

on each piece of equipment before they operate it. The head mechanic is responsible for training the equipment operator to properly check all oil and fluid levels, along with the correct starting and

transporting procedures. The assistant superintendent is then responsible for teaching the safe operation of the machine out on the course. He is with the equipment hands-on to ensure that the

job is done correctly. He then follows the equipment operator out onto the course to show him/her the correct mowing procedure.

Is It Maintenance Or Repair?

BY ROY WILSHIRE, CGCS

Grasslands Golf and Country Club

Most of our budgets have a line item called M&R Equipment. The question is, which of those two letters do we rely upon the most — M or R? At the Grasslands, we are trying to use the M for maintenance more than R for repair. We are accomplishing this only after more than three years of adjusting schedules and simplifying our equipment purchases to best match the equipment that is already here. In simplifying our equipment, we are purchasing more items with the same engines, similar hydraulic sys-

tems and equipment that has proven itself in the field. In utilizing this system, we are reducing the need for unnecessary parts inventory, which is time consuming to count and reorder when needed, thus putting the labor time in the shop versus out of the shop. We are also finding that there are less in-the-field repairs now than in previous years.

This system is working because the shop foreman and his assistant are more able to schedule their work, rather than take the next one in line. And if something does go down repairs are more easily taken care of. Let's not fool ourselves! We still have our days when it's, "Take the next number, and we'll be with you in a minute." In addition to operating under less stress, it allows the em-

ployee in the shop more time to educate himself by reading the articles in the trade magazine and attending seminars. I'm very fortunate in having a very skilled shop foreman with a good background (thanks, Bobby Ellis.). His persistence, my willingness to allow him to establish the programs and utilize a computer program for equipment are paying great dividends for us at the Grasslands.

So, do you replace the grease zerk or the bearing? Change belts in the shop when they're cracked or after their broken in the field? These are just a couple of examples of how maintenance versus repair can assist you in being more productive and cost effective. And once it's in effect, you'll find that it's much easier to use the M rather than the R.

Non-Stop Mechanics - Better than an apple a day!

BY CHUCK GAST, CGCS

Superintendent

AND BILL ELLMAN

*Chief Mechanic
Jupiter Hills C.C.*

Key components of a successful golf course operation involve careful coordination of a myriad of programs relating to cultivation, fertilization, irrigation, regulation and all other sorts of "-ations." However, even with all these aspects in their proper place, basic, yet technical turfgrass mowing operations are the core of a sound golf course maintenance operation for quality playing conditions.

Just as important as having the appropriate equipment to complete specific turfgrass mowing operations, proper equipment maintenance on a routine

basis is essential to maintain desired mowing quality with optimum efficiency. To help us in achieving this goal at the 36-hole Jupiter Hills Club our staff has worked to establish a mechanics program with specific duties and responsibilities to each of three mechanics. We have incorporated rotational scheduling to ensure a mechanic is on duty no less than eight hours a day, seven days a week.

The mechanics staff at Jupiter Hills consists of a chief mechanic and two assistant mechanics, each with specific areas of responsibility. The chief mechanic oversees all operations in the shop area including maintaining parts inventory and prioritizing specific equipment maintenance relative to scheduled golf course operations. Correcting emergency breakdowns and general troubleshooting of less-than-cooperative equipment is also the responsibility of the chief mechanic. Primarily the chief mechanic maintains a work schedule of Monday through Friday, 6:00 a.m. to 3:00 p.m., while also

filling in on weekends depending on workload and assistant mechanics' scheduling.

As for the two assistant mechanics, one is primarily responsible for routine daily maintenance that involves a thorough check of all greens mowers following each mowing operation. Roller performance, motor and clutch operation, and reel-to-bedknife adjustments are maintained on all greens mowers on a daily basis. Attention to tires, batteries, fluid levels and servicing of air filters, as well as other aspects of daily maintenance of various other equipment is also handled by this assistant mechanic.

The workweek of this mechanic is generally Monday through Friday, 7:00 a.m. to 4:00 p.m. With the majority of the maintenance crew clocking out daily at 3:00 p.m., the extra hour at the end of the day allows this mechanic the opportunity to check out all equipment and perform all necessary set-up procedures for the following day as necessary.

