



# Integrated Pest Management Plan for UW Bothell/Cascadia College Buildings and Grounds

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**i. Scope**

This plan applies to all interior spaces in the campus buildings and all portions of the site and grounds surrounding campus buildings. This plan will be consulted prior to taking action on pest management in the building or on the building grounds. Pests include plants or animals that are detrimental to the property, a nuisance to building occupants, a public health concern, or unwanted on the building grounds for other reasons.

**ii. Goals**

<u>Operational element</u>	<u>Goal</u>	<u>Performance measurement unit</u>
Cases that do not warrant emergency treatment	Prior to applying chemical pesticides or baits, alternative pest control methods will be used in 100% of cases	Number of cases
Cases that do not warrant emergency treatment	If alternative methods fail, least-toxic pesticides will be used prior to resorting to the use of non-least toxic pesticides or baits in 100% of cases	Number of cases
Occupant notification	In 100% of non-least toxic pesticide applications, occupants will receive notification according to the notification procedures described below	Number of cases

**iii. Roles and Responsibilities**

**Integrated Pest Management Team**

<u>Name/Title</u>	<u>Responsibilities</u>
Overall responsible party: Tyson Kemper, Grounds Supervisor and Campus IPM Coordinator	<ol style="list-style-type: none"> <li>1. Ensuring that this plan is executed</li> <li>2. Ensuring that the contracted IPM vendor is fully trained on this plan and adheres to the plan procedures</li> <li>3. Coordinating site visits by the vendor for regular inspections and as needed for implementation of pest controls</li> <li>4. Overseeing work performed by the vendor</li> <li>5. Approving the use of pesticides when they are necessary</li> <li>6. Providing proper notification to occupants when non-least toxic pesticides are applied</li> <li>7. Ensuring Building Coordinators are aware of the procedures in this plan</li> <li>8. Evaluating performance and making updates to the plan as necessary</li> </ol>
Pest control vendor	<ol style="list-style-type: none"> <li>1. Adhering to the procedures outlined in this plan</li> <li>2. Identifying pests during site visits and inspections</li> <li>3. Reporting the results of site visits and inspections to the overall responsible party</li> <li>4. Notifying the overall responsible party when pest action thresholds are reached or exceeded</li> <li>5. Obtaining approval from the overall responsible party to apply pesticides when necessary</li> </ol>
Building occupant contacts	<ol style="list-style-type: none"> <li>1. Reporting pest issues in respective tenant spaces to the overall responsible party</li> </ol>

The pest control vendor is responsible for adhering to the procedures outlined in this plan and reporting the results of site inspections to the Campus IPM Coordinator. If at any time integrated and alternative pest control methods fail and chemical pesticides are necessary, the pest control vendor must notify the Property Manager prior to using the chemical pesticides, and wait for approval from the Campus IPM Coordinator prior to applying the pesticides.

Each occupant in the building has a designated Building Coordinator for communications regarding pest control. The Building Coordinators are responsible for reporting pest issues in their space to the Campus IPM Coordinator. When the use of non-least toxic pesticides is necessary, the Campus IPM Coordinator will notify the Building Coordinators, and the Building Coordinators are then responsible for notifying the occupants in their space.

#### **iv. Standard Operating Procedures and Implementation Strategies**

##### **Pest control strategies**

The building interior and exterior will be periodically inspected for the presence of pests and preventive measures will be taken to avoid pests issues. If any pests are detected, integrated (nonchemical) methods will be implemented as the first control step, including sanitation measures, habitat manipulation, exclusion measures, and the use of traps.

**Sanitation:** Potential food and water sources available to pests will be evaluated and minimized or eliminated. This can be done by thoroughly cleaning and maintaining food service areas and break rooms, fixing leaking pipes and faucets, and altering landscape features to eliminate standing water.

**Habitat manipulation:** Vegetation will be cut back away from building envelopes to create a 2-foot buffer zone. Any other conditions conducive to nesting or feeding, or otherwise attractive to pests in the proximity to building envelopes, will be minimized or eliminated.

**Exclusion:** Cracks, crevices, and holes in the building envelope will be sealed. A plant-free zone will be maintained immediately adjacent to the building.

