
Seasonal Weed Control

for Northeast Florida

Introduction

Weed control is a constant battle in the management of pastures. The problems vary from field to field and from season to season. There are several things you can do to reduce the economic impact of weeds. A healthy pasture has fewer weed problems. Soil pH should be checked periodically to maintain the proper soil fertility. A regular fertilization program and proper grazing management will also ensure vigorous pastures.

Prevention is another strategy to maintain a weed free pasture. Always use certified seed to establish pastures and hay fields. Clean equipment that has been used in weed infested fields and only purchase hay from producers that maintain weed-free fields. Quarantine new livestock at least one week before allowing them to graze on your pastures. By following these steps you will greatly reduce the risk of introducing unwanted weeds to your pasture.

Scouting for weeds is the best way to stay on top of weed problems. Learn how to identify weeds, their life cycles and the seasons that they are present. Regular scouting can be combined with other management activities and can help you to spot a problem weed before it takes over the entire pasture.

Control options will be determined by the type of weed, size of plant and budget. Mechanical treatments like mowing are an effective way to control annual weeds and prevent them from going to seed if timed properly. Biological controls have been developed for some species like tropical soda apple. Chemical treatment is often the most effective weed control option. It is critical to treat weeds with the proper amounts of herbicide at the correct time of year to maximize the benefits.

Weed Calendar: The agents of the Northeast Florida Beef and Forage Group in collaboration with Extension Weed Specialists have compiled this list of the most common weeds that are seen in Northeast Florida. Additionally, the weeds are arranged by season of treatment (i.e. summer weeds would be sprayed between June and August) The photos show what the plants will look like at maturity, so you will need to learn how to identify these plants when they are immature to save money on herbicides and improve control.



Steve Gaul, Chair
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Winter

Florida Betony

(*Stachys floridana*)

Description

This weed emerges in the fall and becomes a problem as winter progresses. Florida Betony can be recognized by the white to tan tuber root. It also has square stems and white, pink or blue flowers. The tuber resembles a fat grub or the rattle of a rattlesnake.

Control

This weed can be difficult to control due to its underground tuber. Acceptable control can be achieved by using GrazonNext or Weedmaster (2 pts/ac).



Cudweed

(*Gnaphalium* spp.)

Description

These weeds are either annual or biennials growing from a basal rosette of leaves. Purple cudweed has hairy dull grey leaves. Shiny cudweed has bright green leaves on upper surface with dense white hair on the underside.

Control

Control before plant goes to seed. Remedy (1-2 pts/ac) and GrazonNext (2 pts/ac) provide excellent control.



Thistles

Description

Although there are at least nine different species of thistle in Florida, most are closely related and control recommendations will not differ dramatically. While scouting, you may encounter tall thistle, Leontes thistle, swamp thistle, Nutalls thistle, purple or yellow thistle, bull thistle, Virginia thistle, and possibly others.

Control

Any product containing 2,4-D is highly effective at controlling thistles that are in the rosette growth stage. If thistles have begun to bolt, GrazonNext is the only control option.



Winter



Red Sorrel

(*Rumex acetosella*)

Description

A permanent plant from long underground roots with distinctive arrowhead shaped basal leaves and red flowering stems.

Control

Adjust soil pH and fertility levels according to the results of soil a test. Banvel (1-1.5 pts/ac) and Remedy (1-2 pts/ac) provide excellent control as long as the plant is actively growing.



Chickweed

(*Stellaria media*)

Description

Level to the ground annual with opposite light green leaves. Leaves range from 1/2 to 1 1/4 inches. Flowers are small and white with 5 deeply lobed petals that resemble 10 petals.

Control

Control when small and actively growing with either Weedmaster (2 pts/ac), Remedy (1-2 pts/ac) or GrazonNext. These will provide excellent control.



Wild Radish

(*Raphanus raphanistrum*)

Description

Winter annual growing from leaves at the lower base of the plant only. Leaves covered with thick hairs. As temperature warms, regions of the stem between the leaves begin to lengthen and a flower stalk forms at the top. Flowers are usually yellow, but may be white.

Control

2,4-D amine (2 qts/ ac) provides excellent control as long as plants are less than 6 inches in height. 2,4-D effectiveness drops considerably when plants are greater than 6 inches tall.

