

Weeds in the Pasture

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Why Control Weeds?

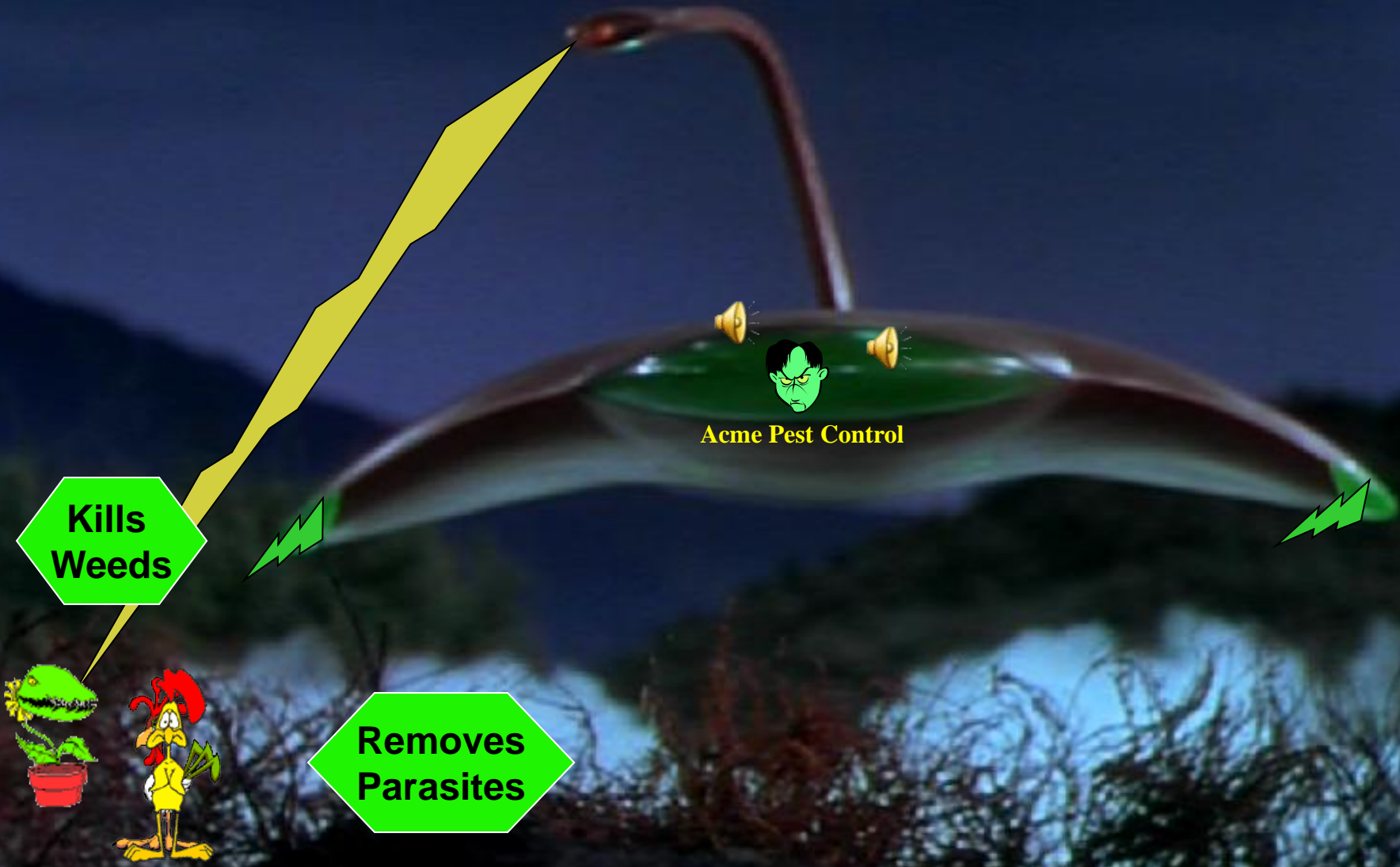
- Some have been declared noxious weeds by the State. It's the law!
- Weeds look bad, they reflect poorly on your management.



Why Control Weeds?

- Reduces desirable plants.
- Reduce overall quality/ yield.
- Reduce overall animal yield.
- Some are poisonous, or can affect the animal product.
- Seeds are spread through manure.

