



Galveston County's 12 Most Aggressive Weeds

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Weed infestations in lawns, flower beds and vegetable beds have become a more challenging issue for Galveston County gardeners in the last several years. Recent weather events have occurred that have changed some of our common beliefs about the weeds growing in our gardens, landscapes and lawns. The landfall of Hurricane Ike in 2008 followed by two summers of extreme drought in 2009 and 2010 and two uncommonly severe winter freezes in 2010 and 2011 have stressed and thinned our lawns to the point that, in some cases, there are more bare areas and weeds growing than turf. Weeds that normally appear in the January-to-March time frame are abundant 2 or 3 months earlier than normal. With the thinning turf and bare areas, weeds have less competition and are proliferating at an alarming rate. Weeds that usually appeared in gardens are now taking over weakened, bare or disturbed turf areas. This publication will help you identify 12 of the most noxious weeds that are currently active in our area and provide some options for controlling them.

BARNYARDGRASS (*Echinochloa crus-galli*) is a summer annual with upright, reddish-purple stems that grow 1 to 4 feet tall. Flowers bloom from May through November in the Galveston County growing area. It produces tillers which lie flat and form secondary roots resulting in a mat formation. Barnyardgrass spreads by seed which germinates in late spring and early summer. The seedhead is a coarsely branched green to purplish panicle 4 to 8 inches in length with spiked awns. The seedhead is held erect or may droop slightly. Mow infested lawns as high as practical during the summer months. It is increasingly being reported as a major weed pest in local vegetable gardens. Barnyardgrass can mature in as little as 42 days producing some 40,000 seeds on each plant.



CAROLINA GERANIUM (*Geranium carolinianum*) is a cool season, herbaceous, broadleaf annual in Galveston County. It has a low sprawling growth habit, with hairy geranium-type split leaves. It can grow 6 to 28 inches and forms a large tap root. This plant has multiple stems arising from the base and stems are erect to ascending. Leaves are attached on prominently long petioles. Leaves are alternate towards the bottom forming a basal rosette, leaves on flowering stems are opposite. Leaves are hairy on both sides, ovoid to kidney-shaped and green but have red hues. Stems are round, green, light pink or red and are densely covered in hair. Flowering period in Galveston County is March to May. Flower color ranges from whitish pink to purple, with 5 petals. Flowers are less than 1/4 inches wide and form in clusters. Fruit is produced at the base of long styles appearing like a stork's bill. When ripe, fruit splits into 5 sections each containing a single light to dark brown oval seed.



CHAMBERBITTER (*Phyllanthus urinaria*) also known as Gripeweed, Leaf Flower or Little Mimosa, is a warm season, broadleaf, small tropical annual herb growing up to 2 feet tall. It grows upright, has a well developed fibrous root system and resembles a mimosa seedling. Leaves are arranged in two rows on the branchlets and are alternate. The petioles are very short and the blades are papery, oblong, egg-shaped, thin and nearly linear. The greenish-white flowers appear in mid-summer. Its fruit is very small, wart-like, greenish-red, and found under every pair of the feathered leaves. Seeds are small globe-shaped capsules that have reddish blotches. Chamberbitter is common in our region in both lawns and cultivated garden beds. It often gains establishment in a landscape from newly purchased pot plants (be sure to check the pot for any weeds).



COMMON CHICKWEED (*Stellaria media*) is a cool and warm season, broadleaf perennial in our area. It can survive the heat of summer in shady, moist areas. Common chickweed, found throughout Galveston County, is a low-growing, succulent weed that often spreads out in extensive mats with a shallow, fibrous root system. Leaves are opposite and oval/elliptical shaped. Leaves range from ½ to 1 inch in length, are light green in color and smooth or possibly hairy toward the base and on the petioles. Upper leaves are without petioles (sessile), while lower leaves are long petiolated. Flowering period is typically March to November but it can flower all year. Flowers appear alone or in small clusters at the ends of stems. Flowers are small (1/8 to 1/4 inches), white and consist of 5 white petals. Petals are so deeply divided that there appear to be ten petals. Common chickweed challenges gardeners by its diverse habitat including turf, gardens, ornamental and vegetable beds, orchards, vineyards, nurseries, roadsides, and other disturbed places, and/or common along sidewalk edges.



FROG FRUIT (*Phyla nodiflora*) is both a cool and warm season, broadleaf, herbaceous aromatic evergreen perennial in our growing area. It grows 3 to 6 inches high. With water and sun it will mound to 12 inches. Growth is prostrate (growing close to the ground) and roots wherever stems touch the ground. Trifoliate, green, opposite, short-stalked leaves are borne on square stems. There are fine hairs on the leaves and stems. Leaves are thick, up to 2 inches long and ½ inches wide, oval and toothed/serrated above the middle blade. Color changes to slight purple in winter with die back. Flowering period for Galveston County is March to November. A multitude of tiny white or crimson purple verberna type flowers are borne on 1 to 3 inch stalk heads. It grows in any disturbed areas including turf grass, ornamental and vegetable beds. Frog Fruit is also known as Turkey Tangle, Common Frog Fruit, Mat-grass, Sawtooth Frog Fruit or Beach Morning Glory.



