

Golf course building is up, architects say

CHICAGO - Golf course architects are approaching the "magic number" of new golf courses that must be built annually to cope with the increasing number of new players.

A survey of member firms of the American Society of Golf Course Architects reveals that 305 new projects and 268 remodeling assignments are in progress in the U.S. and Canada, both healthy increases from the previous year.

According to statistics from the National Golf Foundation, golf players jumped from 20.2 million in 1986 to 21.7 million in 1987.

Based on those figures, the NGF projects that approximately 387 new courses (one a day!) would have to open annually to correct the disparity between the number of players and courses available.

"I honestly believe we could build 400 new courses a year if financing were readily available," says ASGCA president Pete Dye. "If financing manifests itself, then it will be the responsibility of the architect and builder to meet this challenge and produce interesting golf courses that will make those millions of new golfers glad they came out to the course." □



Lee Hellman

PESTICIDES

Deer tick moves into new areas

BALTIMORE — The deer tick population in the United States is spreading, and with it the threat of Lyme disease.

According to Lee Hellman, Ph.D., the pinhead-sized, Maryland-based pest has been detected in a downward migration into the Appalachians, and may soon reach Virginia and other southern states. Cases of Lyme disease have also been documented in Western states and other world-wide locations.

Hellman says deer ticks attack when in the nymphal stage, which is also the time they carry the Lyme disease virus.

Adult females nest in rodents or pets, and then drop off in yards and fields to lay eggs. The first symptom of Lyme disease is a rash around the bite. If untreated, the rash will expand, and heart and nervous conditions or swollen joints may develop.

Two drawbacks in the battle against the disease are that only 75 percent of victims exhibit the rash symptom, and the disease is not always detectable in blood tests. According to Hellman, the disease can be easily controlled by antibiotics, but in some instances disease organisms have escaped the antibiotics and enter body tissue impervious to medication. There they will remain, causing recurrent symptoms.

"Lyme disease will be one of the major health control problems in the eastern United States," warns Hellman.

Hellman says the deer tick can be controlled by most materials now used against turf insects, such as Turfcam, Triumph, diazinon, Dursban, Sevin, or the soon-to-be-available insect growth regulators or synthetic pyrethroids. □

SHORT CUTS

MIDWEST HOT SPOT...The drought took its toll on the state of Michigan in 1988. Paul Rieke, Ph.D. at Michigan State University, says portions of the state had .83 inches of rainfall during May and June. Usual rainfall for that time is 6.07 inches. Michigan experienced 37 days above 90°, a mercuric rise from the usual 11 days. Average per day rainfall from April 24-July 15 was .05 inches.

HOUSES DOWN..."We predict that single-family housing construction will continue to inch downward but will remain above the one million unit level." That prognostication comes from Stephen W. Scott, vice president at JI Case. Case, of course, has a vested interest in housing construction because it manufactures construction equipment.

BE COUNTED...The Michigan Turfgrass Foundation has begun a survey of the Michigan green industry. The purpose, according to Tim Doppel, president of Atwood Lawn Spray, is to determine the size and earning power of Michigan's turfgrass industry. "We intend to use the results to show just how important the Michigan green industry is and thereby generate dollars to support research at Michigan State University," says Doppel, who is in charge of the project.

PR DEPARTMENT..."We all have a public relations department, whether we know it or not," says ServiceMaster vice president Rick White. White says "we are making impressions all the time on the people we serve and even people we don't serve." The four ways to impress people, hopefully positively: "the condition of our vehicles, answering the phones, the appearance of our employees and the quality of our work." White says "I think it's time for us to under-promise and over-deliver," instead of vice versa.

BUG DETECTOR...David Smitley of Michigan State reports the drought of 1988 greatly effected the insect populations in areas of Michigan. "European chafers and Japanese beetles expanded their territory, and there was some cutworm and bluegrass billbug movement onto golf course fairways because of the extreme contrast to other drought-stressed areas." Some fairways, he reports, suffered 50 percent turf loss. Interestingly, home lawns in the state showed little insect damage, with 95 percent being strictly drought stress. In fact, many bugs packed up and moved out of those lawns to find enough moisture.

