session will introduce the user to the resources within the greenhouses and headhouse.

### **Greenhouse Sanitation Procedures**

Use clean containers and tools. All pots, flats, tools, etc. are to be washed and chemically sterilized before being used in any greenhouse project.

Put dirty containers and tools in their proper place. Used pots, flats, tools, etc. are to be placed in the "Dirty Pot and Container Collection Bin" located in the headhouse. These items are not to be reused until they have been washed and chemically sterilized.

Wash your hands before working with plants. This is especially important when working with propagation materials (seeds, seedlings, cuttings and planting media) or if you smoke.

Avoid putting plant material, containers or tools on the floor or other contaminated surfaces. The floor is not a desirable work surface.

Hoze nozzles must be kept off the ground to prevent the spread of pathogens. Hoses must be kept untangled and stretched out along the aisles to avoid a tripping hazard.

All water spigots must be turned off when not in use. Turn off water at the valve, not just at the breaker valve which is located at the end of the hose.

Keep the media inside bags clean. Close the bags after using media. Use only the plastic scoops that are stored inside the bags or in buckets beside the bags to move media around. Do not put these items on the floor. Do not use spilled media including that which accumulates on the floor during repotting.

Sweep up any media spilled in the headhouse, enroute to the greenhouses, on counters or on carts, and place it in the bins marked "Composting Materials." Brooms and dustpans are provided.

Do all of your work with the plants first. Then clean up the work area and greenhouse as a second, separate operation.

Keep all hose ends clean and hung up off the greenhouse floor when they are not in use.

All greenhouse benches, soil bin covers and propagation benches are to be kept clean. Do not use or lay any unsterile tools, containers, etc. on these areas.

Greenhouse carts are to be hosed off after use, and returned to the headhouse.

As mentioned above, all plant material brought into the greenhouse must be disease and pest free. The greenhouse supervisor must be notified BEFORE any plant material is brought into the greenhouse. Special care must be taken when plant material is brought in with soil attached to its roots. The potential to contaminate greenhouse soil supplies is high in these cases.

All insect and disease problems are to be reported immediately to the greenhouse staff.

All greenhouse space is to be kept clean and orderly by the user(s).

### **Safety Procedures**

Appropriate footwear is required for all greenhouse personnel, users and visitors. Shoes must be of the closed-toe type. Sandals are prohibited. Backpacks and bulky coats must be left in the headhouse and not worn or taken into the greenhouses.

Touching food with hands that may have touched plants, media or chemicals is not recommended so please do not eat while in the greenhouses. Drinks with lids are allowed.

Do not sit, stand or put your foot on any of the greenhouse benches. This will also help prevent the spread of diseases.

### **Equipment**

Greenhouse equipment (including thermostats, fans, vents, timers and irrigation systems) is only operated by the greenhouse staff. Contact the greenhouse supervisor to request

changes in any equipment or setting. Immediately report any malfunctions in the environmental controls to greenhouse staff or Campus Security at 417-836-5510.

Greenhouse tools and equipment are not for personal use.

### **Disposal of Plant Material or Media**

The greenhouse user must coordinate the disposal of plant material in a timely manner after completion of his/her project.

Non-woody plant material which is not invasive or transgenic, and media that is not infested, are to be placed in the bins labeled “Composting” in the headhouse.

### **Smoking**

Smoking is prohibited in all areas of the greenhouses.

### **Non-Compliance Statement**

Any non-compliance to terms of this document will result in immediate destruction of all plant material without notification, and non-refundable fees, and revocation of any future use of greenhouse space.

### **Rental of Greenhouse Plants**

Plant materials are available on a rental basis. We have four categories of plants available, based on plant size.

Category 1: up to 12 inches tall, \$3 per plant per day

Category 2: up to 2.5 feet tall, \$5 per plant per day

Category 3: up to 5 feet tall, \$10 per plant per day

Category 4: over 5 feet tall, \$15 per plant per day

We often do not have flowering plants and would have to order those in, so there is an additional fee for those. The fee depends on the type of flowering plant(s) requested.

We do not have fancy pots so the renter needs to provide those if desired. However, we do usually have plastic terra-cotta colored pots which are available at no extra charge but must be returned with the plants.

If plants are returned damaged, the renter must pay the cost of replacement.

The rental of any plant material must be approved in advance.

Delivery of the plants is may be available for an additional fee, and requires additional advanced notice.

### **Field Trips**

Visitors are welcome in the greenhouses. All group activities (classes, tours, etc.) are to be scheduled at least three weeks in advance by contacting the greenhouse supervisor.