

Planting Guidelines for the Town of Jasper





Landscaping in the Town of Jasper

Jasper's urban landscape is an important part of the town's character while contributing to the surrounding protected National Park wilderness with minimal environmental and cultural resource impacts. This urban landscape includes the vegetated areas (including trees, shrubs and other plantings) in both public space and on private leaseholds, as well as the natural open space within the townsite. While this landscape

will support a wide variety of plant material, native plantings, that have minimal wildlife attractants, and support FireSmart principles will be the priority for landscaping and landscape plans.

Maintaining a community's collective landscaping benefits the environment, the health and wellbeing of residents, and creates beautiful spaces for all to enjoy. The [Architectural Motif Guidelines for the Town of Jasper](#) sets out general guidelines and the [Town of Jasper Land Use Policy](#) contains requirements such as maintaining a minimum amount of soft landscaping (vegetative) for each zoning district. Landscaping, including excavation or terrain manipulation, requires a Parks Canada Development Permit. Click the following Link to learn more about the landscaping requirements of your zoning district and apply for a [Parks Canada Development permit for Landscaping](#).

The following information is intended to assist you in planning your soft landscaping (vegetative) project for permit or provide you guidance in replacing existing plantings with suitable native species alternatives. If you are planning a landscaping project outside of the town site, please see "Landscaping in Jasper National Park".

Mature Tree Retention or Removal

Mature trees (at least 20 cm diameter at chest height) are important to the ecosystem and should be retained, unless they are a significant Firesmart hazard or wildlife attractant. They filter air and water, help control storm water, provide protection from wind, shade in summer, screen for privacy, and provide critical wildlife habitat. If your mature tree must be removed for development, or it is assessed as a hazard, you will be required to obtain a [Parks Canada Tree Removal Permit](#). Where mature trees must be removed, replacement trees will need to be planted at a ratio of at least 1:1. This will be assessed on a case-by-case basis.

Tree removal should be done before or after the bird nesting period. Parks Canada is required under the Migratory Bird Act to protect nesting birds from April 21 to August 13th. Therefore, your application may be restricted during this time. Danger trees (those that pose a hazard to property, infrastructure and/or public safety) assessed by a certified arborist can be removed during the nesting bird period with a Tree Removal Permit. It is, however, expected that leaseholders plan to do tree removals outside this period, except in emergency circumstances.

Please note that bird nests are protected at all times. If you

find an active nest in a tree you wish to remove, outside of the nesting bird period, you must contact Parks Canada (pc.jasper-realtymunicipalservices.pc@pc.gc.ca) and refrain from removing the tree.

There may be extenuating circumstances where a tree must be removed during the bird nesting period. These exceptional circumstances are rare, but may be granted with additional mitigations applied. At a minimum, the proponent would need to enlist the services of a registered, licenced professional biologist to do a full inspection of the tree to ensure the absence of nesting birds. If none are found, a permit may be issued.

To apply for a [Parks Canada Tree Removal Permit](#), you will need to fill out a Parks Canada Tree Removal Application including:

- a completed Parks Canada Tree Removal Application;
- tree species and number of trees;
- purpose of removal. If considered hazardous, a written danger tree assessment from a certified danger tree assessor with proof of their certification is required;
- photo(s) of the tree(s);
- dimensioned site plan illustrating the location of the

tree(s), structures, and lot lines on the leasehold;

- flag the tree(s) of concern with flagging tape.

Once the form is completed and the tree(s) are flagged, please return the application and supporting documents to pc.jasper-realtymunicipalservices.pc@pc.gc.ca.

Please be advised that, should there be more than 10 trees cut down, a harvesting and landscape plan will be required. The following elements should be included in your plan, at a minimum:

- a written detailed description of what currently exists on site and the proposed project
- indication of any proposed tree removal
- drawings of (a) what currently exists in the proposed work area with dimensions in metric and; (b) the proposed project with dimensions in metric
- a list of species to be planted, with common and scientific names
- additional information may be required as considered necessary

Space permitting, contractors and leaseholders are expected to replace, at a minimum, the same number of trees that were removed. In some cases, it may be more. Refer to the attached Town of Jasper Planting List for allowable plant species.