Introducing Cutless.[®]

A new kind of turf growth regulator that gives your course a bottom line boost:

More playability.



**Dear lick
moves into
new areas**

BALTIMORE—The deer lick population in the United States is expanding and with it the threat of Lyme disease. According to Lee Hellman, P.D., the national sales manager for Deer Lick, the disease has been detected in a downward migration into the A.P. states and may soon reach Virginia and other southern states. Deer Lick disease has also been documented in West Virginia and other wild areas.

Adult females feed in woods of oak and cherry trees. The first symptom of Lyme disease is a rash around the bite. It is treated with antibiotics and rest. Serious conditions or complications develop. Two drawbacks to the disease are that only 75 percent of ticks which infect the host are always detectable in blood tests. According to Hellman, the disease can be easily controlled by anti-biotics, but in some instances disease organisms have escaped the anti-biotic and enter body tissue. There will be some restrictions to make certain that they will be treated. The disease is not always detectable in blood tests. According to Hellman, the disease can be easily controlled by anti-biotics, but in some instances disease organisms have escaped the anti-biotic and enter body tissue. There will be some restrictions to make certain that they will be treated.

BE COUNTED... The Michigan Turfgrass Foundation has begun a survey of the Michigan green industry. The purpose, according to Tom Dappel, president of Alwood Lawns Care, is to determine the size and earning power of Michigan's turfgrass industry. "We intend to use the results to show just how important the Michigan green industry is and thereby generate dollars to support research at Michigan State University," says Dappel, who is in charge of the project.

PR DEPARTMENT... "We all have a public relations department, whether we know it or not," says ServiceMaster vice president Rick White. "White says" we are making investments all the time on the people we serve and even people we don't serve. The two ways to gain press people, especially positively, are the diffusion of our vehicles, answering the question of our employees and the question of our work. "White says, "I think it's time for us to consider prompt and positive delivery," in speed of the service.

BUG DETECTOR... David Smiley of Michigan State reports the thought of 1988 greatly affected the insect populations in areas of the Great Lakes basin, and there was a major outbreak of blight and blight. The major outbreak of blight and blight was caused by the blight and blight. The major outbreak of blight and blight was caused by the blight and blight.

SHORT CUTS

GOLF
Golf course building is up, architects say

MIDWEST HOT SPOT... The drought took its toll on the state of Michigan in 1988. Tom Dappel, P.D. at Michigan State University says that the drought was a major factor in the decline of the Michigan turfgrass industry. "We intend to use the results to show just how important the Michigan green industry is and thereby generate dollars to support research at Michigan State University," says Dappel, who is in charge of the project.

CHICAGO - Golf course architects are building more courses than ever before. A survey of the American Golf Association shows that the number of courses under construction in the U.S. has increased by 15 percent since 1987. "We are seeing a lot of new courses being built," says Tom Dappel, P.D. at Michigan State University. "We intend to use the results to show just how important the Michigan green industry is and thereby generate dollars to support research at Michigan State University," says Dappel, who is in charge of the project.

This is where perfect lies start on your fairway. New Cutless 50W from Elanco.

Unlike other turf growth regulators, new Cutless doesn't stop the development of warm and cool season turfgrass. Instead, it reduces or slows your turfgrass's growth rate by shortening the internodes of the growth stem with no adverse effects on their roots. The result is improved turf quality and more playable fairways.

With Cutless, your turfgrass appears thicker and stronger for a denser, more consistent playing surface. Golf balls just naturally sit up better.



Cutless also reduces your water use, resulting in less turf wilt. And lower irrigation costs.

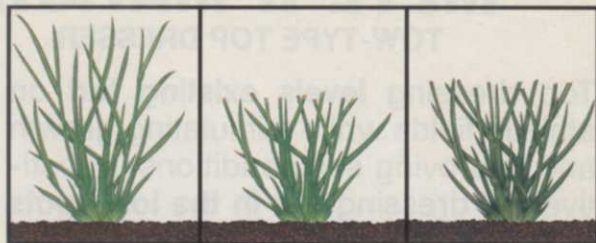
But Cutless does more than that. Much more. It also gives your turf a rich, darker green color.