Fireweed

(*Urtica chamaedryoides*)

Description

Winter annual native to Florida. Plant has square stems with leaves that resemble strawberry plants. Small stinging hairs are located on the stems and leaves. These irritants can cause respiratory stress and local allergic reactions in both humans and livestock.

Control

Apply herbicides when plants are small and actively growing. Milestone (5 fl oz/ac), Remedy (1 qt/ac), and Pasturegard (1.5 qt/ac) all provide excellent control. Research has demonstrated that mowing will not control fireweed.



Cutleaf Geranium

(*Geranium carolinianum*)

Description

Winter annual with distinctive red to pink hairy stems. Leaves divided into deep segments, attached to long stalks.

Control

Apply herbicides when plants are small and actively growing. 2,4-D amine (2-4 pts/ac), Weedmaster (1.5-2 pts/ac), and GrazonNext (2 pts/ac) all provide excellent control.



Cutleaf Eveningprimrose

(*Oenothera laciniata*)

Description

Winter annual or biennial with hairy stems, deeply toothed margins and produces many showy yellow or red flowers. Leaves have a distinctive white midvein and the yellow to red flowers are tubular with 5 petals. Fruits are a four ribbed seed pod.

Control

Apply herbicide when plants are small and actively growing. The best herbicide option is GrazonNext (1.5-2.5 pts/ac) or PastureGard (2-3 pts/ac) is also effective.



Spring



Tropical Soda Apple

(*Solanum viarum*)

Description

Tropical soda apple is a serious weed that can infest a pasture in as little as one to two years. At maturity, TSA is 2-3 feet tall; the leaves are broad with pointed lobes. Stems, leaves, and flower-stalks have white-to-yellowing thorns. Fruits are round, about 1 inch in diameter, and yellow when mature.

Control

GrazonNext (2 pts/ac) is effective on emerged plants, but 2.6 pts/ac will likely provide pre-emergent control for TSA seedlings for 6 months after application. Do not exceed 2.6 pts/ac/yr. Do not harvest for silage or hay for 7 days.



Prickly Pear Cactus

(*Opuntia* spp.)

Description

Prickly pear is a common term used to describe several species in the cactus family. It is not a wide-spread problem, but can devastate a pasture if allowed to establish. It can be particularly troublesome in pastures that are regularly mowed because as pads are removed from the parent plant, they have the ability to root and form new colonies.

Control

Remedy Ultra (20%) + basal oil (80%). Apply as a spot treatment directly to pads during spring and summer. Grass will be burned in treated spots but will recover. Cleanwave can be applied at 50 oz/ac as a broadcast treatment in water. The use of a surfactant is required. Control is slow and it often takes more than 1 year to see satisfactory results.



Goatweed

(*Scoparia dulcis*)

Description

Leaves are light green and approximately 1.5 inches long by 1 inch wide. Stems are usually smooth, but sometimes have soft, fine hairs, and become woody with age. Flowers are white and borne in the leaf axils. Mature plants reach heights of 1 to 2.5 feet.

Control

Goatweed is relatively tolerant to many herbicides. Currently, the best control option is 2,4-D amine (4 pts/ac). Repeated mowing does not control goatweed either, and it is more difficult to control with herbicides if its stem has become woody.

Dogfennel

(*Eupatorium capillifolium*)

Description

An aggressive native that is particularly troublesome in unimproved or over-grazed pastures. The leaves contain low levels of the toxin tremitol, which can cause dehydration when ingested by livestock. Dogfennel growth is frequently from over wintering rosettes, but seeds will also sprout and grow when soil temperatures reach 65°F.

Control

Weedmaster: apply when plants reach a height of 12-18 inches. Weedmaster is most effective approximately 1 month after dogfennel transition from winter dormancy.

Pasturegard: For control of larger dogfennel that has reached 40 inches or more in height. Apply at 3 pts/ac.



Florida Pusley

(*Richardia scabra*)

Description

Florida pusley is a common and troublesome weed. Plants grow creeping along the ground and have hairy stems that grow up to 30 inches. Leaves are thick and fleshy and often have a rough upper and lower surface. Small white flowers that form a cluster at the ends of stems are characteristic of this weed.