The Newest in Pest Management



Acme Pest Control

Kills Weeds

Removes Parasites



Vines

Burcucumber



Japanese Hops



Mile-A-Minute / Tear Thumb



Invasive Weeds: Vines



- While managing the weeds in your pastures, don't forget about the weeds that infest your fence and tree lines.
- Annual invasive weeds like mile-a-minute and Japanese hops can quickly overwhelm the trees and adjacent crops on your farm.
- While technically not an invasive, because it's a native plant, burcucumber behaves as one.
- It's not uncommon for these weeds to grow over a foot-per-day.

Japanese stilt grass

Microstegium vimineum



This tree is considered to be an
invasive weed problem.

Tree-of-Heaven, Ailanthus



Sumac

Poisonous Plants



Black Nightshade



Black Nightshade



- Summer Annual plant
- Related to tomato and potato.
- It can reach up to 2 feet tall.
- The berries and leaves are toxic.

Black Cherry

Wilted leaves produce Prussic acid (HCN).



Black Cherry



- Common tree in this area.
- Only the wilted leaves are toxic to all animals. The leaves are safe to eat any other time.
- Watch out for storm damaged trees and trimmings from trees.
- Also lookout for opportunities for animals to reach leaves that have been frosted by freezing temperatures.

Poison Hemlock



Poison Hemlock



- Spring Annual Plant
- Can reach 9 feet in height
- Looks like common yarrow with white flowers on the end of its branches.
- All parts of the plant are very toxic.
- Relatively new to the area.

White Snakeroot



White Snakeroot

- Perennial, shade-loving plant
- Found along tree-lines
- Reaches a height of 2-3 feet
- Margins of leaves are toothed
- Flowers very late in the summer
- Leaves and stems are toxic



Perilla (Purple Mint)

- Very toxic plant that was introduced as a garden plant.



Pokeweed



Pokeweed



- Perennial plant
- It has a large taproot
- Can reach 8 feet in height
- All parts of the plant are toxic
- Once established, this can be a tough plant to control.
- Yes, this is good to eat when harvested young and boiled.

Common Cocklebur



fruit, flowers and leaves



seedling



stem markings

Common Cocklebur



- Annual plant reaching 1-3 ft.
- First leaves of seedlings and seeds are poisonous.
- Spiny burrs could cause some mechanical injury to animals.
- It is often found in compacted soils around overgrazed areas.

Star of Bethlehem



Star of Bethlehem



- Perennial plant
- It can be seen in early spring when it blooms. It produces a white star-shaped flower.
- Reproduces from bulbs.
- All parts of the plant are toxic, with the bulbs having the highest concentration of a toxin similar to digitalis.

Grape hyacinth is another invader from the garden.



But it is not poisonous to animals.



Mountain Laurel



Mountain Laurel



- It can be found in and around woodlands.
- The leaves are toxic.
- It is related to azaleas and rhododendrons.

Mountain Laurel



- Animals will not usually eat this, but some have died from people trimming brush and feeding it to animals.
- A lamb died from eating a Christmas wreath tossed into a paddock.

Tall fescue



Tall fescue



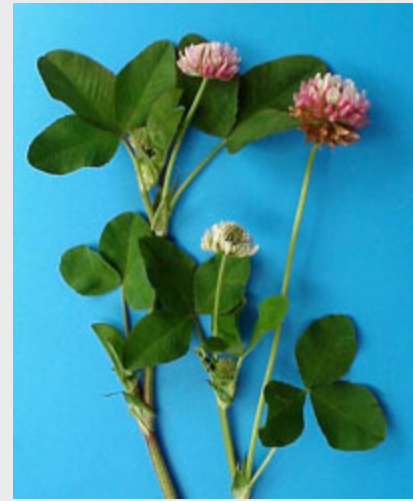
- Perennial grass
- It is not considered to be a poisonous plant.
- An endophyte fungus living in infected plants is the problem.

Tall Fescue



- Fescue-foot, abortion, and poor weight gain are among some problems caused by the toxin.
- Only infected fescue eaten during the summer as the only feed source is going to be a health issue for animals.