**Traps:** For insects and rodents, non-chemical baits (such as peanut butter) will be used to trap pests. No chemical baits for rodents will ever be used indoors. If chemical rodent baits are necessary outdoors, they will only be used as solid blocks placed in locked outdoor dispensers. No second-generation (single-feed) rodent baits will be used.

If integrated pest control measures are unable to resolve the problem, least toxic pesticides will be used prior to resorting to the use of non-least toxic pesticides. Least toxic pesticides include those that meet the Pesticide Selection Criteria in the campus IPM Procedure and any pesticide product for which all active ingredients and known inert ingredients meet the least toxic Tier 3 hazard criteria under the San Francisco Hazard Review Process (<http://sfenvironment.org/article/residents/leasttoxic-pesticides-for-green-buildings>).

Products that are not regulated as pesticides by the EPA because they primarily contain low-risk ingredients, such as garlic oil, may also be considered least toxic options, even if they are not listed as Tier 3 by San Francisco. Nonrodent pesticides that exceed the Tier 3 criteria are considered least toxic if they are used in self-contained bait stations and placed in locations that are inaccessible to occupants. Rodent baits are not considered least toxic under any circumstances.

**Non-least toxic:** pesticides include all chemical rodent baits and any product that meets the Tier 1 or 2 criteria according to the San Francisco Hazard Review Process and does not satisfy the Pesticide Selection Criteria in the campus IPM Procedure. Non-least toxic pesticides may only be used under the following circumstances:

1. Alternative, integrated, and least toxic pest control measures have been exhausted and the pest action threshold is still exceeded
  - a. In this situation, notification (according to the procedures below) must be given to building occupants at least 24 hours before the pesticide is applied to the building or grounds
2. The emergency action threshold has been exceeded
  - a. In this situation, notification (according to the procedures below) must be given to building occupants no more than 24 hours after the pesticide is applied to the building or grounds

The use of non-least toxic pesticides or rodenticides as pest control in areas requiring frequent treatment on a permanent basis is not an acceptable strategy. Non-least toxic pesticides will not be continuously applied in the building and on the site. Integrated and alternative pest control measures will be resumed once the action threshold specified below for the applicable pest is no longer exceeded.

### **Pesticide application notification**

The overall responsible party will coordinate with campus Environmental Health & Safety Specialist to notify the Building Coordinators via email of the pesticide application, including the pesticide name, the EPA registration number, the treatment location, and the date of the application. The Building Coordinators are then responsible for distributing the notification to the occupants in their space. In addition, the overall responsible party will post a sign at the application site, such that an occupant reading the sign can choose to avoid the application area (for example, if the pesticide is applied in a break room, all entrances to the break room shall have a sign posted). The sign will also include the pesticide name, the EPA registration number, the treatment location, and the date of the application.

### **Building Occupant communication plan**

If pests are observed in a Building Occupant's space, it is the responsibility of the Building Occupant to notify the Building Coordinator of the pest via email and the Building Coordinator will then notify the overall responsible party. Within one business day, the overall responsible party and/or the pest control vendor will inspect the situation and determine whether the regular action threshold or the emergency action threshold has been met. The pest control vendor will then take the appropriate actions.

### **Action thresholds**

Regular treatment includes the use of first non-chemical controls (sanitation, habitat manipulation, exclusion, traps using non-chemical baits), followed by the use of least-toxic control methods if the situation is not resolved, and then non-least toxic control methods if the situation is still not resolved.

Emergency treatment includes the use of the most effective control method as a first step, which may be non-least toxic.

The species below are most commonly found in and around buildings, for more information on practices for pest specific management practices, and invasive species management please see appendices at the end of this document.



Pest Type	Action thresholds
<b>Ants</b>	Regular treatment will be performed if any ants are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if there are ten or more reported cases or complaints of ants within a two day period.
<b>Other insects</b>	Regular treatment will be performed if nuisance insects are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if there are ten or more reported cases or complaints of nuisance insects within a two day period.
<b>Cockroaches</b>	Regular treatment will be performed if any cockroaches are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if the presence of cockroaches is confirmed in two different spaces within the building OR if the presence of a large population of cockroaches is confirmed in one space in the building.
<b>Rat, Mouse</b>	Regular treatment will be performed if rats or mice are noted in the building and their presence is confirmed through monitoring.  Emergency treatment may be used if the presence of rats or mice is confirmed in two or more different spaces within the building.
<b>Bed bugs</b>	Emergency treatment may be used if the presence of bed bugs is confirmed in the building.
<b>Other occasional invaders</b>	If the pests pose a threat to occupants' health, emergency treatment may be sought. Otherwise, regular treatment will be performed.

