University of Oregon Greenhouse Facility Policy 2016

Overview of Greenhouse Facility

The University of Oregon Greenhouse Facility comprises more than 6,000 square feet of greenhouse space and a one-acre field to support research and teaching activities. The facility consists of a small greenhouse on the fourth floor of Onyx Bridge Hall, two large greenhouses near Campus Operations, and the Quonset with an incubator, growth chambers, drying ovens, potting bench, and more. The facility is staffed by a part-time Greenhouse Manager who maintains the infrastructure, provides guidance about growth conditions and integrated pest management, keeps the facility stocked with routine supplies, and provides routine plant care; student workers provide much needed assistance.

The UO Greenhouse Facility serves as a core facility supporting the research and teaching missions of faculty and students (undergraduate, graduate, postdoctoral) in multiple academic departments and institutes across the university, as well as multiple universities throughout the country.

Questions regarding greenhouse use and operation may be directed to:
Brian Dykstra
Greenhouse Manager
Office (541) 346-4550
Emergency / after-hours cell (616) 558-0404
1241 University of Oregon
Eugene, OR 97403
Email: briand@uoregon.edu

Hours of Operation

The greenhouses are open at all times to greenhouse users with keys and passcodes. The Greenhouses are staffed seven days a week by part-time student workers. The Greenhouse Manager is typically available onsite:

Mon: 7-10, 12:30-3:30; Tues: 7-9:30; Wed: 7-10; Thurs: 7-9:30; Fri: 7-1; or by appointment.

Emergencies

In case of an emergency please call 911 or, Public Safety dispatch at 346-2919. Contact the Greenhouse Manager immediately if any of the following events occur:

- Alarm has been triggered
- Broken windows (do not approach broken glass, especially if overhead)
- Unable to secure compound, i.e. broken locks, or unresponsive alarm system
- No water or electricity
- Chemical spills

GREENHOUSE FACILITY

T (541) 346-4550 http://uogreenhousefacility.uoregon.edu

Important Information for Greenhouse Users

It is the Greenhouse Manager's job to maintain the greenhouse complex in optimal operating conditions. In order to accomplish this, it is necessary to have the full cooperation of all users. It is important that all users respect the property and activities of others in this facility.

To help the Greenhouse Manager maintain healthy plants, you should:

- (1) Coordinate with the Greenhouse Manager on environmental settings, watering, maintenance, safety, and pest/disease control when you begin your research project and as needed throughout your tenure.
- (2) Check your greenhouse space on a regular basis and notify the Greenhouse Manager when you have any problems. Patience is appreciated, as the Greenhouse Manager is here only half time.

1. Space Allocation

Contact the Greenhouse Manager if you are interested in utilizing greenhouse space.

2. Charges for Greenhouse Use

Charges for greenhouse use are based on the square footage occupied. Our rates are in the midrange of those charged at various state universities for similar services. These fees cover only a fraction of the actual cost; the balance is allocated by the UO Office of Research and Innovation from indirect cost returns from grants awarded to UO

researchers. Because this subsidy is derived from and is intended to support research projects at the UO, fees for non-research use and for non-UO users are higher than are those for UO research projects.

- a) There is a minimum charge of \$50 a month. The purpose is to cover administrative costs for use of small amounts of space. This will not add to the charges when space fees are greater than \$50/month.
- b) There is a one-month minimum and a one-bench minimum.
- c) Use of a portion of a bench will be charged at the full bench rate.
- d) Usage will be assessed the first and third week of each month.
- e) Greenhouse users will be billed on a monthly basis.
- d) All greenhouse use must be approved by the Greenhouse Manager.

Greenhouse Usage Fees (Effective July 2016)

Cost per square foot per month

UO Research: \$0.62

UO Education/Teaching: \$0.82

Non-UO: \$2.00 Commercial: \$2.50 Flat rates cost per month Outside Field: \$250 Greenhouse 111:

Large Soil Bed: \$480 Small Soil Bed: \$270

Growth Chambers & Drying Ovens: \$50

Included in charges:

- Daily watering 365 days a year.
- Regular inspections for insects and disease and pest/pathogen control. The Greenhouse Manager has the right to apply integrated pest management (IPM) techniques according to need to ensure all users' projects can be completed with healthy plants. Users will be consulted before a pesticide application is made.
- Hoses and nozzles
- High/Low temperatures recorded
- Horticultural/IPM advice
- Some reusable containers are available. Users may be willing to share pots.