Alsike Clover

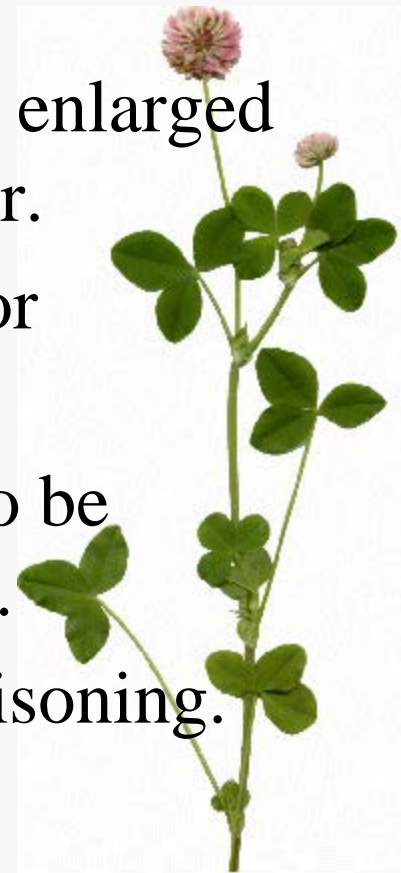


- Once widely planted as a forage, especially on poorer soils.
- It is known to cause photosensitivity (sunburn) in horses, sheep, cattle, and pigs. This occurs mostly when the clover is wet and the animal's skin is moist.

Alsike Clover



- Poisoning is often fatal.
- Also known as “big liver disease”, due to enlarged liver; but reduced liver size can also occur.
- Horses can become markedly depressed or excited and will “head push”.
- The toxin is unknown, but it is thought to be keyed by a fungus disease “sooty blotch”.
- As little as 20% in the diet can trigger poisoning.



Jimsonweed



Jimsonweed



- Annual plant that produces a spiny seed pod.
- It's commonly found in fence rows, around unmanaged areas of fields, and loafing pens.
- This plant is poisonous. The seeds are sometimes harvested by youth hearing of its narcotic effects, however cardiac arrest is also a side-effect.

Johnsongrass



Johnsongrass



- Just like cherry leaves, sorghum species produce Prussic acid (HCN) when they are wilted or frosted.
- Johnsongrass, a commonly found weed in this area is *Sorghum halepense*, a sorghum species.
- Other tall-growing summer grasses that produce HCN include Sudex and sudangrass.

Buttercup



Buttercup



- Perennial plant with three species common to the area; they are tall buttercup, bulbous, and creeping buttercup. Creeping reproduces from both seeds and runners.
- This is a very invasive plant; it will dominate a pasture.

Buttercup



- Animals will not normally graze this plant, because it tastes bad.
- It can cause excess salivation, blisters in the mouth, diarrhea, and abdominal distress.
- Most broadleaf herbicides applied with a good management program can be somewhat effective at control of this weed.
- Some herbicides may need more than one application for control.

Burdock



Burdock



- Biennial plant reaching 5-6 feet tall.
- Burs will attach to animal fur.
- Burs will lower the value of sheep fleece.
- Burs can attach to horse eye lashes leading to corneal ulcers.
- Burs attached to animal fur can cause severe trauma.

Foxtail



Foxtail



- Summer annual grass, common weed problem of spring planted pastures.
- Numerous, fast-growing foxtail seedlings can quickly overwhelm a new planting.
- Early competition can prevent foxtail from developing.
- Common species include green, yellow, and giant foxtail.

Foxtail

- The yellow bristles (awns) on the seeds can cause mechanical injury to animals, primarily to horses.
- The barbed bristles will penetrate and stick in the animal's both chewing and digesting.
- This can lead to ulcers in the mouth and digestive tract.
- The vegetative plant is okay to eat.