General Guidelines for Planting

The following general guidelines are provided to assist you in planning your landscape project:

STEP 1: WHERE TO PLANT

Follow the zone guidelines set out by FireSmart Canada. The design of the landscape immediately adjacent to buildings is a critical factor in determining the likelihood of an asset being resilient to wildfire impacts.

Zones

Immediate Zone

(0 – 1.5 m from building) – no planting of trees or other woody vegetation or use of mulch in this area.

Intermediate Zone (1.5 – 10 m from building) – no planting of coniferous trees in this area. You may plant deciduous native trees like aspen, poplar, cottonwood and birch. This is encouraged.

Landscape with appropriate short grasses, flowers, shrubs, in low density. Do not use bark or pine needle mulches in this zone as they are highly combustible. Gravel mulch and decorative crushed rock mulch significantly reduces the risk of wildfire.

Extended Zone (10 – 30 m from building) – both coniferous and deciduous trees can be planted in this zone. Spacing is important. There should be 3 m between adult coniferous trees, from drip line to drip line (between outer branch tips of each tree). To achieve this, plant saplings/small trees at least 8m apart.

Deciduous trees can be planted closer together (~4m). Again, planting deciduous native varieties is preferred over coniferous trees. **Wood mulch is not recommended.**



Planting Near Utility Lines

If your lot has a formal utility right-of-way, avoid planting trees or shrubs in these areas to ensure unhindered access for future utility installation or maintenance. Trees should be planted a minimum of 5m from your septic line to mitigate root damage to the service line.

STEP 2: PLANTING CONSIDERATIONS

No planting of fruit-bearing trees and shrubs

Fruit-bearing trees and shrubs, such as crab apple, plum, and Saskatoon berry, attract ungulates and bears. This increases the risk of wildlife harm and poses significant public safety concerns. Driven by their keen sense of smell and hearty appetite, bears may lose their shyness around people as they look for calorie-rich foods. Bears can climb into trees in search of ripening food, breaking branches in the process, and getting a food reward that will bring them back repeatedly. This may also lead to a bear seeking other food sources such as garbage or pet food, thereby putting their life at risk.

Plant native species

Native species with low palatability to wildlife should be used for projects in areas of high human use. Invasive non-native plants pose a significant threat to native plant and wildlife communities. They spread rapidly without their natural insect predators and disease controls. They also displace native plant species that stabilize soils and provide forage and cover for wildlife. Personal gardens and built landscapes are entry points for many invasive, non-

native plants. The most effective way to control non-native plants is to prevent their establishment.


Vegetable gardens are permitted, aggressive, spreading species (like mint and chives) must be planted in pots as opposed to beds. Vegetables can also attract wildlife, so fencing or screened enclosures is required.

Choose low fire risk species

Low flammability vegetation is required for any areas adjacent to facilities or infrastructure. Few coniferous trees are included in the plant list below due to their high flammability rating, which pose a greater fire risk to buildings and communities.

Deciduous Trees

Deciduous trees (with leaves) are attractive for ungulates (elk and deer). **After planting, the stems of these trees must be protected with cage and stakes to a 2 metre height until they are mature and established enough to withstand ungulate browse.** This typically takes 3 – 5 years, depending on the tree/shrub species, its age, and the frequency of ungulate browsing.



Deciduous trees, particularly aspen poplar (*Populus tremuloides*), are seeing decreases in the park due to ungulate browsing. We encourage leaseholders to plant these trees in their yards. Similarly, Douglas-fir (*Pseudotsuga menziesii*) are the preferred coniferous tree for planting, due to their fire-resistant nature.

STEP 3: WHAT TO PLANT

Permitted Trees and Shrubs for Landscaping in the Town of Jasper

This list contains plant species that are native to Jasper National Park and regional area and unlikely to become ecological problems through cross-pollinating with native plants or spreading into the natural environment. Preferred plant species are those that are native to Jasper National Park. Some non-native species that are not invasive, fruit bearing, and have low flammability may also be acceptable. If you're unsure whether a species is invasive,

please reach out to jasperdevelopment@pc.gc.ca for verification. Also, the website www.abinvasives.ca provides an up-to-date list of invasive species in Alberta, and can be a helpful resource.