Please inquire with the Greenhouse Manager.

- General purpose pesticides

Facilities Services covers the following;

- Cooling systems Heating systems
- Door Fixed lighting for general illumination
- Repairs to hardwired equipment
- Routine Plumbing (Not drip or irrigation systems past the water supply)

To see an extensive list of things covered by Facilities Services, visit:

http://campusops.uoregon.edu/services

NOT included in charges:

- Lighting (bulbs and light fixtures) Soil
- Student labor for tasks other than watering
- Pots
- Stakes Labels
- Timer
- Fertilizer
- White wash
- Repairs to growth chambers
- Pesticides used exclusively for a User's project

Facilities Services does not provide direct support for research activities, such as grow lights, auxiliary heat, or circuit modification for equipment.

If the Greenhouse Manager spends an unusual amount of time on your project, additional charges will be assessed on a case-by-case basis.

Labor Fees

For managerial labor beyond general tasks there are hourly labor rates.

University of Oregon Academic: \$20.00 hr

Oregon Universities: \$30.00 hr

Commercial: \$50.00 hr

Student workers are available for special projects at additional charges. If you choose to utilize student help, hours spent on your project will be logged on a separate time sheet. Student workers are great for tasks such as weeding, planting, cleaning, and washing pots and

flats. They serve as a positive and proven source of assistance with daily needs.

3. Plant Spacing

Crowding of plant material on benches is not allowed. Plants that are too close together cause irregular plant growth and an inviting environment for pests and disease. If plants are too crowded, the Greenhouse Manager will inform the user who must comply with the requests.

Discard plants promptly when experiments are completed to avoid unnecessary pest sprays, watering, etc. As a greenhouse user, it is your responsibility to help keep the facilities in a clean and orderly condition.

4. Storage

Greenhouse users have access to limited storage space at no extra charge. Storage is available on a first come first serve basis and is proportionate to greenhouse usage. Stored materials must be organized so as not to interfere with the day-to-day operations of the facility. Storage can sometimes be provided for non-greenhouse users, but fees will apply (to be negotiated with the Greenhouse Manager and Faculty Oversight Committee).

5. Summary of Expectations for Greenhouse Users (details provided below)

- 1. Maintain the security of the greenhouse facility through proper use of the security system.
- 2. Do your part to maintain a healthy environment for all users by respecting the Greenhouse Manager's requests concerning plant debris, plant spacing, pest control, etc.
- 3. Do not bring any plant materials, chemicals, into the greenhouse without first consulting the Greenhouse Manager. It is in your interest to inform the Greenhouse manager of any new equipment or materials you bring to the greenhouse and storage areas. Please label accordingly.
- 4. Adhere to the rules for controlling the greenhouse environment as outlined below.
- 5. Only the Greenhouse Manager is permitted to handle and apply pesticides.
- 6. If an insect infestation or pathogen spread makes a greenhouse unusable by others due to failure to adhere to these guidelines, charges will be incurred beyond that to the actual planting area.

6. Security

The greenhouse facility is located behind a locked gate and is on a user-only access security system. It is imperative to keep gates locked and doors closed at all times. The security alarm must be set upon leaving if no one else is present. Before leaving the facility at any time during the day, you must make sure that all doors and gates are closed and that no one else is around. Do not assume someone else is here and will do it. Take the time to do a walk through. Every greenhouse user must be assigned a security code. The Greenhouse Manager issues security codes to those using the facility on a regular basis. The Greenhouse Manager will keep a current list of the users and their codes. Do not share your security code or keys with anyone.

An understanding of the alarm system is necessary to assure the absence of false alarms,

especially after hours. It is the responsibility of the Greenhouse Manager to ensure that all persons using the facility receive a thorough orientation to the security alarm system.

