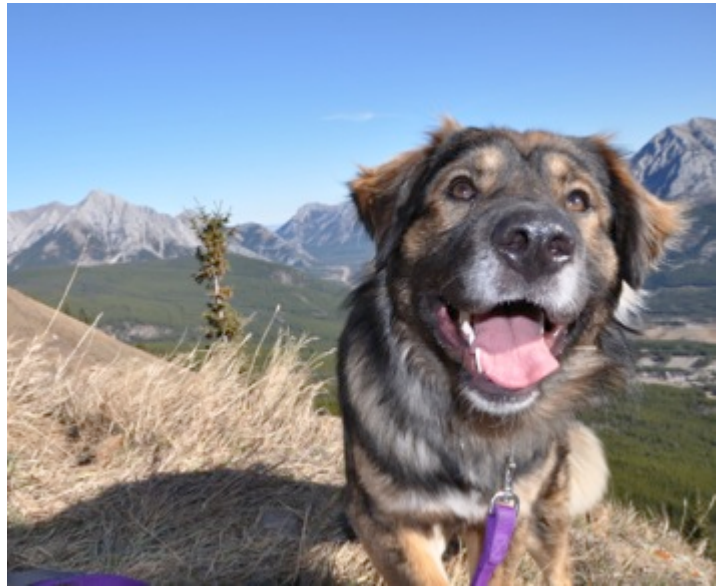


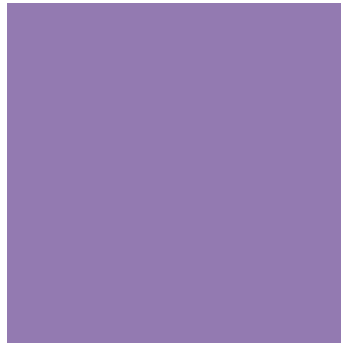
**Plant
Management
& Reclamation**

OrganicWeedControl.ca 403-615-7229



World's Best Organic Weed Control

- Environmentally safe and sustainable
- 1/3 to 1/2 the cost of chemical spraying and mechanical management
- Reduce limitations, error and financial loss
- Reduce liability and negative public perception
- Studies show 95% reduction of Weeds



+ Sometimes its good to be BAAH'D

The World's Best Organic Weed Control for Commercial, Urban and Rural Landscapes

BAAH'D Plant Management & Reclamation supports Energy, Forestry, Agriculture and Tourism industries with effective, organic, chemical-free plant management and reclamation. We are committed to lower emissions, reduced carbon foot-print, and alleviate legal environmental liability.

Target browsing is the best form of plant management because it is the only form that provides; reduced liability, organic solutions that are beneficial to the earth, increases soil productivity and has a positive public perception. Did we mention it's about half the cost?

Mission

To provide Commercial, Urban and Rural landowners a non-toxic, environmentally responsible and risk-free weed control method that promotes biodiversity, sustainability and has no adverse effects.

Values

Environmental Protection, Preservation, Promotion, Sustainability, Biodiversity, Education, Public Health, Community, Ethics and Accountability, Safety, Security, Love, Integrity, Positiveness, Expansion, Development, Growth, Change, Sharing, Education, Responsibility, Compassion, Cooperation

Our strategy doesn't use fences so the goats are never left alone. Goats are browsers, which means unlike sheep, cattle and horses, goats prefer broad-leaved and woody plants to grasses. For thousands of years Shepherds have utilized goats to clear agricultural lands.

+ How I came to see the demand for Organic Weed Management

Inspiration
Growth
Sustainability
Eco-Friendly

I aim to provide Commercial, Urban and Rural landowners a non-toxic, environmentally responsible and risk-free weed control method that promotes biodiversity, sustainability and has no adverse effects. In 2001, nearly 5 billion pounds of chemicals were used worldwide to kill weeds and insects; only 5% reached its destination. Today studies show that glyphosate, the chief ingredient in Roundup, has been shown to cause Infertility, Birth Defects, Cancers, Parkinson's, Autism, Alzheimer's, Diabetes, overall negative impacts on bodily function and resistant bacteria and plants. The EPA reports in 2007, 185 million pounds of glyphosate was used by U.S. farmers. It is apparent that we are in crisis.

The Canada Food Inspection Agency reported in 2002 that Leafy spurge alone reduced the value of land in Alberta and Saskatchewan by 30 million dollars. This is not including the 19 million dollars for lost yield, recreation and weed management. For the timber industry, even moderate infestations can reduce the growth of tree and shrub seedlings by 50-75% according to Alberta

Agriculture and Forestry. The billions of dollars lost each year due to invasive weeds and the billions now spent on healthcare as a result of chemical exposure are evidence that we are fighting a losing battle. It's time to change our strategy. Target browsing is a form of organic weed management that can be a solution to all of these problems.