HENBIT (*Lamium amplexicaule*) is a cool season, broadleaf, annual. It's low-growing with erect flowering stems that grow from 4 to 10 inches tall. Stems are square and four-sided. Seedlings emerge in Galveston County in the fall and early spring when temperatures cool. Henbit completely dies in hot summer months. Leaves are opposite, round or heart-shaped with numerous rounded teeth. Leaves lack stalks and tend to project at right angles to the stem. Entire plant is sparsely hairy. Flowering period is early winter through spring. Flowers are pink to purple and arise from leaf axils near the tip of erect stems and grow in whorls. Flower parts are united into a two lipped tube. The tube has purple splotches inside. Fruit are egg-shaped nutlets, brown to light brown with white speckles, about 1/12 inches long and have two angular flat sides and a rounded back. Henbit is common in home gardens with rich moist soil and lawns where it looks for disturbed areas of thinning turf. Also known as: Common Henbit, Deadnettle, Giraffe Head and Henbit Deadnettle.



MULBERRY WEED (*Fatoua villosa*) is a warm season, broad-leaf annual. Although it is also described as being an herbaceous plant (leaves and stems die back to the soil level at the end of the growing season), it can often be a perennial during mild winters in our Galveston County area. It grows upright with triangular, alternate, hairy leaves that have toothed/serrated margins and a woody-hairy stem that has a tap root. It can grow up to 4 feet tall. The flowering period is summer to fall. Mulberry weeds have tannish, pea-sized, feathery clusters and its flowers are purplish-light green, unisexual, without leaves and occur in axillary flat-topped or convex flower clusters. Fruit is a one-seeded achene that is less than 1/10 inches long. It invades home landscapes and turf, field nurseries and containerized ornamentals. Difficult to hand pull unless soil is moist. Other common names include Crabweed or Hairy Crabweed,



SLENDER ASTER (*Aster subulatus*) is a cool season, broad-leaf, herb-like perennial in our growing area. It grows in disturbed sites, lawns and gardens. It is common in coastal areas. This is a small, stiffly-erect plant, usually with several stems. It has a thickened, corm-like woody base, sometimes rhizomatous. Plants form a rosette of leaves at first. The leaves of the rosette have petioles (leaf stalks) up to 1 1/6 inches long and narrowly oval blades (1 5/8 to 3 1/8 inches X 1/4 to 5/8 inches). Leaves on the upright stems are sessile (attached without a stalk) and narrower than the rosette leaves. The size of the leaves on the stem decreases towards the tips of the branches. Leaves are thick and firm, scabrous (rough), entire (or nearly so), obscurely veined except for the midrib and sometimes a single pair of narrowly divergent laterals. Leaves are alternate and flowering is late summer to fall. Flowers are 8–14 ray petals, short, violet or bluish, often rather pale light violet to reddish purple ray florets and pale yellow disc florets at the center. This plant is also called Wild Aster and has become one of the problematic weed pests in Galveston County lawns.



SMALL BUR CLOVER (*Medicago minima*) is a cool season, broadleaf annual that germinates in the fall. In Galveston County it can grow throughout the year. Small Bur Clover is erect or prostrate, herb-like and can grow 6 to 22 inches high. It has creeping stems, with alternate clover-like leaves and spikes of small yellow pea-like flowers. Leaf stems are prostrate and slightly hairy. The compound leaves are clover-like with three inverted heart-shaped leaflets, with slightly serrated margins. Leaves are alternate with petioles (leaf stalks) approximately 1.2 inches long. Flowering period in our region is February to June. Flowers are borne on short flower stalks with 2 to 10 small yellow pea flowers ($\frac{1}{8}$ to $\frac{1}{4}$ inches long). Fruits are coiled pods $\frac{1}{6}$ to $\frac{1}{4}$ inches in diameter.



SPOTTED SPURGE (*Euphorbia maculata*) also known as Milk Purslane, Spotted Matweed or Creeping Spurge is a warm, broadleaf annual in Galveston County. It's a low-growing, prostrate plant (growing close to the ground) that emits a milky sap when broken and forms dense mats that radiate out from a central point. Leaves are opposite and have an ovate or oblong shape and may be finely toothed. They have a distinguishable red splotch midway down the leaf on the center vein and can reach a length of up to 1.5 inches. It flowers mid-summer to fall. Flowers often go unnoticed because they are very small (about .06 inches in diameter). They are grouped in small flowerlike cups in the leaf axils. Fruit is about $\frac{1}{16}$ of an inch long and contains one seed, about $\frac{1}{25}$ of an inch long. Spotted Spurge grows in thinning turfgrass, decaying mulch, edges of lawns next to curbs, driveways, sidewalks and where soil has been disturbed.