Watch Out for Ornamentals

- Yew
- Azalea
- Rhododendron



Ornamentals



- Animals have gotten out and grazed these plants. Neighbors have trimmed these shrubs and tossed the trimmings into the pasture as an animal treat.
- Bulletin 314 “100 Poisonous Plants of Maryland”

Other Trees to Watch



Oak

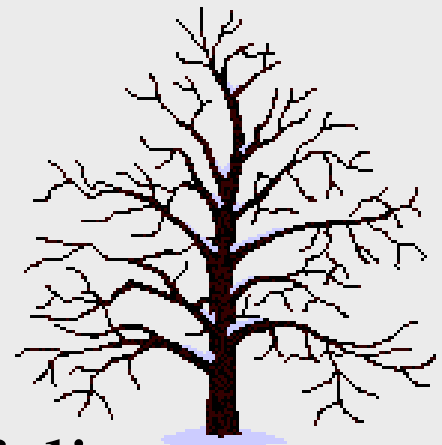


Red Maple



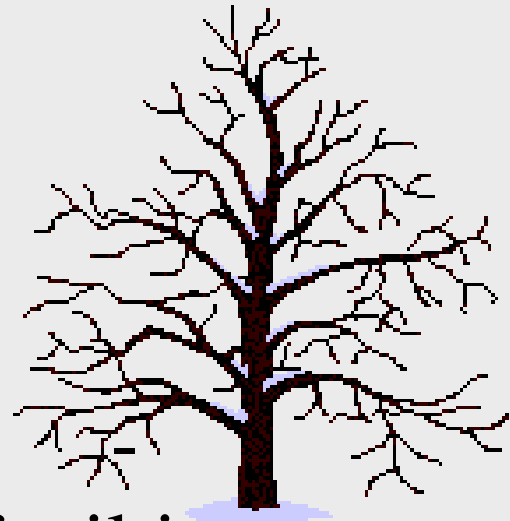
Black Locust

Other Trees



- **Black Locust**
 - Bark, seeds, and new growth foliage are the most toxic. It's a legume.
- **Oak**
 - The older the leaf, the more toxic.
 - The older the acorn, the more toxic.
 - The toxin is tannin and it affects the intestinal tract and kidneys.

Other Trees



- **Red Maples**

Leaves are toxic from the point of wilting until 30 days after they have dried.

- Fresh leaves are safe to eat.

- Ponies that ate 6.5 lbs. of dried red maple leaves died in 1 to 5 days.

- The toxin has not been identified.

Noxious Weeds Listed Under Maryland State Law



Johnsongrass



Statewide IPM Project
Regents, University of California

Johnsongrass



- Prohibited noxious weed related to forage sorghum.
- Perennial weed spreading by both roots and seed.
- Introduced to USA as an improved forage plant.
- Leaves and stems are toxic when wilted; produces HCN.

Canada Thistle



Canada Thistle



- All species of thistle are prohibited.
- Canada thistle is a perennial spreading by both roots and seeds.
- It can be characterized from other thistles by its shorter height and small purple flowers.
- It can grow in dense patches.

Bull Thistle



Musk Thistle



Musk & Bull Thistles

- They are biennial thistles that only spread by seed.
- They will produce an upright growth habit during late spring and summer.



Biennial Thistles

- There are some other species of biennial thistles invading pastures.
- Most form rosettes like the picture here until they bolt up to flower. Thistles such as the musk thistle can get over 6 feet tall.



Multiflora Rose



Multiflora Rose

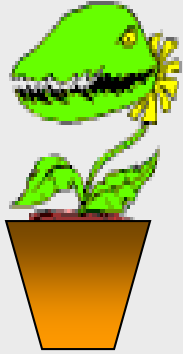


- Perennial, woody plant introduced several years ago as a living fence. You can thank the government for it.
- It can be a thorny problem, but is usually found in tree lines and fence rows and in unmanaged pastures.

Multiflora Rose

- The state can order its control when a complaint by a neighbor has been filed with the MDA Secretary of Agriculture.





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Chicken Flower

Common Weeds



Broomsedge



Broomsedge



- Perennial tall-growing grass.
- Member of the bluestem grass family, however its not considered palatable by foraging animals.
- Considered to be a weedy grass. It grows on low-fertility soil, indicating low pH and low phosphorus.

Red Sorrel

- Perennial weeds that spreads by rhizomes.
- Indicates poor fertility.



Common Mullein

- Biennial
- Not considered invasive.