Because Cutless-treated grass grows at a slower rate, there's also a dramatic reduction in clippings. Up to 50% less. With less mowing frequency. Also up to 50% less. You not only save time and labor costs, you

can also manage your hard-to-mow areas more efficiently.

Here's another added benefit with Cutless. As your turfgrass grows up thicker and more competitive, there's less room for troublesome weeds to interfere. Cutless also helps crowd out *Poa annua* for conversion to a more desirable turfgrass such as bentgrass.



1. Sprig of grass in normal state.
2. Seven to 10 days after Cutless application, mowed sprig sometimes exhibits slight discoloration of treated area and leaf tip browning.
3. Growth reduction peaks between third and eighth weeks, accompanied by darker green coloration and increased tillering.

Don't just take our word for Cutless. Take it from Scott Niven:



Scott Niven
Superintendent, Stanwich Club
Greenwich, Conn.

"I've reduced clippings 30 to 50% when we mow fairways. My guys don't have to empty the baskets as much, so we save time and money on labor. But I think the best advantage is the reduction in the amount of water you have using Cutless. It's a marked difference.

"Initially, you get so little discoloration with Cutless that a golfer would never notice it. But after 4 weeks, the difference

was between night and day on how dark green the Cutless turf was.

"Cutless helped us convert from 80% Poa annua to over 95% bentgrass within five years. But I'm just as impressed with how Cutless creates a much thicker turf. It makes the grass as tough as nails, helps the ball sit up higher for our golfers."

Find out more about giving your course more playability with Cutless. See your Elanco distributor. Or for a free brochure, call toll-free: **1-800-352-6776**.

Elanco Products Company
A Division of Eli Lilly
and Company
Dept. EM-455, Indianapolis, IN 46285 U.S.A.
Cutless®—(flurprimidol, Elanco)

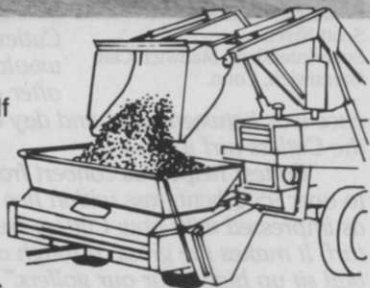


Circle No. 196 on Reader Inquiry Card

TURFCO METE-R-MATIC II

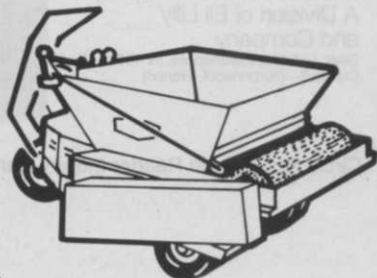
TOW-TYPE TOP DRESSER

Top dressing levels existing turf on athletic fields while stimulating growth and improving soil conditions. Repetitive top dressing **fills in the low spots** and also promotes the **decomposition of thatch**.



- Top dress 18 golf greens in under 6 hours
- Top dress an athletic field in under 2 hours
- 18.3 cubic feet hopper capacity
- Spreading width of 60"
- Top dress at up to 8 miles/hour
- Ground driven no engine to maintain

TURFCO also manufactures self-propelled and truckster-mounted METE-R-MATIC TOP DRESSERS



TURFCO MFG., INC.
3456 N. Washington Ave.
Minneapolis, MN 55412-2688

Ph. 612/588-0741
Telex 5106013762

TURFCO

Circle No. 188 on Reader Inquiry Card

NEWS from page 11

GOLF

GCSAA begins environmental management

LAWRENCE, Kan. — The GCSAA has contracted with Hall-Kimbrell Environmental Services to develop the first comprehensive environmental management program for the golf industry. Hall-Kimbrell is one of the nation's leading environmental consulting firms.

"We want to help superintendents make their golf courses as environmentally pleasant and safe as possible," says John Schilling, executive director of the golf superintendents association.

The GCSAA feels that coping with regulatory obligations and managing environmental and safety risks are increasingly being recognized as important professional priorities for its members.

The package being provided to superintendents consists of a Compliance Audit Notebook, an instructional videotape and additional printed material. The package deals with issues like pesticide handling and storage, worker safety, underground storage tanks, hazard communication standards and more.