Wherever possible, these plants should be derived from local stocks to reduce the risk of introducing non-native varieties. All species listed are now, or soon to be, available from Alberta sources as seed or plants; they are considered non-invasive and are not at high risk of mortality from disease.



Jasper Townsite Planting List

Common name	Scientific name	General max height	Site conditions
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Deciduous Trees

Balsam poplar	<i>Populus balsamifera</i>	25 m	Moist sites, open to partial shade
Paper birch	<i>Betula papyrifera</i>	30 m	Shade intolerant, well drained sandy/silty sites
River birch	<i>Betula occidentalis</i>	25 m	
Trembling aspen	<i>Populus tremuloides</i>	30 m	Dry-moist, sunny sites, open forest
Maple	<i>Acer spp.</i>	30 m	Moist. Not all maple species are suitable
Spring snow crabapple	<i>Malus 'Spring Snow'</i>	20 m	Not fruit bearing

Coniferous Trees (Should be minimum 10 m distance from buildings.)

Alpine fir	<i>Abies lasiocarpa</i>		
Balsam fir	<i>Abies balsamea</i>	25 m	Moist sites, partial shade
Jack pine	<i>Pinus banksiana</i>	25 m	Native Alberta pine - not native to Jasper
Limber pine	<i>Pinus flexilis</i>	15 m	Slow growing native Alberta pine - not native to Jasper
Lodgepole pine	<i>Pinus contorta latifolia</i>	30 m	Dry-moist, sunny sites, open forest
Rocky Mt. Douglas-fir	<i>Pseudotsuga menziesii glauca</i>	40 m	Dry-moist, sunny sites, open forest
Tamarack	<i>Larix laricina</i>	20 m	Wet sites, with poor drainage
Western hemlock	<i>Tsuga heterophylla</i>	40 m	Moist sites, shaded to partial shade
Western red cedar	<i>Thuja plicata</i>	40 m	Cool, moist, shady sites
Western yew	<i>Taxus brevifolia</i>	5 – 15 m	Moist, sheltered sites
White spruce	<i>Picea glauca</i>	40 m	Moist to wet sites, open or closed forest
Whitebark pine	<i>Pinus albicaulis</i>	20 m	Slow growing native Alberta pine -endangered spp.

Deciduous Shrubs

Arctic willow	<i>Salix arctica</i>		
Bebb's willow	<i>Salix bebbiana</i>		
Bog or shrub birch	<i>Betula glandulosa</i>		Moist and dry sites, adaptable
Western snowberry	<i>Symphoricarpos occidentalis</i>		Good tall groundcover
Common lilac	<i>Syringa vulgaris</i>		Many cultivars on market
Common wild rose	<i>Rosa woodsii (later flowering)</i>		
Green alder	<i>Alnus crispa</i>		
Meadowsweet	<i>Spiraea betulifolia</i>		Prefers canopy, not very vigorous

Most acceptable
 Acceptable

Common name	Scientific name	Site conditions
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Deciduous Shrubs continued

Mountain or river alder	<i>Alnus tenuifolia</i>	Prefers moister sites
Prickly rose	<i>Rosa acicularis</i> (earlier flowering)	Most commercial shrub roses are non-native varieties
Pussy willow	<i>Salix discolor</i>	
Red osier dogwood	<i>Cornus stolonifera</i>	Prefers moister sites
Shrubby cinquefoil	<i>Potentilla fruticosa</i>	Many cultivars on market
Smooth willow	<i>Salix glauca</i>	
Snowberry	<i>Symphoricarpos albus</i>	
Wolf willow or silverberry	<i>Elaeagnus commutata</i>	

Evergreen Shrubs

Kinnikinnick or bearberry	<i>Arctostaphylos uva-ursi</i>	Good groundcover. No more than 10 plants/site
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Wildflowers and Grasses

