

MONOCOTS *Perennial*

QUACKGRASS

An erect narrow-leaved aggressive perennial

Leaf is rough on upper surface

Collar area has claw-like fleshy appendages (auricles) that clasp stem

Plant develops multiple rhizomes from base of plant

Seedhead is a single slender spike



JOHNSONGRASS

A very wide-bladed aggressively spreading prostrate perennial

Collar area has short hairs on upper surface near ligule

Spreads by multiple 1/4-inch-thick rhizomes



STRUCTURAL CHARACTERISTICS:



Leaf in bud:
rolled



Collar:
broad
continuous



Ligule:
short

STRUCTURAL CHARACTERISTICS:



Leaf in bud:
rolled



Collar:
broad
bottom pinched



Ligule:
tall
with hairs

DISTRIBUTION:



■ *Indigenous states*

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MONOCOTS *Perennial*

NIMBLEWILL

A very short-leaved stemmy spreading perennial herb

Leaves are short

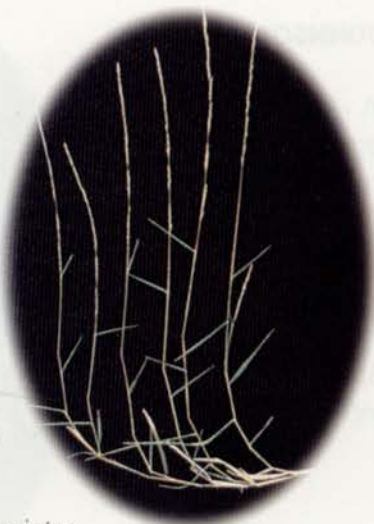
Spreads by very slender stolons

On frequently mowed sites, plant often looks stemmy in fall

Turns off-white during winter

Collar area has long hairs at leaf edge

Seedhead has single, very slender spike



KNOTGRASS

A prostrate spreading perennial

Collar area has short hairs at leaf edges and near ligule

Seedhead has two slender upright branches



STRUCTURAL CHARACTERISTICS:



Leaf in bud:
rolled



Collar:
medium
top pinched



Ligule:
short

STRUCTURAL CHARACTERISTICS:



Leaf in bud:
rolled



Collar:
broad
bottom pinched



Ligule:
tall
rounded

DISTRIBUTION:



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MONOCOTS *Perennial*

YELLOW NUTSEDGE aka *yellow nutgrass*

A very rapidly growing erect perennial herb

Spreads by rhizomes with underground tubers

Leaves are v-shaped with a prominent midrib tapering to a sharp point

Stems are triangular

Seedhead is semi-open, carrying yellow seeds



PURPLE NUTSEDGE aka *purple nutgrass*

Rapidly growing erect perennial herb

Spreads by rhizomes with underground tubers

Stems are triangular

Leaves are v-shaped, tapering to a sharp point

Seedhead is open, carrying dark or purple seeds



DISTRIBUTION:



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Dicot weeds

In a universe of hundreds of dicot weeds, a limited number can tolerate repeated mowing of managed turf sites. In order to provide a broader representation of turf weeds, we have included a select number of these dicot weeds. Those presented herein were chosen for their ability to survive in turf, often as a continuing pest. Several of the species can persist even at fairly short mowing heights; others are active in cool weather.

Identifying a dicot weed

Unlike the prototypical size and shape of monocot weeds, the shape and vegetative growth habits of many dicot weed groups are visually unique. Also, the distinctive traits of monocots—seedheads, ligules and collars—are not always present, making visual identification more important.

We suggest the following process for identifying dicot weeds:

- Look for a sample flower if available
- Leaves: check for identifying characteristics (size, shape, notches, venation or coloration)
- Stems: check how the leaves are held (opposite or alternate), shape and color
- Flowers: check color, size and composition (single, double or compound)
- Location: take note of the conditions in which the weed is growing (shade, compacted soil, etc.)
- Distribution: confirm that this weed species has been identified in your state

DANDELION

aka *common dandelion*

A large rosette-type perennial herb

Leaves growing from plant base are long, narrow and deeply notched

Points of leaf lobes point backward toward base of plant

Has large, slightly mounded yellow flowers on hollow stems

Mature seedhead is a round puffball with seeds that are easily dislodged



DISTRIBUTION:



