

Use of Native Plants in Landscaping

Over the past several years, there has been a resurgence in the popularity of native plants for use in landscaping. Much of this resurgence has been fueled by news stories documenting the declining of butterfly, honey bee, and other pollinator populations due to a lack of habitat. Many homeowners have incorporated natives into their landscape to provide a nectar and pollen source for bees, or even to provide a waystation for monarch butterflies during their annual migrations. There are several additional reasons why native plants may be right for your landscape:

1. Native Plants are Non-Invasive – Many of our introduced plants, such as Bradford Pear and Sericea Lespedeza, are invasive and take over an area if not kept in check. The majority of native plants are non-invasive and will stay where we put them.
2. Minimal Inputs – Native plants typically require much less water, fertilizer, and pesticides than introduced plants do.
3. Longevity – Partially related to minimal inputs, native perennial plants often survive and thrive for many years with little to no care.
4. Variable Conditions – Because plants are native, they are better suited to the variable conditions we experience here in Missouri. Native plants are better able to survive flood, drought, freezing temperatures, and exceedingly high temperatures than introduced plants are.
5. Wildlife Habitat – Many native plants are useful as a food source or shelter for wildlife such as deer, turkey, and an assortment of birds. Native plants contain a much higher fat and calorie content than introduced plants do, which is necessary for wildlife to survive our sometimes harsh winters.
6. Beauty – Native plants have their own beauty which can be significantly different than plants in a traditional or formal landscape. Many homeowners find they prefer the different look of a native planting.



Article continued on back page

A look at the big picture helps with animal health

I was recently looking through the results of a survey one of the weekly online farm newsletters I receive had conducted; one of the questions posed pertained to ranking the top 5 issues facing the beef industry. Not surprisingly, animal health issues made the cut. Certainly, some beef operations have more difficulty with animal health issues than others do. Some of the variation relates to the type of business; a backgrounder, who makes their living adding value to other's mistakes for example, is taking on more risks from an animal health standpoint in hopes of a greater financial return from their added efforts. From the cow/calf operator's standpoint, with proper management and some preventative maintenance, animal health issues shouldn't be a major setback. Some of the major diseases mentioned as problematic by the respondents were respiratory disease, scours, pinkeye, and parasite issues.

We have long known that proper nutrition and stress reduction strategies for our grazing animals is one of the first lines of defense we have against disease outbreak. A more holistic and intense approach to management where forage resources and animal nutrition are considered along with the use of a disciplined preventative health program might unlock the key to reduced illness and added profit potential. Below, you will find some of the concerns mentioned and ways to mitigate their impact.

Internal Parasite Control

There is a bit of disagreement among the animal health community as to the proper parasite control timing regime in the cow herd. The general consensus is that you shouldn't need to deworm your herd more than twice per year and in most instances, only once. The consensus in much of our area is that once per year shortly after calving is probably the best approach in most instances. Regardless of your calving season or deworming schedule, we can do ourselves a favor by reducing parasite load through management of the forage base. Most internal parasites make their way into the body by way of consumption of infected forages. The majority of the parasite load on the plant is located near the ground, in the bottom 3 inches of the plant. Leaving pastures with some residual growth will not

only reduce parasite load, it will also make for more efficient use of the forage and quite possibly more season long growth in the process. Most parasites also have a relatively short life cycle of somewhere around 3 weeks. Through rotation of pastures that leads to a long rest period, we can often times break the parasite life cycle and reduce incidence of problems. Some individual animals tend to be more prone to parasite infestation than others are so if you can identify them and cull them; you will be doing yourself a favor.

Fly Control

Unfortunately, there isn't a way to completely eradicate flies; they manage to out maneuver us in some way with every effort we throw at them. The best approach is a multi-pronged one. Flies are quick to adapt tolerance to new chemicals so it is a good idea to rotate between pyrethroids, organophosphates and the newer technologies and keep them guessing. Like with changing chemicals, it is a good idea to have several different approaches such as a feed through option and spraying or fly tags, or adding a biological component such as fly predators. Keep in mind that you need to keep on top of the chemical modes and follow directions on the lifespan of the product; it is near the end if the efficacy period when the product is weakening that we see flies able to build tolerance to a product the worst.

Calf Scours

Calf scours is almost entirely a man-made problem brought on by having the herd closely confined at calving time. Developing a rotation to allow manure to dry down and kill bacteria is a good starting place. The Sandhill's Shuffle method, which splits of pairs as the cows calve into separate group pastures until the calves get a little more age on them, is another valuable tool. Consider the weather at calving and try to avoid wet muddy times of year for the calving season if possible. If you continually have scours issues, it might take the addition of a scours vaccination program to aide in getting some colostral immunity passed on to the newborn calf to keep it healthy.