***v. Performance measurement and schedule for reassessment***

All pest control activity, including inspections, will be recorded by the pest control vender in their Inspection Report. The following items will be tracked:

- Pest type and name
- Pest population density and monitoring frequency
- Pest action threshold observed
- Prevention measures implemented
- Product applied (name)
- Toxicity of the product (the tier level as determined by the San Francisco Hazard Review Process)
- Date and time of product application (if applicable)
- Date and time of occupant notification (if applicable)
- Emergency application? (Y/N). If yes, an explanation of the emergency will be included.

The overall responsible party will record each pest that is reported by Building Occupants in the IPM tracking tool. The pest control vendor will record the applicable items from each site visit in their Inspection Report.

On an annual basis, performance will be evaluated against the goals specified above. If the goals are not being met adjustments will be made to this plan in order to facilitate goal achievement. If adjustments to the action

thresholds are necessary, the overall responsible party will work with Building Coordinators and the pest control vendor as necessary in order to appropriately adjust the action thresholds.

## vi. Quality Assurance/Quality Control Processes

On an annual basis, the overall responsible party will evaluate performance against the goals specified earlier in this plan. If the goals are not being met, adjustments will be made to this plan in order to facilitate goal achievement, and the pest control vendor and Building Coordinators will be educated on the adjustments made to the plan.

## vi. Appendix

### UW Bothell Pest Specific Management Plans : Supplement to campus Integrated Pest Management Plan

**Ants: small or large:** Several ant species inhabit the UWB community. Never allow them to be sprayed with Raid or equivalent chemicals. Spraying common insecticides only scatters them throughout buildings, and soon, many new nests will arise. Pest Control Technician will seek their pathways and nest openings and bait as needed. Treatments will start with Tier III products and escalate as the situation arises. If Tier III products fail, approval for products not on the list will be required.

**Ants: winged.** The complaint comes in that “hundreds of winged ants” are emerging from somewhere. Most ant species swarm at various times, usually in the summer or early autumn. Pest Control Technician will be informed of location of complaint and treatment will include vacuuming of live activity and determining the location of the nest, if applicable.

**Cluster flies.** Exclusion is the number one way to reduce. Caulk to close entryways in siding, windows, trim, soffits, etc. You may want to place fine mesh screening over areas where caulk is not feasible or useful (such as soffits). A vacuum cleaner is a good tool for removing live cluster flies.

**Drain flies.** The key to managing drain flies is the elimination of organic matter buildup at breeding sites. Common breeding sites include sink and floor drains in food preparation areas, grease traps, mop drying tubs, and evaporation pans placed beneath appliances. Regular use of an enzymatic drain cleaner can reduce organic matter buildup in drains. Drain flies can also develop in a wide range of wet organic detritus in general locations.

**Fruit flies.** Keeping raw fruits and vegetables in a refrigerator or sealed container can help. Reduce organic build up near floor drains and in sinks and garbage cans. Traps may be deployed, but they are only partially effective. Pest Control Technician may use enzyme drain cleaners to digest organic matter buildup in drains.

**Hover flies (lesser house flies).** Hover flies usually gather in cool shady places like loading dock overhangs near dumpsters and just hover around. A sticky fly trap can be deployed to keep populations down to a manageable level.

**Fleas.** If complaints for fleas are received, have Pest Control Technician perform an inspection. Once identified, Pest Control Technician will treat accordingly with least toxic options first. Pest Control Technician will return approximately 7 – 10 days after the initial treatment to inspect and retreat as needed. Sanitation is also very important and actions such as vacuuming should take place regularly until infestation is eradicated. If pets are implicated, they need to be treated for fleas by the owners while the Pest Control Technician is treating the area.