Control

GrazonNext alone, or used in combination with Pasturegard, has been shown to provide excellent control. GrazonNext is quite slow acting, but the addition of Pasturegard greatly hastens control.



Horsenettle

(*Solanum carolinense*)

Description

The leaves of this plant are oblong to oval on both surfaces with star-shaped hairs. The flowers are in clusters on prickly flower stalks with 5 white to violet petals and a yellow cone-shaped center. Plant produces a berry that is green when immature turning yellow and wrinkled with maturity. Leaves also emit a potato odor when crushed.

Control

Apply herbicides when plants are small and actively growing. Milestone (5 fl oz/ac) or GrazonNext (2 pts/ac) will provide excellent control. It is important to stay on top of this weed as one plant can produce up to 5,000 seeds.



Summer



Sicklepod

(Cassia obtusifolia)

Description

Also called coffeebean, it has erect stems, light green oval leaves that grow in pairs. It has yellow flowers when mature. Seed pods are round with brownish, angular seeds. This plant needs to be sprayed during summer to prevent livestock from consuming this poisonous plant. Mature plants can be spotted in late summer and fall.

Control

Any herbicide containing 2,4-D will control sicklepod. Early treatment is recommended. Mature plants need to be pulled from the field to prevent animal poisoning.



Coffee Senna

(Senna occidentalis)

Description

Very similar to sicklepod, but leaves are ovate to lance-shaped. Yellow flowers come out at the leaf axils. The seed pods are flat, dark brown and about 3-4 inches long. The seeds are known to be weakly toxic to livestock. Plant can get up to 6 ft tall.

Control

Any herbicide containing 2,4-D will control coffee senna. Early treatment is recommended. Mature plants need to be pulled from the field to prevent animal poisonings.



Showy Crotalaria

(Crotalaria spectabilis)

Description

An herbaceous annual that can get up to 4-5 ft tall. Seed pods are cylindrical with inflated appearances. When mature it has yellow flowers and is extremely toxic to livestock at all stages.

Control

If you had crotalaria in a field last year, go ahead and spray in early summer with 2,4-D (3 pts/ac). For mature plants spot spray with Remedy and Pasturegard (3 pts/ac).

Bahiagrass in Bermudagrass Fields

Description

Most common forage in Florida. Can be a problem as it is aggressive and forms a thick mat. Reproduces by seeds and long fleshy roots that grow horizontally in the soil. Leaves are smooth on both surfaces or often hairy only at the collar. Paired seed heads are branched. Some of the varieties include Tifton 9, Pensacola and Argentine. Of all, Argentine is the most difficult to control.

Control

Apply to bermudagrass hay fields after bahiagrass green-up. Early applications are often most effective. Prolonged periods of dry weather prior to application will greatly decrease herbicide effectiveness. Use a metsulfuron product and see label for rates. Do not mix 2,4-D or control will be reduced.



Crabgrass and Sandburs

(*Digitaria ciliaris*) and (*Cenchrus* spp.)

Control

Imazapic (Journey, Plateau, Impose, etc) is highly effective on grass and sedge species, but can injure bermudagrass. Do not apply to bahiagrass. Bermudagrass may be stunted for 3-4 weeks and applications should not be made until the bermudagrass is actively growing and rainfall is common.

Another option, in between hay-cuttings, is glyphosate (8-10 fl oz/ac) applied immediately after hay removal. This method is inexpensive and bermudagrass injury is unlikely, but total crabgrass and sandbur control is rarely achieved.



Sedges

(*Cyperus* spp.)

Description

Yellow nut sedge: A perennial, slender smooth, 3-angled stems, up to 2 ft tall. White fleshy, underground roots that radiate from 1st plant, ending on bulbs or tubers, which may produce new plants. Purple nutsedge: Similar to yellow nutsedge except plants are smaller, dark green, with reddish-purple seed heads.

Control

Use Outrider (1.33 oz/ac) for sedge control in established bermudagrass and bahiagrass pastures. It is effective on a wide variety of sedge species while causing little or no grass damage.





Chinese Tallow

(*Sapium sebiferum*)

Description

The leaves are simple with a distinct point at the tip. This tree has milky sap and the fruiting body is a 3-lobed capsule that stays on the tree through the fall. Also known as “popcorn tree.”