Pinkeye

Pinkeye is a multifactorial disease, meaning it takes a few wrongs coming together just right to cause an outbreak. An irritant such as seed heads, sticks or any course, protruding object leaves the eye watering which attracts flies. Those flies carry bacterial from the manure piles to the eye and from eye to eye, spreading the outbreak. The first step is to manage the pasture so there aren't seed heads and stems that potentially cause eye irritation. Ideally, we would do this through grazing management, however, mechanical means like pasture clipping or chemical seed suppression methods work too. Fly control is the other necessary approach. In widespread cases, vaccination against pinkeye is another approach that might be necessary. There are a number of products available now but I would encourage you consult a nearby veterinarian and see what one is working on locally common strains of the bacteria; The vet can even culture infected eye specimens and develop an autogenous vaccine tailored to your specific farm.

Respiratory Disease

Mature animals should have virtually no issues with severe respiratory disease. When we see an outbreak in the calf crop, it is generally caused by a combination of nutritional, environmental and lack of immunity factors. Vaccination is a cheap insurance policy, at less than \$10/ hd to protect your valuable asset, the calf crop. Along with vaccination, it is advisable to plan weaning in a way that will reduce stress on the calf and avoid weather related stresses. Keep the animals on a sound nutritional plane and eating through the weaning process and you will be ahead of the curve.

At a recent conference, I heard a former college instructor and friend of mine, Dr. Jason Salchow DVM, use the analogy of a meal prepared slowly in a crock-pot compared to one heated up in a microwave in relation to herd health. The crock-pot mentality will produce a better end product but it takes more time and effort to get there, where the microwave approach is the fast approach for the here and now. From a herd management standpoint, we should always strive to be more like the crock-pot prepared meal but at the same time don't forget about the microwave like options and be willing to use them as a backup plan when the need arises.

Source: Andy McCorkill, Livestock Specialist

Check your home for toxic plants

It is estimated that more than 700 plant species growing in North America can have harmful effects on humans. Many plant poisonings occur when curious children are attracted to colorful berries and blooms on plants within their reach. Their low body weight makes plant toxicity higher in children than adults.

A poisonous plant can cause symptoms ranging from allergic reactions such as rashes to internal poisoning. Common poisonous household and garden plants include azaleas, caladium, calla lily, elephant's ear, foxglove, holly berries, hyacinth, hydrangea, iris (leaves, roots and rhizomes), larkspur, morning glory, oleander, peace lily, periwinkle, philodendron, potato plant leaves, pothos, rhubarb leaves, wisteria and yew. For a more complete list, go to ipm.missouri.edu/MEG/2009/3/Plants-That-Can-Harm.

Tips to avoid poisoning:

- Educate yourself on what plants are harmful.
- Remove poisonous plants from your home until children are older.
- Keep plants out of the reach of children. Check day care centers and homes your child visits often.
- Instruct children never to put plants or plant parts in their mouths.
- Do not use flowers or plant parts for food unless you know their production history. Pesticides used on ornamental plants are not labeled for food plants.



If you think someone has ingested a poisonous plant, take immediate action. Remove the plant from the person's mouth and give them water. Call the Poison Control help line at 800-222-1222, your local hospital or 911 emergency center. Try to identify the plant and collect a small sample, if possible, to give to the medical professional.

Program the Poison Control help line into your phone to be prepared. The number works anywhere in the United States 24 hours a day, 365 days a year.

Poisonous plants have been a part of our daily lives for years. Their presence is not a cause for alarm as long as we know the dangers involved and are aware of the risk implied by their presence.

*Source: David Trinklein, State Horticulturist ;
Karen Funkenbusch, Safety & Health Specialist*

Use of Native Plants in Landscaping *(continued from front pg)*

After deciding to implement natives into the landscape, plant species selection is the next process to go through. Plant selection is largely determined by the site where they will be installed:

1. Sun vs. Shade – Most native plants require full sun. There are several that will tolerate some shade and these should be utilized when appropriate. There are no native plants that will thrive in full shade.
2. Annual vs. Perennial – Selection of perennial native plants is a much longer commitment than using annual plants. If you're not sure you'll like native plants or cannot permanently dedicate an area to native plants, annual may be a better option.
3. Wet vs. Dry – The majority of established native plants can handle the dry soil conditions we have in the summertime. We also have a good selection of native plants that can handle soils that stay wet for all or part of the year.
4. Rich vs. Poor Soil – Native plants are ideal for poor soils. They can handle thin soils, soils with a high clay content, or even rocky soils. Deep, fertile soils are typically not recommended as native plants will grow too much, become "leggy", and possibly fall over before blooming or producing seed.

Designing a landscape using natives can be much different than traditional landscaping. If you have additional questions regarding native landscape design or wish to know more about specific plant selection, contact your local county extension center. Other resource website: Missouri Grow Native: <http://grownative.org> & Missouri Botanical Gardens: <http://www.missouribotanicalgarden.org>

Source: *Travis Harper, Agronomy Specialist*