STRAGGLER DAISY (*Calyptocarpus vialis*) is often described as shade loving but it tolerates full sun in the Galveston County area. It is considered a pest by some and welcome by others. It is a native, broadleaf, deciduous, semi-evergreen perennial in our region. It grows 8 to 10 inches tall with small, opposite, hairy, leaves that are less than 1 inch long with toothed margins and conspicuous veins. Stems grow along the ground rooting at nodes. It has a sprawling, prostrate growth habit. Small $\frac{1}{4}$ inch yellow flowers continuously bloom from mid-spring to late fall. Each flower consists of 8 female ray florets and 10 hermaphrodite flowers, i.e. disk florets. It spreads by rhizomes. Although straggler daisy usually occurs as weedy patches scattered in lawns and neglected beds in our region, it can be cultivated to make an attractive fine-scale groundcover. It is attractive to bees and small butterflies like sulfurs and skippers. It becomes dormant in cold winters. Other common names include Horseherb and Lawn Flower.



YELLOW NUTSEDGE (*Cyperus esculentus*) is a warm season perennial sedge in Galveston County and is often confused with grasses. It has a distinctive erect, three-sided (triangular shaped), tough and fibrous stem with long, glossy, greenish-yellow leaves that can reach two to three feet in length. Its rhizome root system quickly forms solitary tubers that arise from a basal bulb or rhizome. Below the basal bulb a brownish to black tuber or nut grows that sustains the plant during stressful conditions. Underground horizontal rhizomes spread outward from parent plant to give rise to new shoots. It grows quickly, faster than surrounding turf, and is extremely invasive. Leaves emerging from the plant's base are three ranked, grasslike, and light yellow-green. They are 1/8 to 1/2 inches wide, up to 3 feet long, and have parallel veins with a prominent midvein. The upper surface is shiny or waxy and the lower surface is dull in color. Each branch of the inflorescence is composed of multiple yellow to golden brown spikelets, each up to 1 1/4 inches long. These flowers appear July to September. It grows where moisture is plentiful but tolerates dry soil when established. Does not tolerate shade. Control is difficult due to reproductive capacity of tubers once formed.



INTEGRATED PEST MANAGEMENT (IPM) CONTROLS

Use the least toxic methods of control first. If chemicals are required, identify the weed, read and follow all product labels and apply appropriate amounts per the label instructions. Act responsibly to ensure the health of our waterways, including Galveston Bay. Both pre-emergent and post-emergent herbicides are also very effective at controlling the weeds in this publication. When options permit, rotate pre-emergence herbicides so the plants are exposed to different herbicide chemistries. Always read and follow product labels. Contact the Galveston County AgriLife Extension Office for further assistance in identifying weeds and chemical control options.

CULTURAL CONTROL: Weed establishment commonly occurs in stressed, bare and disturbed areas. Weeds are opportunistic and gain foothold in weakened areas without competition from healthy turf or mulch.

Practice proper lawn management strategies such as proper mowing, no stress from insects, diseases, drought or nutrient imbalance. It is critical to maintain turf density and health through proper management. Mow high, get a soil analysis and provide the required nutrients for a healthy turf. A dense and healthy lawn is the best deterrent to weeds.

Mow lawn as high as practical during the summer months. The seeds of some weeds require high light intensity to germinate. The shaded environment near the soil surface in a high-mown lawn helps deter weed seed germination. In addition, the higher mowing height produces a healthier grass plant. Mow often enough so that no more than one-third of the grass blade is removed in a single mowing. Letting grass grow tall and then cutting it back to a low height reduces turf density, allowing weed seeds to germinate and grow more easily. It is especially important to mow a lawn more frequently in the spring, when the grass is growing faster. Lawns in the Galveston County area may require mowing every three to five days during the spring and early summer.

Eliminate the weed plants as soon as you see them growing. The weeds listed in this publication, for the most part, are easy to pull out by hand. Dispose of in the trash, not in your compost piles. Try to remove as much of the root or rhizome system as possible and try to remove before flowers form and seeds mature.

Mulch flower and ornamental beds, at least 2 inches thick to block the light needed for weed seeds to germinate. Remember, the seeds of some weeds require high light intensity to germinate.

FOR ADDITIONAL INFORMATION: Obtain a copy of Publication GC 362 entitled "Ten Commandments of Smart Weed Control" from the Galveston County AgriLife Extension Office, 4102-B Main Street, La Marque, TX 77568