Alpine aster	<i>Aster alpinus</i>	Full sun to partial shade. Dry soil (will not grow well on wet sites). Blooms: June-July.
Alpine hedysarum	<i>Hedysarum alpinum</i>	Full sun to partial shade. Prefers drier soils, can grow in rocky soils. Blooms: Late May-August.
Cusick's locoweed (alpine locoweed)	<i>Oxytropis campestris var.cusickii</i>	Prefers full sun. Well drained soils (soils with sand). Blooms: late May-August.
Great blanket flower	<i>Gaillardia aristata</i>	Full sun (can withstand heat). Medium to dry soil, well drained soil. Blooms: Late May- September.
Bluebell or harebell	<i>Campanula rotundifolia</i>	Full sun to partial shade. Dry well drained soils. Blooms: June-August.
Strict blue-eyed grass	<i>Sisyrinchium montanum</i>	Full sun. Medium to moist soil conditions. Blooms: Late April-July.
Dwarf fireweed	<i>Chamerion latifolium</i>	Prefers full sun to partial shade. Well drained soil with high organic matter content. Blooms: July- August
Canada goldenrod	<i>Solidago canadensis</i>	Full sun. Well drained soil, moderately high organic content. Blooms: June-August.
Common yarrow	<i>Achillea millefolium</i>	Full sun and well drained soils. (Good for xeriscaping.) Does not have a high water requirement. Blooms: May-September.
Cut-leaved fleabane	<i>Erigeron compositus</i>	Full sun. Well drained soil, but adaptable to most soil conditions. Blooms: May-July.
Firefly coral bell	<i>Heuchera brizoides</i>	Full sun to part shade. Medium moisture well drained soils. Blooms: May- August.
Cordilleran arnica	<i>Arnica mollis</i>	Partial sun. Prefers sandy/ loamy soils. Will not grow in clay soils. Blooms: June- August.
Red columbine	<i>Aquilegia formosa</i>	Full sun to part shade. Medium moisture well drained soils. Blooms: June-early August.



Most acceptable
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Common name	Scientific name	Site conditions
Wildflowers and Grasses continued		
Cut-leaved anemone	<i>Anemone multifida</i>	Medium to full sun. Moist, well drained soil. Blooms: Late July-August.
Daylily	<i>Hemerocallis hybrida</i>	Partial shade to full sun. Well drained soils with medium organic content. Blooms: Late June- August.
Early blue violet	<i>Viola adunca</i>	Partial shade to full sun. Moderately dry to moist soils. Blooms: May-June.
White locoweed	<i>Oxytropis sericea</i>	Full sun. Dry soil, can grow in gravelly soil. Blooms: Late May-July.
Evergreen candytuft	<i>Iberis sempervirens</i>	Prefers full sun, tolerates some shade. Well drained soils (sandy). Blooms: May-July.
False Solomon's seal	<i>Smilacina racemosa</i>	Partial to full shade. Grows best in average to moist soil, well drained soil. Blooms: June-July.
Fireweed	<i>Chamaenerion angustifolium</i>	Full sun. Moist well drained soil (can be difficult to grow at home). Blooms: June-September.
Garden phlox	<i>Phlox paniculata</i>	Partial shade to full sun. Moist, well drained soil. Blooms: July-September.
Golden corydalis (Scrambled eggs)	<i>Corydalis aurea</i>	Partial shade. Moist, well drained soils. Blooms: May-July.
Graceful/ Slender cinquefoil	<i>Potentilla gracilis</i>	Full sun. Moist but well drained soils. Excellent winter hardiness. Blooms: June-July.
Yellow locoweed	<i>Oxytropis monticola</i>	Full sun. Dry, well drained soils. Blooms: June-August.
Lindley's aster	<i>Aster ciliolatum</i>	Partial shade. Moist, well drained soils. Blooms: August- late September.
Northern bedstraw	<i>Galium boreale</i>	Partial shade. Medium-dry to medium-moist soils. Blooms: June-August.
Sweetvetch	<i>Hedysarum boreale</i>	Full sun. Well drained loamy soils. Blooms: June-late July
Prairie smoke	<i>Geum triflorum</i>	Full sun. Drier soil. Grows well with wild blue flax. Blooms: Late May-early August.
Pasture sagewort	<i>Artemisia frigida</i>	Full sun. Dry well drained soils. Heat tolerant. Blooms: July-September.
Pearly everlasting	<i>Anaphalis margaritacea</i>	Part shade to full sun. Medium drained soils. Blooms: Late July-August.
Prairie crocus (Pasqueflower)	<i>Pulsatilla patens</i>	Full sun. Sandy, well drained soils. Blooms: May-early July
Prairie groundsel/ Woolly groundsel	<i>Senecio canus</i>	Partial to full sun. Dry soil. (Low water requirement) Blooms: May-August
Prairie sagewort	<i>Artemisia ludoviciana</i>	Full sun. Dry, well drained soils (will not grow well in clay soils). Blooms: Late July-September.
Small-leaf pussytoes	<i>Antennaria parvifolia</i>	Full sun or partial shade. Loamy or clay soils, grows poorly in sandy soils. Blooms: May-June
Rocky mountain goldenrod	<i>Solidago spathulata</i>	Partial shade. Medium moisture soil (not very wet or very dry). Blooms: June-September.
Shining arnica	<i>Arnica fulgens</i>	Partial shade to sun. Moist soil. Blooms: Late June-late July.