To ensure optimal security of the greenhouse facility, please make an effort to become familiar with the other greenhouse users. Do not let anyone inside the greenhouse complex gate unless they are a greenhouse user. If you are uncertain, ask for a University of Oregon I.D. and the name of the professor with whom the person works. When in doubt, call the Greenhouse Manager.

7. Exterior Areas

The areas surrounding the greenhouses are to be kept clean, organized, and weed free at all times. Please do not leave debris, plants, pots, or soil sitting outside of your designated areas for more than 24 hours. You will be charged for clean up. Do a thorough job of clean up and do not leave debris trails along the way. Debris contributes to the spread of disease and insects. Please keep all walkways and spaces in between tables free of obstructions at all times.

8. Environmental Controls

With the exception of primary users, do not manipulate any of the heat, vent, or cooling systems, unless instructed to do so. Users should contact the Greenhouse Manager immediately when you notice any problems. If the Greenhouse Manager cannot fix it, facilities or HVAC will be contacted as soon as possible to correct any problems. Thermometers are available for daily record keeping for each greenhouse if needed.

9. Greenhouses

Greenhouse 110 North End

Roof vents are on an automated system. Side vents can be opened manually at any time. The heat is turned off for the season when temperatures increase. Swamp coolers are cleaned and filled seasonally by Facility Services. White wash is applied in the summer to help with cooling.

Greenhouse 111

Only Susan Belcher and the Greenhouse Manager are allowed to operate the Wadsworth temperature control. The roof vent is inoperable so do not open it. The evaporative cooling system will be serviced and maintained seasonally by Facilities Services. The heat is turned off for the season when temperatures increase. The jet tube stays on 24/7 year around.

460 Onyx Bridge Greenhouse

Due to high temperatures, the environment in this greenhouse is not conducive to planting during the summer. Use at your own risk during summer. Facilities Services will turn off the heat at their discretion in late spring. The plants in room 460 A (Biology Lab plants) remain in this house all year. Please do not adjust thermostats for lights, roof vents, or heat and swamp coolers without informing the Greenhouse Manager.

10. Safety

Emergency contact info is posted in front of the greenhouse office and in the Onyx

Bridge greenhouse. There is no dress code, but closed toed shoes and long pants are highly recommended.

- Walkways must be free of tripping hazards.
- Walkways must be clear of hoses.
- Long pants and closed toed shoes must be worn when operating any machinery. All users frequenting the greenhouse should be familiar with the location of phones, emergency phone numbers, and the emergency eye wash and shower stations. The MSDS book is available next to the phone in Quonset 109 in the main greenhouse complex.

11. Insect and Disease Control

The Greenhouse Manager will survey on a regular basis all plants for insect and disease infestation, and use an integrated pest management approach. The Greenhouse Manager will inform all users at least two business days prior to any pesticide applications. Only the Greenhouse Manager is allowed to apply and handle pesticides. All legal and safety regulations are followed. The locked pesticide storage cabinet is off limits to greenhouse users and student workers. It is illegal for anyone other than the Greenhouse Manager to apply restricted use pesticides. The improper use of pesticides can put other users or their plants at risk.

- Do not bring live insects into the facilities without advance approval from the Greenhouse Manager. This includes biological controls.
- Any plants brought into the greenhouses must be pest and disease free.
- A sign will be posted outside of an area after each pesticide application. Do not enter the area until after the posted REI (Restricted Entry Interval) date and time posted.
- Employees have legal rights to be informed of all chemical hazards at their work site. Pesticide labels, Hazard Communication, Material Safety Data Sheets (MSDS) sheets and other types of information are available from the Greenhouse Manager to assist any employee with the "Right-to-Know" information.
- All pesticide applications are recorded and available to view upon request.
- The MSDS book is kept up-to-date and is located next to the phone in Quonset 109.
- Users are not allowed to bring in their own chemicals for insect control without Consulting with the Greenhouse Manager.
- Insect infestations must be dealt with promptly to avoid negatively impacting other greenhouse users. Failure to do so may result in extra costs to the user, due to the need of intervention by the Greenhouse Manager.