Broadleaf Plantain

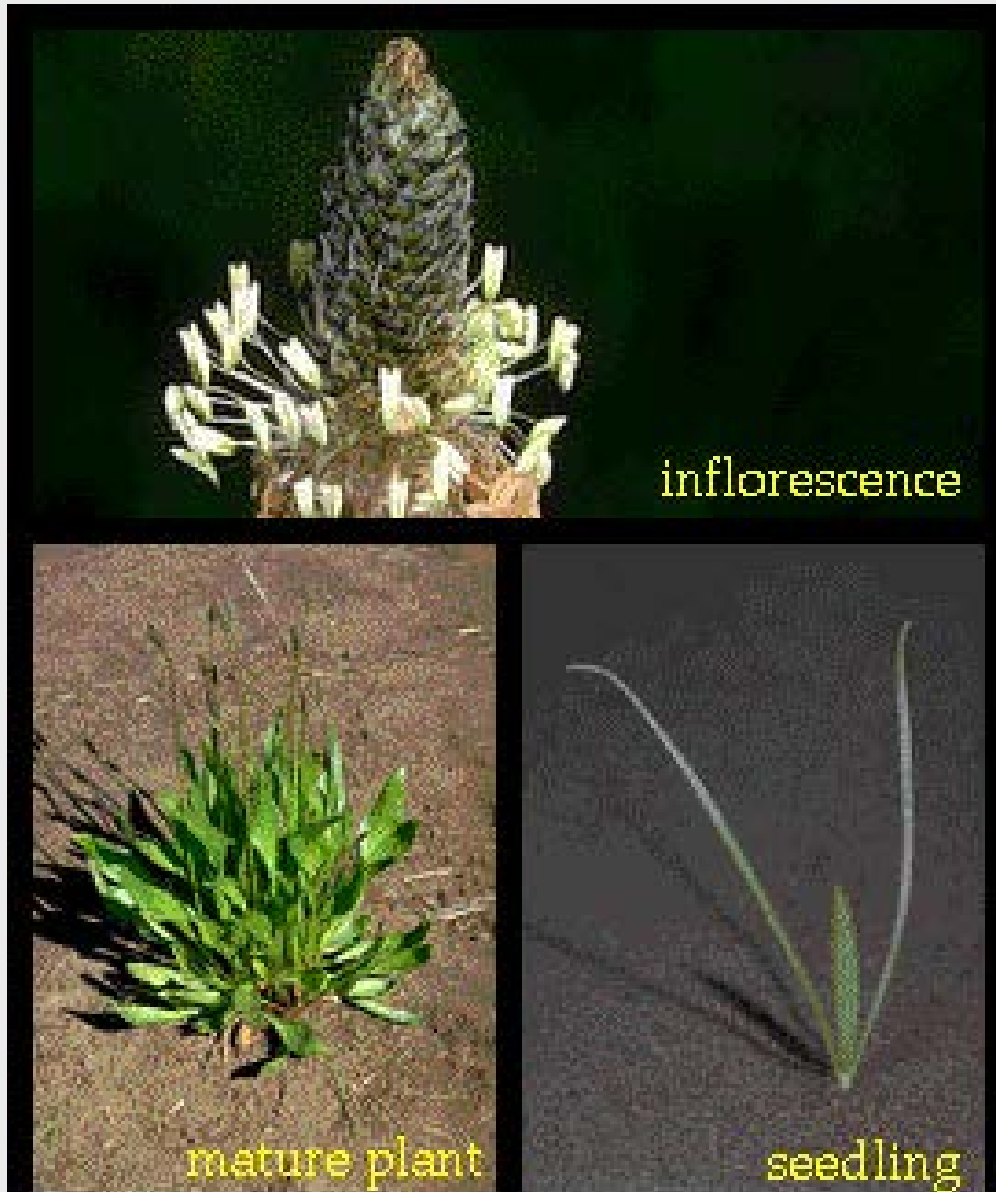


Broadleaf Plantain

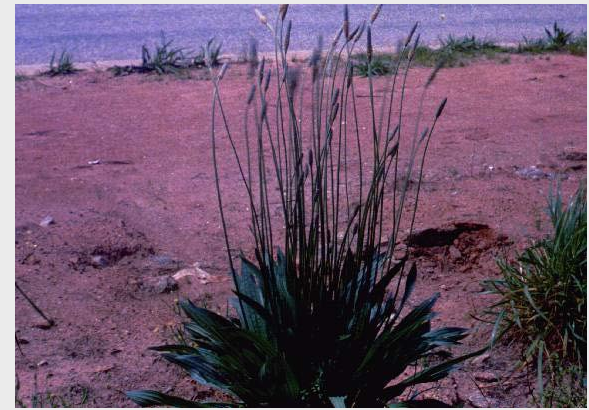


- Perennial, low-growing plant.
- It has a flat growth habit.
- It's a very common weed that can dominate over-grazed, thinned areas of a pasture.
- It's a tough survivor whose broad leaves easily hold back the competition.