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Common name	Scientific name	Site conditions
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Wildflowers and Grasses continued

Shooting star	<i>Dodecatheon pulchellum</i>	Partial sun to full sun. Organically rich well drained soils. Blooms: Late May-July.
Showy aster	<i>Aster conspicuus</i>	Partial shade to full sun. Dry to moist soil conditions. Blooms: July-October.
Showy locoweed	<i>Oxytropis splendens</i>	Full sun. Well drained to dry soil. Hardy plant (good for rock gardens and exposed sunny gardens). Blooms: Late June-September.
Slender blue beardtongue/ Little flower penstemon	<i>Penstemon procerus</i>	Partial to full sun. Dry soil. Often found in sandy banks/ gravelly soils naturally. Blooms: June-August.
Smooth fleabane	<i>Erigeron glabellus</i>	Full sun. Well drained to moist soil. Blooms: June-August.
Star-flowered Solomon's seal	<i>Smilacina stellata</i>	Partial sun. Slightly dry to moist soil conditions. Blooms: Late May-July.
Mountain larkspur	<i>Delphinium glaucum</i>	Shade to sun. Moist to wet soil conditions. Blooms July-August.
Tufted fleabane	<i>Erigeron caespitosus</i>	Full sun. Dry to well drained soils. Blooms: July-August.
Twinflower	<i>Linnaea borealis</i>	Partial to full shade. Prefers cool moist soil. Well drained soil, does not tolerate drought. Blooms: Late May-July
Veiny meadow rue	<i>Thalictrum venulosum</i>	Partial shade-sun. Moist, well drained soil. Blooms: May-August.
White camas/ Mountain death camas	<i>Zigadenus elegans</i>	Sun or partial shade. Tolerant of most soil types. Blooms: June-August.
White mountain avens	<i>Dryas octopetala</i>	Partial shade to full sun. Dry soil, can grow in gravelly soil, high drought tolerance. Blooms: June-August.
Wild bergamot	<i>Monarda fistulosa</i>	Full sun. Moist soil with high organic material content. Somewhat heat/ drought tolerant. Blooms: July-early September.
Wild blue flax	<i>Linum lewisii</i>	Partial shade to full sun. Medium moisture, well drained soil. Heat tolerant, can grow in hot and dry conditions. Blooms: June-mid August.
Wild lily-of-the-valley/ Canada mayflower	<i>Maianthemum canadense</i>	Partial shade. Moist organically rich soils. Blooms: Late May-July.
Wild mint	<i>Mentha arvensis</i>	Partial shade to full sun. Tolerant of most soil types (can grow in sandy soils and clay soils). Blooms: July-September.
Wild white geranium	<i>Geranium richardsonii</i>	Partial shade to full sun. Moist, well drained soils. Blooms: May-October.
Yellow columbine	<i>Aquilegia flavescens</i>	Partial shade. Moist soil. Grows best in conditions that mimic higher elevation environments. Blooms: June-August.
Yellow dryad	<i>Dryas drummondii</i>	Partial sun, but shade tolerant. Dry soil, drought tolerant. This species fixes nitrogen so it can still grow well in poor soil conditions. Blooms: May-July.



Most acceptable
 Acceptable

Frequently Asked Questions

1. Once building construction is complete, there will not be room to plant enough trees to satisfy the minimum 1:1 ratio. What are the options?