12. Sanitation

The main washing station is in Quonset 109. Dirty flats and pots from Onyx Bridge are brought back to Quonset 109 to be washed. Any pots or flats you want brought back to Quonset 109 can be put on the designated table. The washing station (the big sink) can be used at your discretion, but please keep the area clean and do not leave things in or near the sink.

- Only use clean containers and tools. All pots, flats, tools etc. should be washed or chemically sterilized with bleach before being used in any greenhouse project
- Clean used containers and tools promptly after use to eliminate the spread of disease and/or pests and to ensure a clean work environment.

- Wash your hands before working with plants. This is especially important when working with propagation materials (seeds, seedlings, cuttings, or planting media).
- All greenhouse benches and floors are to be kept clean at all times.
- Any plant material brought into the greenhouses must be disease and pest free.
- Notify the Greenhouse Manager before bringing any new plant material into the greenhouses.

13. Growth Chambers

There are two working growth chambers and two large drying ovens in the Quonset 109. These are available for use for a small fee (Greenhouse User Fee table).

14. Hoses

Keep all hose nozzles clean and off the ground. Hoses need to be off walkways at all times. Stretch out the hose so it's not twisted with kinks. When stored with kinks, the longevity of the hose is shortened. Users will be charged to replace hoses when not cared for properly.

15. Key Requests

The Greenhouse Manager issues all keys to the greenhouses and gates. Keys must be returned when employees will no longer be using the greenhouses. The keys can be obtained at the UO Public Safety Office and are non-transferable.

16. Lighting

The Greenhouse Manager can coordinate the purchase, location, and installation of supplemental lighting. User's pay for their own light bulbs and new or replacement light fixtures.

17. Maintenance

The Greenhouse Manager along with Facility Services conducts periodic inspections to make sure that the greenhouses are maintained in good operating condition. Please report issues immediately to the Greenhouse Manager. If the Greenhouse Manager is not available contact Facility Services at 346-2319.

18. Media

All media, soil, fertilizers etc. are ordered from off site and are supplied at the user's expense.

The Greenhouse Manager can order and coordinate pick up or delivery of supplies.

- Do not dump or wash media under benches.
- Do not plug sink drains with media.
- When planting, avoid filling pots to the rim with soil. Leave ample space between the top of pot and the soil surface. This will help reduce soil overflow when watering.

19. Personal Plants

Personal plants in the greenhouse should be minimal and short term. The houses are not to be used for private plant care during vacations or holidays. Personal plants must be

labeled to identify the owner. Please contact the manager to learn more.

20. Phones

There are phones in GH 110, GH 111, and Quonset 109. The phones are to be used for work related calls only. In general, do not answer the phone. The Greenhouse Manager must be able to call in and check messages from off campus. If you answer the phone and it is for the Greenhouse Manager who is off site, please have the person hang up and call right back to leave a voicemail.

21. Shading

Shade fabric and white wash can be ordered/applied at the user's expense.

22. Smoking

Smoking is prohibited in greenhouses and surrounding areas at all times.

23. Supplies

Hoses, nozzles, basic tools, and some flats and pots are available to greenhouse users. Additional supplies can be purchased at users' expense. Catalogs are available at the greenhouse office. The Greenhouse Manager or the purchasing staff of your department/institute can assist with ordering, deliveries, and pick-ups.

24. Trash

At the main greenhouse compound, the dumpster is serviced every Thursday. Never leave plant debris in the trashcans located within the greenhouses. Take debris out of the greenhouse daily. This helps reduce insect and disease issues. If there is an issue with the dumpster call Tod Luik at 346-2273.

The Onyx Bridge greenhouse trash is emptied daily so it is okay to put plant debris in the bins located near the front door only. The bin in 460 B is not serviced daily and is not to be used for plant debris. Avoid putting heavy materials (wet soil, sand etc.) in the main garbage bin, as the custodian will not empty it.

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Thank You!