Control

Apply Remedy 15% solution + basal oil to the lower 12–15 inches of bark around the entire stem. Spray until bark is wet, but not to the point of runoff. Do not apply to bark that’s wet from heavy dews and rain. The leaves can be spot treated with 1% Imazapyr or 2% Triclopyr. Cut down large trees and treat stump with 50% Garlon3A immediately.



Mimosa Tree

(*Albizia julibrissin*)

Description

Alternate compound leaves with pink showy blooms in the spring. This tree has large seed pods that can reach 6 inches long and can often be found in fence lines, road sides and other disturbed areas.

Control

Apply Remedy 15% solution + basal oil to the lower 12–15 inches of bark around the entire stem. Spray until bark is wet, but not to the point of runoff. Do not apply to bark that’s wet from heavy dews and rain. The leaves can be spot treated with 1% Imazapyr or 2% Triclopyr. Cut down large trees and treat stump with 50% Garlon3A immediately.



Blackberry

(*Rubus* spp.)

Description

Blackberry is a woody, thicket-forming, perennial that commonly infests grazed pastures. This species is very difficult to control because it has massive underground root systems.

Control

Multiple applications are often needed for complete control. Remedy (1 qt/ac) and Pasturegard (2 qt/ac) will give rapid brown-out, but 20 to 30% re-growth is common. The value of these herbicides is that they control numerous other weedy pests, but blackberry control best when applied late in the fall, prior to frost.

Spiny Amaranth

(*Amarathus spiniosus*)

Description

Also called careless weed, it is common in heavy traffic areas within the pasture. This weed produces thousands of seeds per plant and one plant may produce seed several times per season. Therefore, this weed can quickly take over and out-compete existing forage.

Control

Many herbicides are effective: 2,4-D, Weedmaster, GrazonNext, and Telar. Cleanwave and Pasturegard offer limited effectiveness.



Cherry Trees

(*Prunus* spp.)

Description

Very toxic to livestock and should be removed from pastures. Cherry can easily be mistaken for persimmon, a harmless tree species. The easiest way to identify young cherry trees is to examine the bark. Cherry will have smooth grey/black bark with white striations that are easily seen.

Control

The best approach is to cut the tree to a stump that is less than 3 inches tall. Remove all parts of the downed tree and treat the newly cut stump with herbicide to prevent re-sprouting.



Cogongrass

(*Imperata cylindrical*)

Description

Cogongrass is a perennial grass species that commonly infests disturbed areas within pastures. The leaves of this pest are a light green with an off-center white mid-rib. Cogongrass develops a fluffy white seed head in the spring, but most seeds are sterile. Spread of this weedy pest is due to underground rhizomes, or white fleshy roots.

Control

It is very difficult to control and portions of the pasture will often have to be sacrificed. Glyphosate (4% solution) and Arsenal (0.5-1% solution) applied in the fall can be effective. Spray plants until leaves are wet, but not to the point of runoff. After application, monitor the site to ensure that the cogongrass does not return. Other desirable pasture grasses should be established as quickly as possible.



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Resources

Web sites

Northeast Florida Beef & Forage Group
(UF/IFAS Extension)
<http://nfbfg.ifas.ufl.edu/>

Forages of Florida
(UF-Agronomy Department)
<http://agronomy.ifas.ufl.edu/ForagesofFlorida/index.php>

Pesticide Information Office (UF/IFAS)
<http://pested.ifas.ufl.edu/index.html>

Solutions For Your Life
(UF/IFAS Extension)
<http://solutionsforyourlife.ufl.edu/>

Small Farms – Alternative Enterprises
(UF/IFAS Extension)
<http://smallfarms.ifas.ufl.edu/>

Weed Identification Guide
(Virginia Tech)
<http://www.ppws.vt.edu/weedindex.htm>

Web Publications

UF/IFAS Soil Test Form
http://soilslab.ifas.ufl.edu/ESTL_files/SS18600.pdf

UF/IFAS Fertilizer Recommendations
for Agronomic Crops
<http://edis.ifas.ufl.edu/pdffiles/SS/SS16300.pdf>

Weed Management in Pastures and
Rangeland – 2009 (UF/IFAS)
<http://edis.ifas.ufl.edu/pdffiles/WG/WG00600.pdf>