Buckhorn Plantain



Buckhorn Plantain



- Perennial, low-growing plant.
- It's also known as narrow-leaf plantain.
- These types of weeds can completely take over thinned areas, shading-out desired plants.

Dandelion



Dandelion

- Perennial
- Long-taproot
- Spreads by seeds
- Will take over a thinned pasture



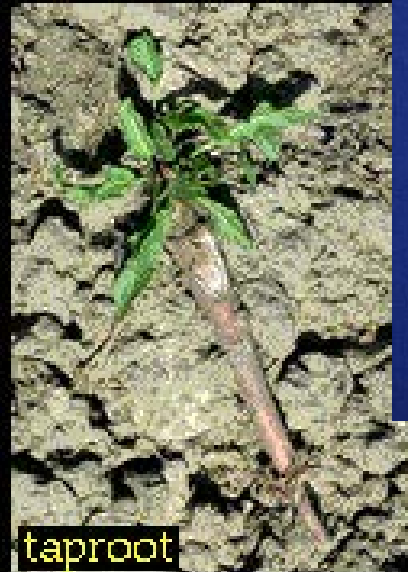
Curly Dock



seedling



mature plant



taproot

Curly Dock



- Perennial broadleaf plant with a deep taproot.
- Once established, it is very difficult to control.
- This weed is a familiar sight in late summer as it branches out producing ample seed.

Lambsquarter



Lambsquarter



- Annual broadleaf weed that begins its invasion in early spring.
- It will branch out and produce a multitude of seeds.
- It will infest thinned or barren areas and is a serious threat to spring seedlings.

Poison Ivy



Poison Ivy



- Perennial plant
- Reproduces from both seeds and rhizomes.
- It is not toxic to horses, in fact the Chincoteque ponies depend on it as a major food source.
- It is very difficult to control.

Horsenettle



Horsenettle



- Perennial plant common to the area.
- It has a long taproot.
- It produces bluish to white flowers and yellow berries.
- Some call it “Devil’s Tatter”
- It has thorns.

Prickly Lettuce



Prickly Lettuce



- Winter annual tall-growing plant.
- Leaves and stem are very prickly.
- Typically found along fence lines and unmanaged areas.

Wild Mustard



Wild Mustard



- Winter annual plant growing 1 - 3 ft. tall.
- Yellow flowers develop in early spring.
- Forms a large taproot.
- It is one of the more commonly weeds found in the region.
- It is not toxic to animals, but does lower the quality of hay and pasture.

Yellow Rocket



Yellow Rocket



- Winter annual plant growing to 3 ft. tall.
- A member of the mustard family, also known as winter cress.
- Leaves are darker green and more shiny than wild mustard, otherwise they look very similar.
- It has a taproot and flowers at the same time as wild mustard.
- It is not toxic to animals, but it will lower forage quality in hay and pasture.

Common Ragweed

- Summer annual weed.



Creeping Woodsorrel

- A perennial that mimics a summer annual; it is also known as Oxalis.



Crabgrass



Crabgrass



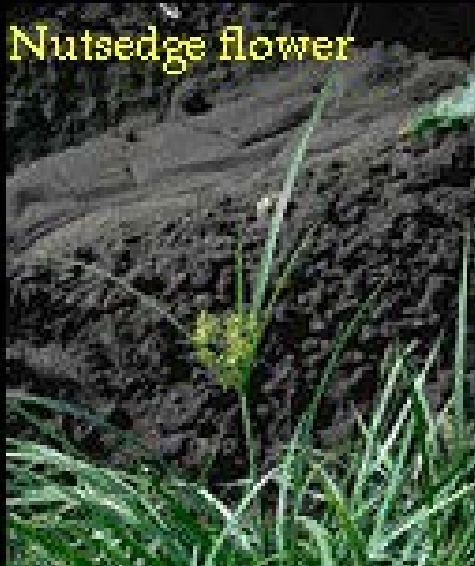
- Summer annual grass
- Couple of species are commonly found around here.
- Opportunistic invader.
- Being marketed as an annual pasture. Like any other grass, it is very palatable when vegetative.