■ Indigenous states

HENBIT

aka *dead-nettle*

A mostly erect winter annual or biennial

Leaves are similar to mint: rounded, toothed, heavily veined with soft hairs on top, held opposite on square stems

Single flowers are trumpet-shaped, pale purple and project from ends of stems

Seen primarily in spring, dying with heat



KNOTWEED

aka *prostrate knotweed*

- A persistent low-growing summer annual

- Prefers compacted soil of pathways and along drives


- Leaves are blue-green, up to 1 inch long and 1/4-inch wide

- Small single white to pink flowers are found at the junction of the leaves and the stem




DISTRIBUTION:



 *Indigenous states*

DISTRIBUTION:



 *Indigenous states*

DICOTS

PURSLANE

aka *common purslane*

A prostrate, succulent summer annual

Leaves are shiny green, wedge-shaped, thick and up to 1 inch long

Stems are thick, fleshy and purple to brown in color

Plants are very drought-resistant

Small, single yellow flowers may appear in the leaf clusters at end of stems



COMMON CHICKWEED

aka *starwort, winterweed*

A low-growing winter annual

Plant prefers shaded moist sites

Opposite small leaves are carried on tender stems

Stems may root at leaf nodes

Small compound flower composed of 5 pairs of two pale purple petals

Plants die back with summer heat, but can survive year round at cool sites



DISTRIBUTION:



Indigenous states

DISTRIBUTION:



Indigenous states

SPOTTED SPURGE

A prostrate fleshy summer annual herb

Leaves are opposite, oblong, and up to ¼-inch long

Upper leaf surface has a purple to brown blotch along center vein

Hairy stems produce a milky-white sap when broken



DISTRIBUTION:



Indigenous states

ACKNOWLEDGMENTS

This guide was written and compiled by Chris Sann of Turf Information Group, Inc., Wilmington, Delaware. Sann is a former lawn care operator and green industry newsletter publisher with 20 years experience in the industry.

Photos of weeds were taken by Arlyn Evans, a horticulturist from Memphis, Tenn., who has supplied similar materials to a variety of green industry organizations, including the Southern Weed Science Society.

Graphic design and execution and illustrations by LANDSCAPE MANAGEMENT graphic designer Lisa Bodnar.

Editorial assistance was provided by the LANDSCAPE MANAGEMENT editorial staff: editor-in-chief Jerry Roche, senior editor Ron Hall and managing editor Terry McIver.

The "LANDSCAPE MANAGEMENT Weed Identification Guide" presented as a service to the green industry by American Cyanamid of Wayne, N.J. and LANDSCAPE MANAGEMENT magazine of Cleveland, Ohio.

"WHITEMARSH Valley Country Club.