Scheduled long-term preventative maintenance-type activities are performed by the other assistant mechanic. Areas of responsibility include lapping and grinding of reels, fluid changes, tune-ups, lubrication and other aspects of equipment maintenance performed on a routine once a month or every 100-hour service program. All pieces of equipment are addressed on a rotating basis with frequency determined by use rate. A workweek of Wednesday through Sunday, 6:00 a.m. to approximately 3:00 p.m. for this mechanic rounds out the attendance program in the shop to provide continuous full-time mechanic expertise on site. With complete access to all equip-

ment for most of the day on Saturday and Sunday, the weekend is an extremely valuable period to concentrate on maintenance of high-use equipment.

An additional benefit that greatly improves the entire operation through effective equipment training and troubleshooting between operators and the mechanics is the bilingual capabilities of one of the assistant mechanics. Without question, effective communication on a daily basis is a truly valuable step toward the proper use and safe operation of all equipment.

On a final note, while it is clearly evident that routinely scheduled equipment maintenance is essential to maxi-

mize equipment life and minimize down time, it is imperative to also maintain an effective and timely equipment replacement program. Continually channeling valuable mechanic attention to "over worked" equipment is not only very expensive in the long run but also inevitably results in a reduction in quality, efficiency and morale in daily procedures throughout the entire operation. Not to mention the fact of the potential snowballing problems that no doubt will occur if critical preventative maintenance programs are consistently shoved to the back burner. Take care of your equipment, or it most definitely will take the care out of you.

Golf superintendent hits a grand slam Using high technology lubricants

BY KEITH VANMETER

Professional golfers have grand slam tournaments, anyone may have a grand slam breakfast, and professional baseball players hit grand slam home runs. Golf superintendents can also hit grand slams with operational and productivity enhancement programs using better performing lubrications. Like runs scored on bases achieved with ballplayers, the bases may be occupied by designated teammates below:

1st Base: Higher productivity

2nd Base: Lower maintenance costs

3rd Base: Oil resources extension by usage

At Bat: The environmental steward

Runs scored by not fouling the environment with hydrocarbons and improving operations.

Going to bat with these engineered organic high tech lubrications will dramatically lower the superintendents confrontation with that old victory grabbing nemesis....DOWNTIME. The four-base, grand slam homer can indeed be hit by the superintendent.

The big pitcher

First, let us take a look at the field of play — Lubrications.

The large oil company was "the engine that could" industrialize the world from an agrarian world culture. This was a great accomplishment for mankind. Large petroleum industries jump-started global industry, rule the world in some peoples minds, and still greatly affect what happens for many economies.

Without oil, we would be mowing with hand power and the sickle. We might be fertilizing with animal byproducts, not the sophisticated chemical compounds in use today. In fact, Golf as we know it today would not exist.

America's game

The USA is the world's largest exporter of grease and oil. It is so because the USA has the cleanest of the world's oil supply. The least contaminated drilled oil, produced by Mother Nature, lies under the mid-continent of America.

The most oil drilled and the dirtiest oil comes from that world hot spot, the Middle Eastern. Because this crude oil is high with sulfurs and tars, it is primarily manufactured to be fuel products for consumption.

In the good old U.S. of A, crankcase, gear box, hydraulic and transmission oils are "Made in America" with America's high-paraffinic based oil resources.

Synthetics are oils that are synthesized. These topnotch oils are great for some applications. — long-hauler trucking companies for one of many. Use in golf operations is overkill.

Mineral-based, high technology oil is best for the golf course unless otherwise indicated. As it is not as expensive as synthetic oil, it will offer unexpected high performance.

Why pay the extra costs of synthetics above the mineral-based products and spend more than you can justify? Today, synthetics are not cost effective.

The best ballplayers

Manmade machines emulate the human machine. As blood is to our human body, oil is to the mowing machine. Blood acts as oil in that it helps cool our body engine, taking away wastes and heat.

Without healthy blood, we trudge down and are inefficient as fully functioning, living machines. Ditto with a not-living machine, pump or other mechanism.

The key to an efficient mechanism is getting the heat and wastes down to within operational limits, even in the most extreme working environments.

Make no mistake about it: golf operations are Extreme Working Environments and courses aren't level playing fields.

Operations require the lowest levels of downtime possible to be efficient and