Yellow Nutsedge

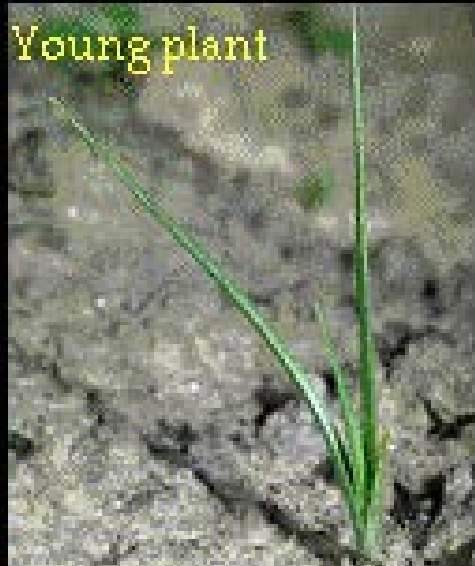
Yellow nutsedge tubers



Nutsedge flower



Young plant

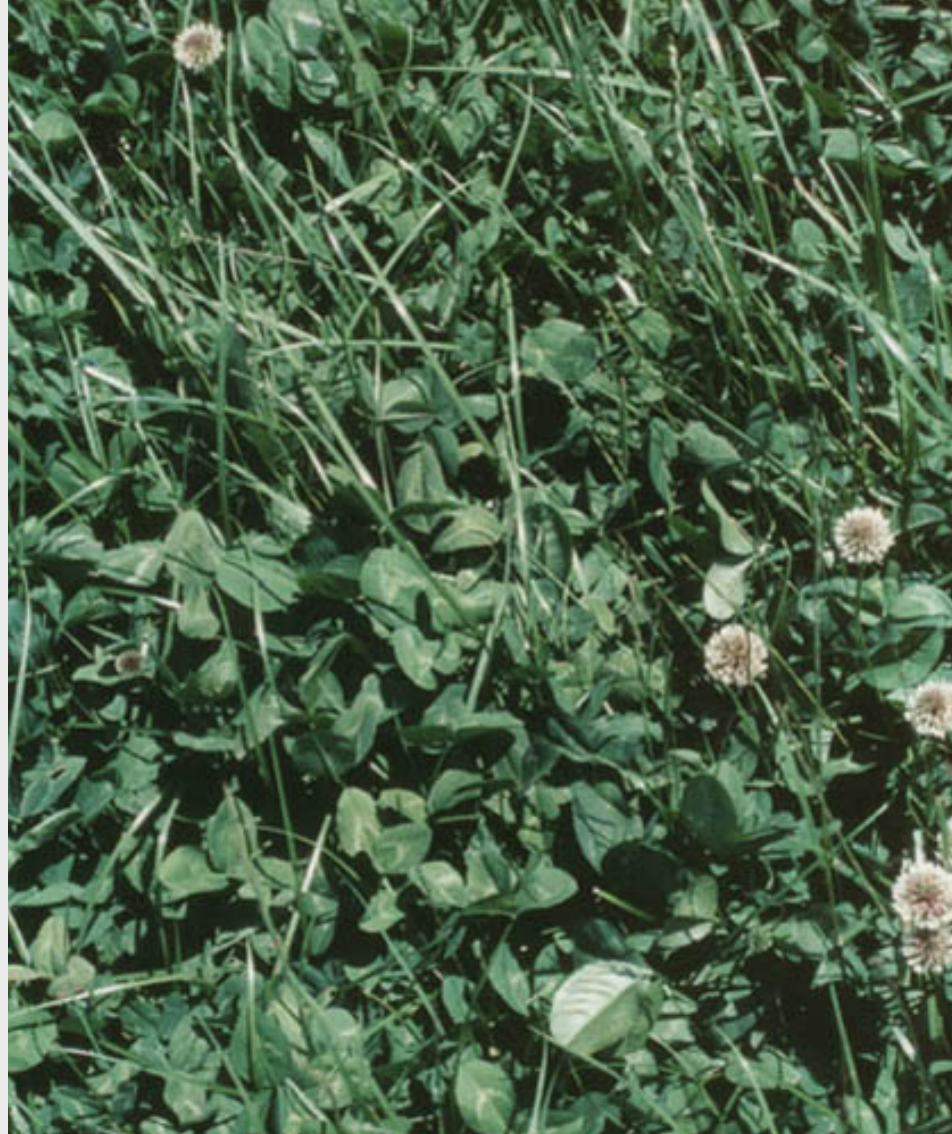


Yellow Nutsedge

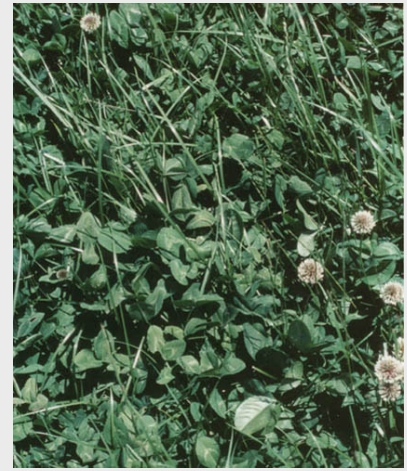


- Perennial that looks like, but is not a grass species.
- It will spread rapidly with underground runners, tubers, and seed.
- Has triangle-shaped leaves and yellowish to golden-brown seed head.
- Prefers damp and wet areas.

Common White Clover



Common White Clover



- Perennial plant that spreads from seeds and above ground runners, also known as Dutch White Clover.
- Difficult to manage in heavily grazed pastures. Grasses can shade out excess clover if they are not over-grazed.

Spiny Pigweed



Spiny Pigweed



- Annual
- Plant has sharp spines.
- Commonly found around barnyards and other places where animals hangout.
- Manure spreading will spread this weed.

Chicory



Chicory



- Perennial
- Usually found along fence rows and waste areas.
- Its beautiful blue flower will show up in late summer.
- Not typically a problem weed.

Two Common Winter Annuals



Purple Deadnettle



Henbit

Chickweed



Weed Management

- **Cultural Control**

- * mowing

- * grazing

- * over seeding

- * improving fertility

- * watch out for weeds brought in from the outside, such as in manure, topsoil, and farm equipment.

Weed Management

- **Chemical Control Options for Pastures**

- * **2,4-D (LV Ester and Amine)**

- * **Banvel, Dicamba**

- * **Crossbow (2, 4-D + Garlon)**

- * **Pathfinder II**

- * **Cimarron**