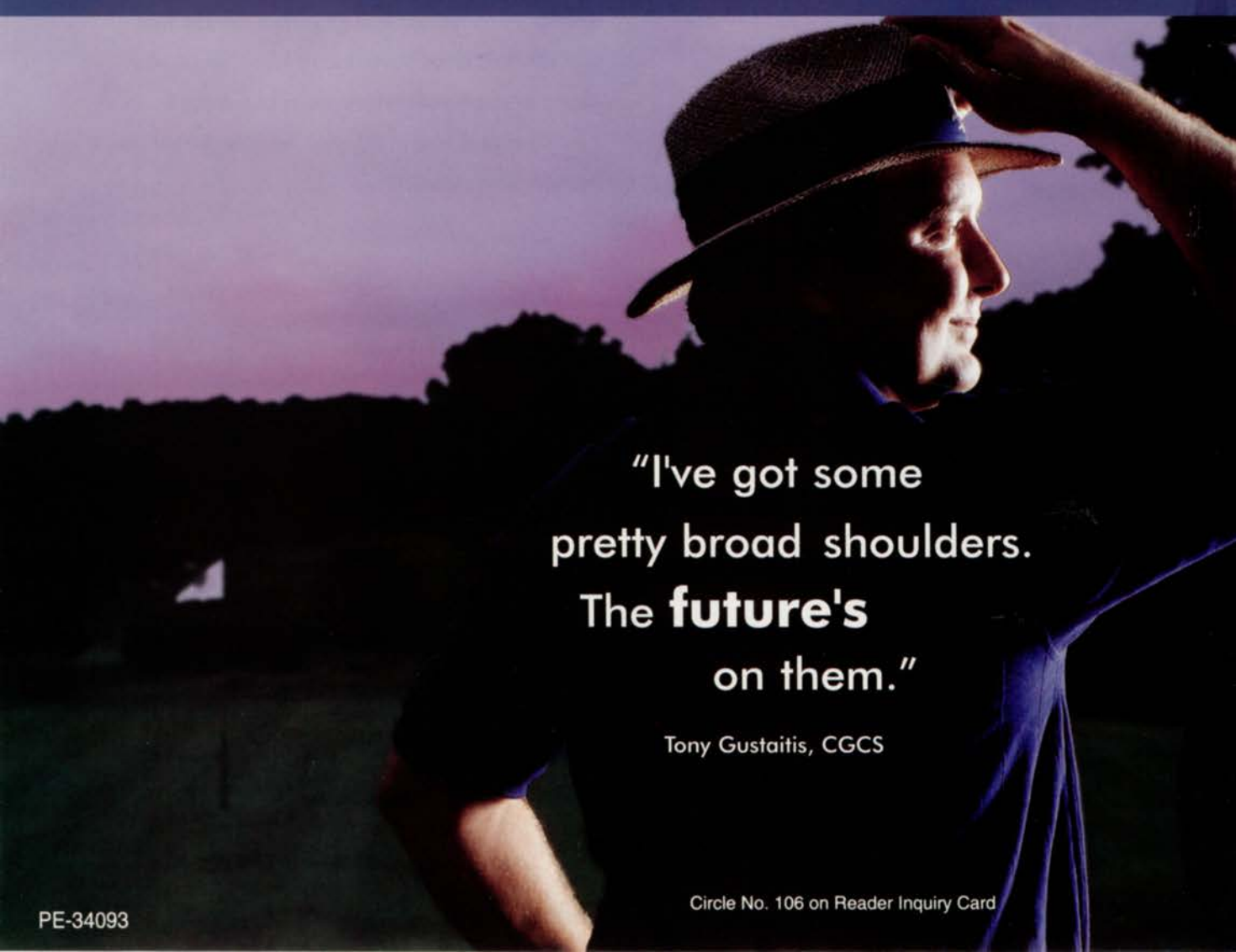
We've been around a long time — over 75 years.

The players demand impeccable turf and we deliver. But the **highest standards** around here are those I set for myself.

I have the future of the course to think about. So, I make sure the herbicides

I use to keep the course gorgeous are also **respectful of the environment**. I try to make sure the course and the world will be around for another 75 years. Pendimethalin is the turf herbicide that **meets these standards** year after year"

Pendimethalin



"I've got some
pretty broad shoulders.
The **future's**
on them."

Tony Gustaitis, CGCS

GOLF/GROUNDS

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Budget hike good for golf course

PAGE 8G ▶

Eight ways to keep fields in play

PAGE 12G ▶

Four keys to great bunkers

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Redesign speeds play at Duke

While shooting a round of golf this season, I noticed an oil leak on a green. It appeared every five feet or so, and went from one end of the green to the other, aprons included. This was some leak. It trickled along cart paths, fairways and greens. The entire back nine of the course was dotted with oil. That's no way to start a season.

It is just "one of those things" that can happen, and does. People get sick and can't come to work, or they get hurt, or they forget to look for oil

leaks, low fuel levels or that tree in front of them. Equipment breaks down and tires go flat.

Daryl Decker, superintendent at Arrowhead Country Club in Ohio (see article on page 2G) likens the mower/operator/golf course scenario to someone driving a BMW around on someone else's \$2 million investment.

Mowing can be relaxing and fun work. It can also become monotonous. The mind wanders, and the operator may not always be paying attention.

All you as a manager can do is instruct the operator in safe equipment operation and tell them to keep their eyes open. When accidents happen, or an oil leak is missed, all you can say is, "Please be more careful and attentive." (Which is better than saying, "You're fired!")

Prevention begins at the shop. Decker's mechanic, Bruce Metzger, gets to the shop well before the rest of the crew. He fuels up equipment, and otherwise gets the fleet ready to go. This is also the time to check for loose fittings or split hoses.