**Rats and Mice.** Campus-wide monitoring program utilizing a non-toxic bait around most buildings, secured in tamper-resistant boxes. Boxes are placed strategically around the campus, and monitored monthly. If activity is identified, the use of Tier II products will be implemented and monitored weekly until activity has returned to a manageable level. At the same time, Pest Control Technician will inspect the area for conducive conditions and recommend corrections.

**Indoors:** If a rat is loose in human space, e.g., an office, call the Pest Control Technician immediately and get them working the problem into their schedule. Usually moving the occupant to work in another room is all that is necessary until the Pest Control Technician can arrive and set traps. Traps must be checked 3-7 times per week until rodent activity ceases; do not allow “set-and-forget” trapping. Snap traps are the preferred treatment method inside buildings. The long-term solution is to find out how the rats entered the building, and get the opening(s) closed. Room-by-room exclusion may be the only viable control measure in large infestations.

**Outdoors:** Request the observer to describe the site, then complete a report with good location detail and inform the Pest Control Technician. Check location to see if there is an unsuspected food source or reason for rats to be there, e.g., some well-intentioned soul feeding the squirrels or birds.

**Yellow jacket, hornet, and wasp nests.** Wasps, hornets, and yellow jackets are encountered every year from spring through autumn. Unlike honeybees, they do not swarm but may attack in numbers if disturbed. About 20% of nests belong to hornets (vespids with black as the dominant color), but most nests are occupied by yellow jackets, vespids where yellow rather than black dominates. Both species build nests out of natural wood fiber paper, the color varying depending on the insects’ wood fiber source. Wasps tend to be brown, build small nests often of mud or sand on ceilings, are solitary and much less aggressive toward people. Yellow jackets differ significantly from hornets and wasps by often nesting in the ground or in thick hedges where nests are well camouflaged. Take complaints about “bees” flying up pant legs seriously, and ask the person to take you to the exact location where they were stung. Ground nests are very hard to find unless marked. Have the caller flag the area if possible. The gardeners have orange or yellow flagging tape for this purpose, sometimes a traffic cone with signage is used.

Both yellow jackets and hornets tend to get more irritable as summer proceeds, will attack humans with little or no provocation, and live in nests which grow to contain hundreds of individuals. All nests die every winter, and only gravid queens survive winter to start new nests the following spring. Ignore nests not in human traffic areas, e.g., up in trees and in autumn and winter. When the leaves drop in autumn, nests should be removed to help control beetle populations.

Treatment for nests that pose a risk to humans will be treated starting with Tier III products and/or physical removal. If Tier III products fail or removal is not possible, approval for Tier I or II products will be required.

## **Invasive Plant Species Management Plans : Supplement to Campus Integrated Pest Management Plan**

### **Poison-hemlock (*Conium maculatum*)**

#### ***Ecology***

Poison-hemlock is a regulated Class B designated noxious weed in Kind County and control is required. It is acutely toxic to humans and animals and can quickly invade pastureland. Poison-hemlock spreads primarily by seed. (King County Noxious Weed Control Board fact sheet)



### **Management Plan**

Entire plants are dug up and disposed of in a commercial composting waste stream when encountered. If ever a plant was discovered that had advanced to the stage of seed production the seed heads would be bagged and disposed of in the garbage waste stream.

### **Yellow nutsedge (*Cyperus exculentus*)**

#### **Ecology**

Yellow nutsedge is a regulated Class B designated noxious weed in King County and control is required. This plant is extremely aggressive and persistent. It reproduces by seed, rhizome, and corn-like basal buds or tubers. Tubers are its main source of reproduction with a single plant capable of producing thousands in a single growing season. The tubers can overwinter in the soil and can sprout several times through numerous surface buds before exhausting food reserves. (King County Noxious Weed Control Board fact sheet)

#### **Management Plan**

Plants are not allowed to set seed if possible. Plants, rhizomes, and tubers are dug out, bagged and disposed of in the garbage waste stream. Care is taken to keep soil in which yellow nutsedge has been growing in place over time so as not to inadvertently spread tubers to other areas of campus. Eradication of established patches has proven nearly impossible without the use of chemicals. Limiting new infestations on campus is critical.

### **Japanese Knotweed (*Fallopia japonica*)**

Prepared for campus managers by Arcadis Consulting in 2008.

