

# TRANSPORTATION

## BMPs for Invasive Plant Species



### *What are Invasive Plant Species?*

Invasive plant species are non-native plants introduced outside of their natural habitats. In this new environment, free from their natural 'enemies', they have an advantage that allows them to out-compete native plants and agricultural crops for space, moisture and nutrients.\*

Examples of invasive plant species potentially spread through transportation activities include:

- Bull Thistle [1]
- Field Bindweed [2]

### *What RISKS do invasive plant species pose through transportation activities?*

- Jeopardized reputation of transporters, producers, and municipalities
- Increased costs for control along transport corridors
- Uncontrolled movement along and through transport corridors
- Compromised use of construction materials (gravel, soil, sand, rock, straw)
- Leapfrogged spread to distant locations and into new areas or regions
- Decreased profitability of agricultural economy



## Beneficial Management Practices (BMPs)

Invasive plant species pose a very real threat to production, economic value, and aesthetics of the land. BMPs are practices that can be implemented to fight against invasive plant species, including prevention of their introduction, control of their spread, or elimination of their presence. The following BMPs can assist in these efforts.

### TRANSPORT

#### **Risk of invasive plant species in transported materials, on equipment, or trucks**

- ✓ There is always a risk of invasive plant parts within the load - especially for custom transporters, as circumstances around and within the load are rarely known!
- ✓ Ask the product's producer about possible invasive plants in the material or in the area
- ✓ Tarp loads to reduce material falling from the load onto roadsides
- ✓ Avoid travel through sensitive or ecologically fragile areas (e.g. sand hills, along rivers)
- ✓ Clean transport equipment between loads (loaders, trailers, trucks)
  - *clean out* at the point where the load ends†
- ✓ Do not transport hay or grain containing known invasive plant parts with the ability to propagate
- ✓ Inform the receiver of goods of possible contamination in the load
- ✓ Be conscious of the risk of invasive plants when transporting and ensure they are not spread into other jurisdictions – have courtesy for fellow citizens and neighbours

*Become familiar with plant identification and control strategies.*



*Inspect and clean all equipment and vehicles prior to entering or leaving a new area.*

# Beneficial Management Practices

## ROAD MAINTENANCE

### Risk of invasive plant species in ditches, gravel, or on equipment

- ✓ Inspect ditches before mowing and time mowing prior to seed set
- ✓ Mow and grade clean areas first and areas with invasive plants last
- ✓ Clean tractors, mowers, graders, and trucks prior to entering new area or crossing approach or road
- ✓ Inspect gravel pits regularly and at varying times of year prior to using gravel
- ✓ Do not use gravel from pits with known invasive plants present
- ✓ Implement integrated control options on road-sides and in ditches
  - herbicide application / timed mowing / biological (insects) / burning • consult agrologist
- ✓ Become informed about invasive plants in the area prior to conducting any road maintenance

*Inspect ditches, road-sides, gravel pits, soil storage areas, hay and seed (loads), and transport corridors regularly.*

## ROAD CONSTRUCTION

### Risk of invasive plant species in construction materials or on equipment

- ✓ Use certified seed free of invasives when revegetating areas – request certificate of analysis
- ✓ Inspect gravel pits and soil storage areas prior to material use
- ✓ Do not use gravel, topsoil, or subsoil from pits with known invasive plants present
- ✓ Implement integrated control options in gravel pits and soil storage areas
- ✓ Use weed-free mulch (straw) for soil stabilization and other reclamation practices
  - local sources are preferred • native mulch on native areas is best
- ✓ Become informed about invasive plants in the area prior to initiating any construction
- ✓ Do not park equipment on infestations before, during, or after construction
- ✓ Do not mix topsoil or move to a different site - replace promptly and spread in the area of origin

*Work with Rural Municipalities and other stakeholders to help implement inspection, prevention, and control practices.*

Thank you to the many groups and individuals who contributed their expertise to the creation of these beneficial management practices.

**FACT:** Ever see those little piles of grain on the side of the highway? The remnants of a load have been cleaned out - a perfect spot for a new invasion to start! Always *clean out* at the point where the load ends.



#### Photo Credits

Trucking Hay (header) – A. Butler, [YLazySRanch.com](http://YLazySRanch.com)  
 Bull Thistle – S. Dewey, USU, [Bugwood.org](http://Bugwood.org)  
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 Load Remnants – J. MacKenzie, MacKenzie Prairie Consultants  
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### Additional Readings and Resources

- Saskatchewan Association of Rural Municipalities [www.sarm.ca](http://www.sarm.ca)
- Saskatchewan Heavy Construction Association [www.saskheavy.ca](http://www.saskheavy.ca)
- Saskatchewan Invasive Species Council [www.saskinvasives.ca](http://www.saskinvasives.ca)
- Saskatchewan Ministry of Agriculture [www.agriculture.gov.sk.ca](http://www.agriculture.gov.sk.ca) (Environment Stewardship / Invasive Alien Plant Program)
- Saskatchewan Watershed Authority [www.swa.ca](http://www.swa.ca) (Invasive Species Factsheets)
- Native Plant Society of Saskatchewan [www.npss.sk.ca](http://www.npss.sk.ca)
- Saskatchewan Forage Council [www.saskforage.ca](http://www.saskforage.ca)
- Alberta Invasive Plants Council [www.invasiveplants.ab.ca](http://www.invasiveplants.ab.ca) (\*invasive species definition adapted from this source)
- Invasive Species Council of Manitoba [www.invasivespeciesmanitoba.com](http://www.invasivespeciesmanitoba.com)
- Government of Canada [www.invasivespecies.gc.ca](http://www.invasivespecies.gc.ca)
- North American Weed Management Association [www.nawma.org/WeedFree.html](http://www.nawma.org/WeedFree.html) (Weed Free Gravel)



*Inform operators of any known invasive plants and the proper practices to be implemented.*

## The Bottom Line

Invasive plant species can spread rampantly through transportation activities, negatively affecting agricultural land and markets within each impacted region. The risk exists and is very real. Prevention is the first, best, and most affordable option.



### Project Partners



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Crossing the Medicine Line Network



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