Target browsing has been used for thousands of years, it's far more effective and costs 1/3 to 1/2 the price of mechanical and chemical management. I was first introduced to target browsing when I was working on a Nature Conservancy of Canada site just south of Calgary. Then, I was the Habitat Coordinator and had been conducting several studies and monitoring programs on invasive plants. I understood the value of target browsing and began to master the art of land stewardship.

As I continued my program for Environmental Technology at SAIT I began to work in the private sector as an Environmental Consultant. I noticed a demand from landowners for organic and effective weed management. I also noticed

several sites were not meeting reclamation certification criteria as a result of weeds. This was creating higher legal liability ratios (LLR's, a ratio between a companies environmental liability costs and the companies worth) for companies and shrinking the amount of leases companies could own, which in turn hurts the production rates. Companies pass these otherwise perfectly safe sites from company to company. We can offer a solution to remove the liability and increase production, as well as satisfy the demands of landowners.

In chats with several landowners I noticed consistent complaints regarding the effectiveness of chemical sprays. For example, leafless plants like tansy and scentless chamomile are not affected by chemical sprays because the mechanism in the plant biology that chemical sprays use is non-existent. Weather, slope, water bodies, plant mutations and human error all influence the effectiveness of chemical spraying. Another example is the impacts on soil pH and nutrients resulting in crop loss, cost for amendments and habitat creation for new weeds.



Ethics
Accountability
Safety
Love
Integrity

Biodiversity
Education
Public Health
Responsibility
Community

+Hitting the Target

How Target Browsing works

Targeted browsing is the best form of plant management because it's the only form that provides; reduced liability, organic solutions that are beneficial to the earth, increases soil productivity and has a positive public perception.

The strategy doesn't use fences and the goats are never left alone. Goats are browsers, which means unlike sheep, cattle and horses, goats prefer broad-leaved and woody plants to grasses. Some cattle have been taught to eat some weeds but not enough to be a viable weed solution. For thousands of years Shepherds have utilized goats to clear agricultural lands.

The key is in how we do it; it's a strategy that requires attention to detail and knowledge of the livestock and land. You don't just throw up a fence and pray, this requires good old-fashioned common sense and hard work.

We identify the desirable plants from the undesirable plants, hence aiming for a target. We then herd and push the goats towards the targeted plants. We graze in a rotation as to regulate the pressure we put on the vegetation. The goats will start with the plants they find most palatable and on the second and third passes move to the next palatable plant until all the weeds are gone. When we see the goats have switched to munching on

other plants we push them to the next area. Grasses are not desired by goats and are usually eaten last. Because the goats are eating weeds they aren't competing with livestock or wildlife and are actually expanding the viable land area.

Every part of the weed that is above ground is eaten, this gives very little opportunity for the plants to produce seeds. By coming back 3 or 4 times a year and for a few years after, the plants roots are harassed and eventually starve. The digestive tracks of the goats are very acidic and destroy seeds at a higher rate than other livestock; there is a less likely chance of them distributing seeds.

We are leaving roots in place so we will not risk soil erosion and we aid natural plant succession. We are helping desirable plants compete. Herbicidal chemicals change the pH of the soil, which leads to metal and nutrient leaching. The now infertile soil leads to more weeds.

We are monitoring the progress of the goats and what they are eating. We only use electric fences when there are areas we can't risk any goats getting into, like a playground or a highway. At night the goats are penned up.



More than just Goats

Whether it's a fire smart program, phase II or reclamation certificate we can help you get there. We are committed to your final goal, to actually getting this site off your list of "things to do". Our field technicians are trained and familiar with;

- Alberta sampling protocols and policies,
- Alberta environmental laws, rules and regulations,
- ground disturbance,
- waste management,
- OH&S codes,
- Alberta certified chainsaw and logging and
- municipal invasive plant listings.

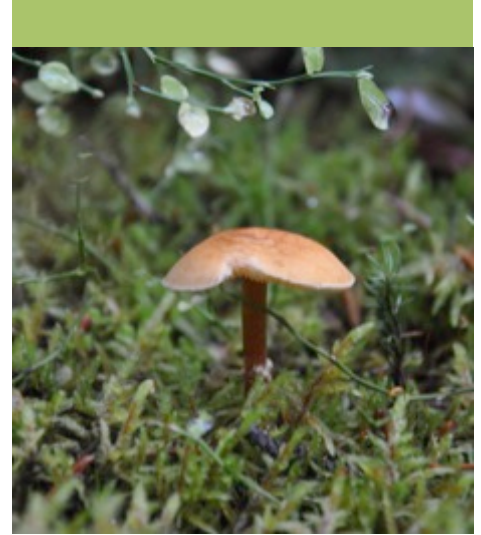
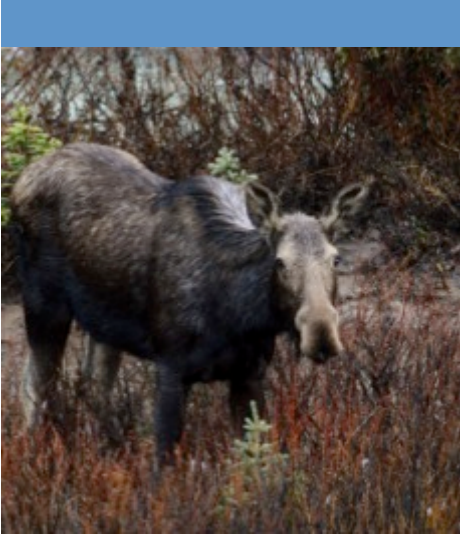
Our talented and flexible team can assist in putting together the big picture.
We also offer:

- Aerial Photography, Remote Sensing and Mapping
- Environmental Sampling and Monitoring
- Environmental Site Assessments
- Phase 1, 2 and 3 Investigations and Remediation
- Reclamation and Certificate Applications
- Fire Smart, Log and Brush Removal



Advantages

For you, your neighbor and the planet



- **Target browsing reduces liability.** Target Browsing is free of toxic chemicals which can have **adverse effects** on; staff, landowners, neighbors, pets, livestock, wildlife, crops, wetlands, riparian areas and sensitive natural areas. Many toxic chemicals have been found to cause Autism, Infertility, Alzheimer's & Cancer. Pesticides and herbicides accumulate in soils, adsorb to the soil and are often water-soluble. Toxic chemicals become more concentrated over the summer as they have a long half-life and are re-applied to plants. Toxic chemicals can migrate off-site, contaminate water and every time they are used an inherent amount of exposure and liability is assumed.
- **Target browsing reduces limitations and economic loss** from; human error of misidentified plants and using the wrong chemical application. Steeply sloped landscapes are no problem for goats. Goats can access invasive plants in dense brush and clear dense brush making work safer and faster for timber removal. Goats eat chemical resistant plants and because the whole plant is eaten there is no opportunity for plant mutation or a reproductive response when a dying plant uses its last reserve of energy into seed production. Goats are effective in wind, rain and sun.
- **Target browsing reduces overall duration and cost** of plant management programs because target browsing promotes natural succession. While the initial treatment and eradication of invasive plants is relatively the same timeline, there is far less disturbance to the site soils and no need to amend soils. Nutrients are still available for native plants to compete with invasive weeds. Shortening the timeframe of overall site management. The costs of target browsing are significantly less than other methods. Several studies show target browsing with goats reduces weeds by 95%.

Advantages

Small choices have BIG impacts



- **Target browsing doesn't distribute seeds.** Goat's stomachs are so acidic they actually destroy seeds and prevent seed distribution; they can also digest weeds that would otherwise be toxic to other livestock. If not timed perfectly right, mowers can actually spread seeds. Chemical spraying can trigger a reproduction response prompting the dying weed to put its last reserve of energy into making seeds.
- **Target browsing will not damage soil** and you won't need soil amendments. Countless studies show that the adsorption of herbicides interferes with the cation ion exchange in soils and causes leachates of metals and nutrients from soils which impact water and prevent nutrients from getting to other plants. Soil pH changes after 2 applications of herbicides and facilitates further weed infestations. When chemicals are used in agricultural areas and parks, where preferred vegetation is wanted, amendments must be made to the soil.
- **Target browsing increases soil nutrients.** Goat's digestion break down nutrients that are trapped in weeds and fibrous material and make it readily available for desired plants. Goat manure has a healthy N-P-K ratio and has been proven in several studies to not be a concern for smell or nutrient overloading with short application rates.
- **Target browsing is safe in sensitive areas** and places where sensitive receptors are near by like; water bodies, parks, hospitals, organic farms and markets. Goats are safe to use in riparian areas and won't damage fragile plants and soil like cattle do. Goats do not compete with wildlife but enhance forages.
- Many more at OrganicWeedControl.ca

What do Goats eat?

Pretty much anything...mostly.

There are times of the years that some plants might taste bad. The consultation will determine which plants we are targeting and when we should be on-site.

We haven't seen it yet but in rare cases very large amounts of one type of weed may be too much for the goats systems. We take a break mid day to get out of the heat and dilute the goat's bellies with hay and other vegetation.

Each goat has its own personality and preference. Some may not like certain plants while others love them. That's why we are there, it's really up to the goats so nothing is completely guaranteed. Goats are always exploring and trying new things, here is a list of what we have seen them eat so far. If you see something on the list you want to keep don't worry, we keep them moving off the favorable vegetation.