#### **Ecology**

Japanese knotweed (*Polygonum cuspidatum*) is a Class B designated noxious perennial weed (WSNWCB, 2008). Knotweed spreads primarily by rhizomes and although it has facultative upland species status (FACU), it grows aggressively along disturbed (as from flood events) stream banks. New plants are established by seeds, broken stem parts, or from any node along the rhizomes. Knotweed can sprout from the tiniest fragments if left on moist soil or through direct contact with water. Without intervention, knotweed can permanently displace native vegetation, and destroy fish and wildlife habitat.

#### **Management Plan**





## Herbicide handling and permitting

According to the Washington Department of Ecology (2007) IMP knotweed update, knotweeds continue to be increasingly problematic along riparian corridors in western Washington. With the exception of small patches that might be able to be controlled mechanically, any management of knotweed will likely require some herbicide use. We recommend the use of herbicides containing the active ingredient Glyphosate by either injection or cut- stem pour applications. Herbicide handling methods and application are outlined below. Aquatic herbicides (those used in and around aquatic environments, such as wetlands) are considered to be 'state restricted use pesticides' in Washington State. These herbicides can only be used or applied by certified applicators or persons under the direct supervision of a certified applicator, and only for those uses covered by the certified applicator's license category (WAC 16-228-1231). Permits for aquatic plant control are issued by Washington Department of Ecology (WADOE) and the Washington Department of Fish and Wildlife (WDFW). National Pollution Discharge Elimination System (NPDES) permits are issued by WADOE under the Federal Water Pollution Control Act ([The Clean Water Act] Title 33 US Code, Section 1251 et seq.)(WSDA and WSDOE, 2004).

### ***Herbicide overview and handling***

Glyphosate (trademarked as Aquamaster® or Rodeo® for aquatic use) is the most widely used aquatic herbicide for Japanese knotweed. According to recently updated labeling this chemical is approved for use in injector guns for control of Japanese and Bohemian (*Polygonum bohemicum*) knotweed. As with any herbicide, use:

According to EPA label;

- In correct concentrations and note application limits;
- The proper and effective application method; and
- During suggested timing to coincide with plant susceptibility.
- Before application of herbicide:
  - Measure the area of weeds to determine the amount of herbicide;
  - Post an herbicide notice, if required;
  - Make a record of the amount of herbicide you start with before measuring out for application to help keep track of the amount used at the end of the treatment;
  - Put on personal protective equipment (PPE) including gloves, eye protection, long-sleeved shirts and pants, and closed-toe shoes;
  - Remember to check that equipment is calibrated, in good working order, and free of debris;



- Measure the amount of herbicide for immediate use to avoid having any remaining liquid that would need discarding;
- Rinse all equipment properly after use; and
- Wash before eating, drinking or smoking.

## Stem injection

### *Overview*

The stem injection method delivers the herbicide directly in to the hollow of the lower nodes. Although this method is time consuming in the short term, the success rate, in experimental trials from one treatment in Clark County, was 100% (Soll, 2004). Moreover, this method greatly reduces herbicidal drift, and therefore reduces the likelihood of human contact with the herbicide. Within a wetland, the last quality of this application method is highly desirable. Please note that stems that are ½ inch in diameter cannot be injected. We recommend marking plants during injection to prevent the skipping of any stems.

### *Application:*

- Use a stem injector gun (<http://www.jkinjectiontools.com/index.php>);
- Assemble the injector tool per instructions;
- Inject 3 to 5 ml of undiluted herbicide into the stem between the first and second nodes or between second and third node if the stem is too woody for the needle to be easily inserted;
- Inject every stem within a patch;
- Note that Rodeo® labeling limits use to 7.5 quarts per acre. This limits treatment to 1420 stems per acre;
- The best time for application is mid-June to the end of September;
- Rodeo EPA labeling for stem injection is attached at the end of this memorandum.

## Cut-stem-pour

### *Overview*

The cut-stem pour method delivers the herbicide directly into the stem cavity. The danger this method poses is a greater likelihood of herbicide making contact with humans and the surrounding environment. However, this method will greatly reduce drift. Although the stem-cut-pour method may be slightly less effective as the injection, it is good for stands of stems with less than ½ inch diameter, which make stem injection difficult. This method should only be used of small, isolated stands and those that are too small for the stem injection method. Moreover, the stem-cut pour method increases the likelihood to spreading the invasive species if BMPs are not carried out during use. Stem pieces, no matter how small,

*should never* be left on moist soil or get into waterway where they can easily re-sprout off-site and downstream.

