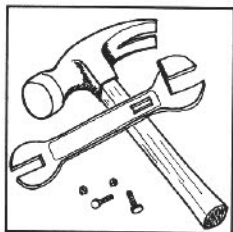


WELCOME TO SHOP TALK!

Editor's Note: This issue of THE GRASS ROOTS marks the beginning of a new feature column — SHOP TALK. A smooth-running golf course depends on smooth-running golf course equipment. This column, which will appear in each issue, hopes to share information from around the state that will help keep our maintenance machinery smooth-running. Pat Norton will be doing the research, following up on tips, and writing the column for us. He will not only be visiting with Golf Course Superintendents, but will be talking to Assistants and Mechanics as well. If you have what you feel might be a good topic or a valuable tip, please give Pat a call.

SHOP TALK promises to be a good addition to our magazine, especially in light of the amount of time spent in our maintenance facilities. We are anxious to hear your "review"! MSM



FUELS — DIESEL OR GASOLINE? AND WHAT ABOUT LEAD-FREE GASOLINE?

By Pat Norton

Diesel or gasoline power? What are the advantages of each? Do I feel comfortable buying and maintaining diesel powered equipment? And how will unleaded gasoline affect my equipments' performance? These and other related questions are ones that all Wisconsin Superintendents should be asking themselves (and their mechanics)! Let's try to answer them by first discussing diesel vs. gasoline, and then briefly talk about the unleaded gas situation.

Diesel power has long been the standard for ag, construction, and trucking equipment. It's now rapidly gaining popularity for all types of commercial turf equipment—tractors, out front rotaries, light-weight fairway units, etc. Why is diesel becoming so popular? It's because diesel has many real advantages over gasoline as a power source. Let's list them:

—*diesel engines, when properly cared for, require much less regular maintenance than do gasoline engines (no tune-ups, no points, plugs, condenser, etc.);*

—*diesel engines can go many more hours before requiring overhaul or replacement than comparable gasoline units. They also generally have a longer lifespan than an equal HP gas unit;*

—*diesels are much more fuel efficient than gas engines—by about 25-30%. This is one of diesels' most important advantages!*

—*diesels not only save \$ on fuel, they save \$ on lessened oil and filter costs. They also save \$ on less labor required to perform all those routine maintenance procedures;*

—*trade-in value of a diesel unit can be as much as twice that of a comparable gas unit.*

Everything is not entirely in favor of diesel power. They do have their drawbacks:

—*the initial cost of diesel powered equipment is considerably higher than gasoline models of comparable horsepower;*

—*when diesels do require serious maintenance or overhaul, it's involved, expensive, and requires a very experienced mechanic;*

—*diesel internal parts are very precisely machined, requiring very clean fuel. Dirt or water in the fuel can cause serious wear and damage to the engine;*

—*diesels that run out of fuel are very difficult to restart;*

—*diesels are very hard starting in cold weather;*

—*a diesel tank setup requires additional up front expenses for those operations currently using only gasoline.*

Although diesel seems to have some obvious advantages, gasoline power is still the mainstay for most golf course operations, and does enjoy some advantages of its own:

—*engine maintenance on gas units is familiar to most or all golf course mechanics;*

—*gasoline is more versatile than diesel fuel — more types of equipment and accessories use gasoline than anything else;*

—*gasoline units start much easier in cold weather than do diesels;*

—*gasoline engines that run dry are very easy to restart;*

—*gasoline powered units have considerably lower initial cost*

than comparable diesel units.

Everyone probably has their own opinions and preferences as to diesel or gasoline—they both have their advantages. Now though, the Superintendent has a choice of either one. The turf manager can now specify his preference, and as a result, definitely can better tailor his equipment fleet to his ever changing needs.

What's the current status on the use of unleaded gasoline? Well, in case you haven't heard, the EPA began a phaseout of leaded gasoline in 1985. The EPA used to allow 1.1 grams of lead per gallon. But, as of July 1, 1985 the allowable level was reduced to .5 grams per gallon. A further reduction, to .1 grams per gallon, was implemented on January 1, 1986.