- * **Stinger¹**

- * **Milestone¹**

¹ Don't use manure from grazing animals on sensitive crops.

Chemical Weed Control

Grazing Restrictions for Horses, Non-Slaughter Animals, and Non-Lactating Dairy Cattle (Check Label)

- **Cimarron.....none**
- **2,4-D.....none**
- **Crossbow.....none**
- **Pathfinder II.....none**
- **Banvel.....none**
- **Stinger.....none**
- **Milestone.....none**

An Old Rule of Thumb

- *If you let a weed go to seed, it takes seven years to get rid of it.*
- Seeds can remain dormant in the soil for centuries, while waiting to germinate when the conditions are right.
- The best way to manage weeds is to never let them go to seed and do what you can to foster good healthy growth in pasture plants.



Sources of Information

- **Websites**
- **Weed Science Society of America**
<http://www.weedscience.org/in.asp>
- **University of Missouri Weed Garden**
<http://www.psu.missouri.edu/fishel/Default.htm>
- **Virginia Tech Weed Guide**
<http://www.ppws.vt.edu/weedindex.htm>



Poisonous Plant Website

http://www.vth.colostate.edu/poisonous_plants/report/search.cfm

This is Colorado State University's Vet School website.



Great Resources on Weeds

What is this weed?

- Cooperative Extension
 - Every county in every state has access to Extension
 - most often we can be found in the county government section of the telephone book
- Bring a bag of weeds in for identification
 - this would be a quick/easy method of learning what problem weeds exist



**Good luck managing the
weeds in your pasture.**