### **Application**

- Cut stems between the lowest 2 nodes and pour 3 ml undiluted Rodeo® directly into the stem cavity;
- For application precision and safe handling, we recommend using a large syringe/needle with a graduate reservoir;
- When using this method it is essential that BMPs are used and any spill herbicide cleaned up immediately and reported to lead, wetland manager and ARCADIS;
- The best timing for cut-stem pour application is late summer or early fall; and
- It is extremely important to remove cut stems from wet soil or waterways and dispose of properly. ***Any stem remaining greater than ½ inch can potentially re-sprout, further spreading this noxious weed. Stems should be kept away from moist soil or waterways.***

### **References**

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Knotweed Biology and Control. King County Noxious Weed Control Program. King County. Accessed online June 3, 2008. <http://dnr.metrokc.gov/wlr/LANDS/weeds/pdf/knotweed-biology-and-control.pdf>

Soll, J. 2004 Controlling knotweed (*Polygonum cuspidatum*, *P. sachalinense*, *P. polystachyum*, and hybrids) in the Pacific Northwest. The nature conservancy. Accessed online June 3, 2008. <http://tncweeds.ucdavis.edu/esadocs/polybohe.html>.

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Washington State Departments of Agriculture (WSDA) and Ecology (WADOE). 2004. Integrated Pest Management Plan of Freshwater Emergent Noxious and Quarantine Listed Weeds. Accessed online June 4, 2008 [http://www.ecy.wa.gov/programs/wq/pesticides/final\\_pesticide\\_permits/noxious/Noxious%20Emergent%20IPM.pdf](http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/noxious/Noxious%20Emergent%20IPM.pdf)

<http://www.jkinjectiontools.com/index.php>

### **Tansy Ragweed (*Jacobaea vulgaris*)**



### **Ecology**

Tansy ragweed is a regulated Class B designated noxious weed in Kind County and control is required. It is a biennial that is widespread in the Pacific Northwest and reproduces through an abundance of seeds that can stay viable in the soil for over 10 years. It is toxic if eaten. (King County Noxious Weed Control Board fact sheet)

### **Management**

Because tansy ragweed has the ability to produce viable seed even if it is dug out or cut while in full flower all plants that are removed are bagged and disposed of in the garbage waste stream. First year rosettes are dug up and disposed of in a commercial composting waste stream. If the tansy ragweed biocontrol, cinnabar moth larva, is observed feeding on a tansy ragweed, that plant is left standing to encourage the proliferation of this biocontrol agent in subsequent years.

### **Purple Loosestrife (*Lythrum salicaria*)**

#### **Ecology**

Purple loosestrife is a regulated Class B designated noxious weed in Kind County and control is required. It grows along the margins of waterways, lakeshores, and within wetlands and ditches with a single plant capable of producing well over one million seeds. It also reproduces via root fragments, rhizomes, and vegetative growth. (King County Noxious Weed Control Board fact sheet)

#### **Management**

All flowers are removed from plants before they set seed. Where possible contiguous monotypic patches are cut back and smothered with geotextile. Smaller plants may be dug out but larger plants are not in order to discourage spread through water dispersal of root fragments. All flower heads are bagged and disposed of in the garbage waste stream. Other plant parts, if removed, are disposed of in the commercial composting waste stream. In partnership with the King County Noxious Weed Control Board the biocontrol agents, black margined loosestrife beetle and loosestrife beetle, are released directly onto plants each summer.