- As a priority, plant as many trees in the disturbed area as possible, following the guidelines provided.
- Trees may also be planted outside the leasehold, on Jasper National Park or Municipality of Jasper lands, space permitting and with their permission.
- Native trees, most notably Douglas fir and deciduous trees (aspen, poplar, birch) are the required species for re-planting.
- Depending on the tree species removed from the construction site, you may be asked to plant more trees than those removed. This accounts for projected survivability from planting size to tree maturity.

2. Can I plant a tree, shrub or flower species that is not on the list?

Plantings not on the approved list are not explicitly allowed and should be approved prior to planting. However some non-invasive, non-native species may also be appropriate, especially in areas where native vegetation will not thrive. Personal gardens and human-built landscapes are entry points for many invasive plants. The most effective way to control the spread of invasive plants is to prevent their establishment, especially in locations bordering wilderness areas. If you really want to do your part in conservation, plant native species.

3. How do I know if a plant is *invasive*?

Visit <https://abinvasives.ca/> for the most up-to-date list of invasive plant species in Alberta. There are many! The most common invasive plant species in and around the Town of Jasper include:

Oxeye daisy (*Chrysanthemum leucanthemum*)



Yellow clematis (*Clematis tangutica*)



Dalmatian toadflax (*Linaria dalmatica*)



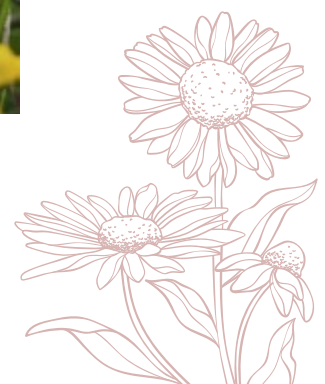
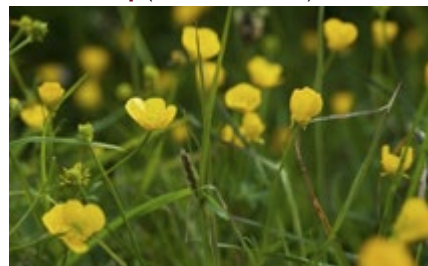
Scentless chamomile (*Matricaria perforate*)



Yellow hawkweed (*Hieracium pretense*)



Tall buttercup (*Ranunculus acris*)



4. I'd like to use wood chips. Is this a good idea?

FireSmart Canada recommends that wood chips not be used. When landscaping against your home, consider using gravel mulch, rock mulch, or a combination of plant mulch and decorative rock mulch to reduce the risk. Wood chips are not considered vegetative and therefore not soft landscaping.

5. I'd like to plant a lawn. What seed mix should I use?

Jasper National Park encourages a movement away from standard lawns to a more natural environment (with native grasses and wildflowers). This approach blends nicely with the surrounding landscape, can be used to meet Firesmart guidelines, takes little maintenance, discourages wildlife from entering the yard to forage and provides habitat for birds, bees and butterflies.

Eg. Traditional lawn



Eg. Naturalized yard, using native plants, rock and gravel.



Where high-use public recreation areas require turf, high-quality non-native Kentucky Bluegrass/Creeping Red Fescue mixes similar to the following may be acceptable:

60 – 70% Kentucky Bluegrass selected, elite cultivars
20 – 30% “Boreal” Creeping Red Fescue
10 – 15% Perennial Ryegrass, turf-type cultivars

6. Can I place artificial turf in my yard?

The short answer is no. Here is why...

There are a few “soft” pros FOR artificial turf

- It does not need to be cut.
- From a distance, it looks aesthetically pleasing
- Turf does not need to be watered. This equals savings.

Points AGAINST artificial turf

- Most artificial turf is made from polyethylene plastic, which is a petroleum-based product. This product needs to be replaced every 15 years, on average, and has a huge carbon footprint. Some of these plastics cannot be recycled — we don't need more plastic in our environment.
- The soil underneath will be polluted for years to come.
- Artificial turf can be toxic to the environment and wildlife.
- Artificial turf does not absorb, filter or provide any benefits to water/hydrology.

The use of native grasses and plants require less water and have huge wildlife benefits—specifically for bees and butterflies. Native species do not require cutting and are beautiful. We simply need to get used to the new look.

