Integrated Pest Management Protocol
For Thompson Rivers University

- **Kamloops campus**

Based on the current sustainability standards and existing grounds maintenance guidelines at Thompson Rivers University (TRU), an Integrated Pest Management (IPM) protocol for the Kamloops campus follows a structured, four-tiered approach. This protocol prioritizes human health and the sensitive semi-arid ecosystem of the Thompson Valley. This IPM protocol approach is discussed in TRU's Campus Strategic Sustainability Plan (see page 38, section 1.3, Campus Grounds).

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1. Action Thresholds

Before any pest control action is taken, a threshold must be met. A "pest" is only managed when its population or the damage it causes poses a significant risk to campus safety, building integrity, or the survival of high-value landscape assets.

- **Health & Safety:** Zero-tolerance for pests like wasps near building entrances or rodents in food service areas.
- **Economic/Aesthetic:** For ornamental gardens (e.g., the Horticulture Garden managed by the TRU Horticulture Program), action is only taken if the pest threatens the long-term survival of the plant material.
- **Nuisance:** Minor weed growth in non-critical areas or "naturalized" zones does not trigger action.

2. Monitoring and Identification

Accurate identification ensures that "beneficial" organisms (like pollinators or predatory insects) are not harmed.

- **Routine Inspections:** Grounds staff perform regular walkthroughs of campus zones, including "grass land, forest area, lawn, and trail" sections.
- **Pest Logs:** Sightings are recorded to track seasonal trends, such as the emergence of specific invasive weeds or localized insect outbreaks.
- **Collaboration:** TRU utilizes its own academic expertise, involving instructors, students and volunteers from a variety of departments and organizations to help identify complex ecological issues (e.g. those from Natural Resource Science, and TRU Friends of the Garden).

3. Prevention

Prevention is a vital step in the IPM protocol. By removing the conditions that attract pests, the need for intervention is minimized.

- **Landscaping Choices:** Selecting drought-tolerant, pollinator-friendly, and pest-resistant native species suitable for the Kamloops climate.
- **Regular Practices:** Proper irrigation programming, mulching to suppress weeds, and aeration to maintain turf health.
- **Structural Maintenance:** Sealing cracks in building envelopes (exclusion) and managing exterior waste/recycling to eliminate food sources for rodents.
- **Infrastructure:** Gravel-covered areas are systematically paved to reduce weed habitats as funding becomes available.

4. Control/Treatment

If thresholds are exceeded and prevention fails, TRU follows a "least-toxic first" hierarchy.

Step	Method	Examples at TRU
1. Mechanical	Physical removal	Manual weeding, line trimming, and non-chemical traps.
2. Biological	Natural enemies	Encouraging beneficial insects or using biological controls for invasive species.
3. Cultural	Habitat alteration	Hydro-seeding natural areas to promote cover crops that outcompete weeds.
4. Chemical	Targeted application	**Last resort.** Use of targeted, least-toxic pesticides only when survival of plant material is threatened.

Note on Chemical Use: TRU has abandoned the historical practice of "blanket-spraying" large areas. Any chemical application must strictly adhere to the B.C. Integrated Pest Management Act and federal regulations.

Implementation Responsibility

The TRU Grounds Maintenance Department is responsible for the daily execution of this protocol, ensuring the campus remains a "healthy urban ecosystem" as outlined in the university's strategic goals.

Comments or Questions can be directed to: facilities@tru.ca