As one might guess, this EPA ruling created quite an uproar in 1985, and now for many a feeling of "making the best of it." Lead has always provided many well known benefits for gasoline-lubrication for internal engine parts, which reduces friction, which lowers engine temperatures and generally prolongs engine life. Lead also provides gasoline with higher octane levels (octane improves engine performance, etc.).

However, there is an interesting and opposite view—that lead in gasoline is actually harmful to engines. A Toro service bulletin (March 19, 1985) used for this article has this to say—"Analysis of field performance and a multitude of test reports in recent years indicates that leaded fuels may be contributing to a number of engine difficulties. These involve early plug fouling, excessive carboning of the combustion chamber and

related components, and generally poor engine performance.

We have verified the position currently being taken by other small engine manufacturers, that the use of regular grade unleaded gasoline will indeed provide better performance, extend the life of the engine, and reduce or eliminate many of the above noted difficulties that occur when leaded gasoline is used."

So there you have it! There seem to be some positive things about using unleaded gas, but arguments can certainly be made on the positive qualities of leaded gasoline. Since we've all just started using lead free gas, I guess time and experience will help us to judge. I suppose the way to view the situation is that this is just one more change to contend with in the rapidly changing turfgrass industry!

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NEWS

CLIPPINGS

MAPMS Meeting Set For March 16 — 18

The Midwest Aquatic Plant Management Society will hold its sixth Annual Conference at the Abbey On Lake Geneva in Fontana March 16 — 18. Subjects will range from the role of regulatory agencies in managing aquatic plants to progress in lake management. Contact: Richard Bauer, Secretary-Treasurer, MAPMS, 7150 Summerdale Drive, Dayton, OH 45424 for registration information.

ITF Invites WGCSA To Golf Day

The Midwest Superintendents Association, Central Illinois Superintendents Association and the Northwest Superintendents Association are co-sponsoring a golf day at the Eagle Ridge Inn and Resort in Galena, Illinois on May 19, 1986. The members of the Wisconsin Golf Course Superintendents Association have been invited to attend. Call 815-777-2444 to reserve lodging and golf for this event.

Lohmann Moves

GRASSROOTS Columnist Bob Lohmann has moved his golf design offices in Crystal Lake, Illinois to a new address. Bob can now be found at 800 McHenry Avenue, Suite H, in Crystal Lake. The zip code is the same 60014, and his phone number is still 815-455-0445.

USGA Regional Conference

Jim Latham, Great Lakes Region Director of the USGA Green Section, has announced that the USGA will be sponsoring a regional conference on Tuesday, March 11 at the Town and Country Club in St. Paul, Minnesota. For more information contact either Jim Latham at his office or Jim Farrell at 815-459-5590.

Horst Awards Announced

John Mortimer, President of Horst Distributing, accepted two awards on behalf of his company at the GCSAA Conference in San Francisco. They received the "Jacobsen Distinguished Service Award" for 1985. OMC honored them with their "Cushman Turf Quota Buster Award" for 1985.

Horst, celebrating their 40th year in the turf business in Wisconsin, adds these latest awards to their long list of previous acknowledgements. Congratulations!

Sauey Joins Columbia ParCar

GRASSROOTS advertiser Columbia ParCar has announced the addition of Todd L. Sauey to the organization as Vice-President of operations. His responsibilities are to cover all manufacturing, material management and accounting functions. Todd goes to Columbia from one of its sister companies in the Nordic International Group.

Wisconsin Turf Hosts a "Sale-A-Bration"

Wisconsin Turf Equipment Corporation of Janesville will be hosting a "Sale-A-Bration" on March 24 and March 25, 1986. Golf course personnel are invited to attend the March 25 date. The event honors 30 years of business for the company. It will be held at the Americana Resort in Lake Geneva and will feature their entire line of golf and park maintenance equipment. Registration is \$7.00 per person. For more details, contact Curt Larson at 608-752-8766.

UW-EX Turf Meetings Planned

The University of Wisconsin — Extension Turf Meetings have been scheduled for various sites around the state. The dates are:

March 10 — Madison, Holiday Inn S.E.

March 11 — Milwaukee, Milwaukee County Extension Offices

March 12 — Appleton, Columbus Inn

March 13 — Eau Claire, Holiday Inn

All meetings will have registration beginning at 9:00 A.M. and the program will run until 4:00 P.M. Lunch is included in the registration fee.