Here's another tip: paint equipment bays white. Oil or other fluids will show up better on the white paint.

And—in what could win you the award for grouch-of-the-month—insist that headset radios

not be worn by people who ride the large equipment. It just makes good sense.

The show season has begun! Where ya' goin' this year? There's lots of great national and regional shows out there, with information just waiting to be had. Take a look at what's coming up:

The Independent Turf and Ornamental Distributors show is in Naples, Fla., Oct. 16-20;

University of California specialists are looking into better pond and lake management, Nov. 9-10 in Santa Rosa;

The Penn State Golf Turf Conference Nov. 12-14 in State College, Pa., and the New York State Turf and Grounds Exposition is held Nov. 12-15, in Rochester;

The PLCAA/ALCA/PGMS Green Industry Expo is in Cincinnati this year, Nov. 17-21;

The North Central Turfgrass Expo is in St. Charles, Ill. Nov. 27-29.

Need I say more? Wherever you live, there's bound to be a show through the fall and winter within driving distance. So don't be a garage potato. Go to a show!

Comments? Write Terry at 7500 Old Oak, Cleveland, OH 44136; **phone him at** (216) 891-2709, **fax him at** (216) 891-2675 or **e-mail him at** 75553.502@compuserve.com. **LM**

'That mower you're driving costs \$25,000. Use with care.'



Terry McIVER

TERRY McIVER
Managing Editor

More money makes projects happen

More members...more money. A simple reality of golf course maintenance at work at Arrowhead Country Club in North Canton, Ohio.

"We have really worked to try to present a strong first image as you come to our club," says superintendent Daryl Decker, who has served as lead superintendent here for 11 years.

More money has also enabled Decker to add about seven persons to his summer crew.

"We've known that we needed more people," says Decker. "But then again, we've always been a small club. When I first came here 11 years ago we had 135 members. We're now at 250 members. Some of that is just a natural growth, due to the mem-

bership size.

"The new members came along because management realized we needed to increase the budget. We were starting to fall behind in maintenance levels, let alone being able to accomplish the extras. As they realized the need for additional income, they brought in the new members. The past 9 to 10 years have been, 'Let's just maintain it.' Now the attitude

is 'How can we improve it?'"

One maintenance need Decker hopes will become a reality is an automatic irrigation system to replace the existing quick-couple system.

Scheduling

Arrowhead uses many high school and college students during the summer. With so much school-aged help, Decker feels it's important to be an understanding boss when it comes to granting worker requests for time off during summer, as long as he knows—at the time the workers are hired—what time off they will need through the summer.

"I understand that this is not their lives," says Decker. "This is what they do for income, to get themselves through school, or to help out at home. I can't bring myself to demand 'You are here from June 1 to September 1!'"

"They have football practices, cheerleading, volleyball, church camps, scout camps, a variety of different things they're all involved in.

"I work with them when I hire them on. I try to keep a family atmosphere as we work the crew here. What I ask in return is, on those busy days when I come in and say 'We have to jump,' let's jump."

Workers get an entire weekend off every other weekend.

Decker pays \$5.75/hour, a wage that was made possible due to the budget increase.

Sod solutions

Decker has occasionally had to replace larger turf areas with sod, and he agrees that proper soil preparation is essential to eliminate layering.

"If there's any way you can get a couple inches of good, loose soil down there, you've won half the battle," says Decker, who uses bluegrass sod when planting into native soil on banked areas.

He says soil amendments are critical to the success of sodding on harder, clay soils.

"The roots are never going to penetrate," says Decker. "It might look good for a little while, but as soon as you hit a drought or stress time, all the rooting is up in the top layer, because it can never pene-

A desire to 'make it better' has fueled improved course maintenance and special projects at Arrowhead Country Club.

by TERRY McIVER / Managing Editor



'I just love the business,' says Daryl Decker, who helps employees balance work requirements with outside interests.

Tips from Darryl:

- 1) Allow flexible hours for summer-only employees.
- 2) Use soil amendments to help create good, loose soil before installing sod.
- 3) Place seed-filled repair boxes on par-3 tees.
- 4) Irrigate deeply, syringe, hand water and use wetting agents to minimize heat stress.
- 5) Use overseeding mixes in areas of high pythium probability.