Weeds List

Alder	Diffuse Knapweed	Plumeless Thistle
Baby's Breath	Distaff Thistle	Poison Hemlock
Birch	Deer Brush	Poplar- Aspen, Balsam
Black Meidrick	Field bindweed	Purple Loostrife
Black Mustard	Field Scabious	Purple Starthistle
Blackberry	Goatsbeard	Rabbit Brush
Blueweed	Goosefoot	Raspberry
Buffalo Bean	Gorse	Russian Knapweed
Buffalo Brush	Hellbane	Russian Thistle
Bull Thistle	Honeysuckle	Scentless Chamomile
Burdock -Common, Slender	Horehound	Scentless False May Weed
Buttercup	Indian Tobacco	Scotch Thistle
Canada Golden Rod	Italian Thistle	Sow Thistle
Canada Thistle	Knapweed	Spotted Knapweed
Caraway	Lambs Quarter	Sweet
Cheat Grass	Larkspur	Tansy
Cinquefoil -Sulphur, Rough	Leafy Spurge	Toadflax
Clover -Sweet, Alsike/Dutch, Red, Purple	Loco Weed	Vetch
Common Candy	Milk thistle	Wild Rose
Common Mullein	Multiflora Rose	Willow
Coyote Bush	Musk Thistle	Wormwood Sage
Current- Gooseberry, Black, Red	Orange Hawkweed	Yarrow
Dalmatian Toadflax	Oxeye Daisy	Yellow Mustard
Dandelions	Pigweed	Yellow Starthistle
	Pineapple Weed	Yucca (leaves and blossoms)

This list is always changing so let us know if you don't see something here you're interested in.



**Municipalities and
Corporations all over the world
are turning to Goats to cut
costs and liability.**

*The City of Kamloops reported spending **30% less yearly** on plant management while utilizing target browsing as compared to manual handpicking, herbicides and mechanical alternatives.*

*Karla Hoffman Integrated Pest Manager **reports 95% reduction** in invasive plants and is credited with Kamloops "Green" image.*
National Post

*"If the City **were to spray**, it would pay **\$1,000 a hectare**. Using inmates from Kamloops Regional Correctional Centre to **pull weeds by hand** runs **\$800 a hectare**. If City staff were used to do the same, **the work would cost \$5,000 a hectare**."*

Kelly Johnston, Kamloops Natural Resources Section Leader, Kamloops Daily News

Elaine Armagost, Invasive-plant Program Manager for the Peace River Regional District says,

*"The Canadian Food Inspection Agency has estimated that weeds in Canadian crops and pastures cost an estimated **\$2.2-billion annually**. Over the years, other methods of dealing with the toadflax had proven ineffective, she said. The infested area is too large to apply herbicide, too steep to pull the plant out by hand, and too cold in winter for the insects used in other parts of the province for weed control."*

Globe and Mail

Amazon is now renting Goats for weed control in the USA and Japan, even on Capitol Hill.

CBC News and Time Magazine

*"Corporations such as Google are using goats for vegetation management. Google wanted a clean air alternative to noisy gas powered lawn mowers and didn't want toxic chemicals for their weed control. Since the cost of using goats was about the same as mowing, **using goats allows Google to show their commitment to low-carbon, non-toxic alternatives**."*

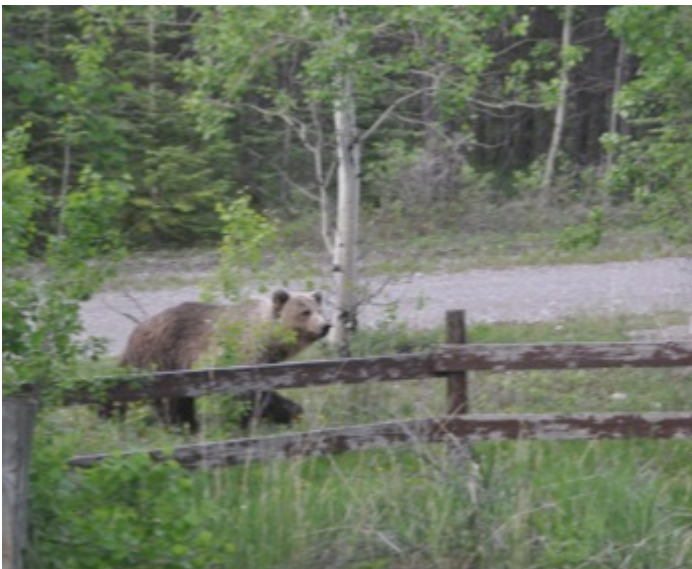
CNET.com News

"Goats have been used by the U.S. Fish and Wildlife Service, the Bureau of Reclamation, the Bureau of Land Management, and the U.S. Forest Service. State, county and city contractors (such as the city of Seattle) have also used goats for weed and invasive species control."

eco-goats.com

Did you know in 2001, nearly 5 billion pounds of chemicals were used worldwide to kill weeds and insects?

Only 5% of that reached its destination ~ Patagonia



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