# UNIVERSITY of WASHINGTON | BOTHELL

## FACILITIES SERVICES & CAMPUS OPERATIONS

### Sample Checklist from the Pest Management Contractor

<b>BILL-TO</b>	<b>115660</b>	<b>LOCATION</b>	<b>115660</b>
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3:38:00 PM  
 UWB CAMPUS  
 11125 NE 180TH ST  
 BOTHELL, WA 98011  
 Phone: [REDACTED]

UWB CAMPUS  
 11125 NE 180TH ST  
 BOTHELL, WA 98011  
 Phone: [REDACTED]

Time Out: 10/13/2021

Customer Signature

Customer Unavailable to Sign  
Technician Signature

License #: [REDACTED]

Purchase Order	Terms	Service Description	Quantity	Amount
BPO20381	UPON RECEIPT	UW-Exterior Inspection	1.00	[REDACTED]
				<i>Subtotal</i> [REDACTED]
				<i>Tax</i> [REDACTED]

### GENERAL COMMENTS / INSTRUCTIONS

I completed the routine inspection and did not find any pest infestations. There were a few spiders and webs that I removed during the service. I also treated a yellow jacket ground nest near the path located on the north end of Discovery Hall.

CONDITIONS / OBSERVATIONS	Reported	Severity	Responsibility	Reviewed
<i>None Noted.</i>				

### PRODUCTS APPLICATION SUMMARY

Material	Lot #	EPA #	A.I. %	A.I. Conc.	Active Ingredient	Finished Qty	Undiluted Qty
Essentria		Exempt	17.0000%	0.0030	Rosemary oil, geraniol, peppermint oil	0.2000 Gallon	0.0051 Ounce
<b>Areas Applied:</b> Exterior							
<b>Target Pests:</b> Yellow Jackets							

PEST ACTIVITY	# Areas	# Devices	Pest Totals
<i>None Noted.</i>			

### DEVICE INSPECTION SUMMARY

Device Type	# Inspected	Inspected w/Activity	# Skipped	# Replaced



Insect Monitor	0 of 3 (0.00%)	0 of 0 (0.00%)	0	0
Rescue Yellow Jacket Trap with Attractant	0 of 5 (0.00%)	0 of 0 (0.00%)	0	0
<b>-Totals:</b>	0 of 8 (0.00%)	0 of 0 (0.00%)	0	0

AREA COMMENTS

None Noted.

DEVICE INSPECTION EXCEPTIONS

None Noted.

INSPECTION DETAIL

Area	Time	Type	Status	Pest Findings
Above Rock Wall Behind Bus Stop Near Flag Pole				
CC1/2	3:37:56 PM	Area	No Activity	
CC1/2 -> Exterior	3:38:03 PM	Area	No Activity	
CC3	3:38:03 PM	Area	No Activity	
CC3 -> Exterior	3:38:06 PM	Area	No Activity	
Chase House	3:38:06 PM	Area	No Activity	
Chase House -> Exterior	3:38:10 PM	Area	No Activity	
Discovery Hall	3:38:10 PM	Area	No Activity	
Discovery Hall -> Exterior	3:32:43 PM	Area	No Activity	
LB1	3:32:43 PM	Area	No Activity	
LB1 -> Exterior	3:38:15 PM	Area	No Activity	
LB2	3:38:15 PM	Area	No Activity	
LB2 -> Exterior	3:38:19 PM	Area	No Activity	
LBA	3:38:19 PM	Area	No Activity	
LBA -> Exterior	3:38:22 PM	Area	No Activity	
NorthCreek	3:38:22 PM	Area	No Activity	
Physical Plant	3:38:27 PM	Area	No Activity	
Physical Plant -> Exterior	3:38:31 PM	Area	No Activity	
Truly House	3:38:31 PM	Area	No Activity	



Area	Time	Type	Status	Pest Findings
Truly House -> Exterior	3:38:36 PM	Area	No Activity	
UW1	3:38:36 PM	Area	No Activity	
UW1 -> Exterior	3:38:40 PM	Area	No Activity	
UW2	3:38:40 PM	Area	No Activity	
UW2	3:38:45 PM	Area	No Activity	
UW2 -> Exterior	3:38:45 PM	Area	No Activity	

### INSPECTION DETAIL

Material	A.I. %	Finished Qty	Application Equipment	Application Rate	Time
EPA #	A.I. Concentration	Undiluted Qty	Application Method	Sq/Cu/L Ft	Lot #
Essentria	17.0000%	0.2000 Gallon	ground nest	0/1/0	3:36:50 PM
Exempt	0.00300000	0.0051 Ounce			

### PRODUCTS APPLIED

**Target Pests:** Yellow Jackets

**Areas Applied:** Discovery Hall -> Exterior

**Weather:** 52°, Overcast, 1 MPH, SE