It is available through the GCSAA, 1617 St. Andrews Dr., Lawrence, KS 66046. Cost is \$725 for members and \$900 for non-members. □

LANDSCAPING

Teamwork gets best results

BALTIMORE — Cooperation and teamwork between lawn care operators and customers remains a green industry issue. Clark Throssel, Ph.D. at Purdue University, believes one part of this relationship is to reconcile customer expectation with actual results.

Speaking to a packed house at the Maryland

Turfgrass Conference, Throssel said operators must instill reasonable expectations by realistic statements made in person and in company advertising. "Don't create false illusions of the perfect lawn," Throssel advised. "Avoid statements like 'weed free' or 'grub proof.' Rather, say 'weed control' or 'grub management.'"

Throssel also stressed the importance of homeowner involvement in post-treatment maintenance. "If they don't follow your suggestions," said Throssel, "the results will be less than expected."

Proper mowing height and proper watering are crucial to a successful program. "The numbers on the mower wheels do not refer to mowing height. If a customer says he is cutting at six inches, you can be sure he's looking at the numbers on the wheels."

Since many customers equate a lower height with a nicer lawn, the lawn care professional must advise them otherwise. "They need to know," said Throssel, "that lower mowing is harmful to root growth. The roots will not grow for five or six days afterwards."

"If your customers decide they'd like to experiment on their own," said Throssel, "let them know which species work best for that part of the country, and which species are incompatible. Turf-type tall fescue and Kentucky bluegrass, for example, will not be successful."

"The competition in the green industry has left a limited customer base," warned Throssel, who suggested being as helpful and available as possible. That means looking for and meeting with prospective customers on Saturdays and weekends. □



Throssel

Aeration Defined



is Otterbine

Introducing The Instant Fountain™

A Good First Impression

Bold, Versatile, Creative. Our new mini-aerator line is attracting the attention of the most discerning landscape designers, nurseries, homeowners and private clubs. Small to mid-sized commercial and residential properties can now include these economical aerator-fountains in their landscaping plans.

Perfect for patios, courtyards or backyards. The esthetic appeal of a fountain's gently falling water, distinctive spray pattern and optional night lighting enhances the beauty of any chosen setting. Instant Fountains also add oxygen to the water, helping to keep it clean and clear.

Definitely Appealing

Available as separate components for existing ponds or as a complete *Water System Package* that includes a mini-aerator and the Otter-Pool; Instant Fountains are a whole new design opportunity worth exploring.

175 Rocket II
with Fountain-Glo™



175 Sunburst



Let's Get Together

For more information, call (215) 965-6018. FAX (215) 965-6050 or write: BAREBO, Inc. P.O. Box 217, R.D. 2 Emmaus, PA 18049



175 Otter-Bell

Circle No. 105 on Reader Inquiry Card

THE STONE EX-TRACTOR

Dig stones the easy way. Fits on any tractor with 3 point-hitch and a hydraulic top link.

Simple; Trouble free. Use during and at off season times for many other uses. Will pay for itself in 3 working days.



PRICE only \$695.00
FOB Pardeeville, WI 53954

Terracare Products Company, Inc.

P.O. Box 506, Pardeeville, WI 53954 608-429-3402 FAX 608-429-2889

Circle No. 184 on Reader Inquiry Card

TURFGRASS

New grass from the Emerald Isle

BELFAST, Northern Ireland — Logro, a dwarf variety of grass bred to grow not more than six inches high, is proving to be a boon to landscapers here. According to a press release, the grass is also being tested in Texas, parts of Canada, New Zealand and East Germany.

"Logro has a prostrate growth habit," says David Johnston, turf researcher for Queens University at the Horticultural and Plant Breeding Station in Loughgall, Northern Ireland. "It tends to grow horizontally along the ground with the result that there is good ground cover even after close mowing. It also maintains an attractive color, is disease-resistant and it needs to be cut about two-thirds as often as traditional types of grass. The potential for savings world-

wide is unlimited."

Herbicide-resistant varieties called Duchess and Countess are now being tested.

"Both varieties will give a magnificent green sward of almost 100 percent purity," Johnston continues. "And recent trials in Texas have confirmed that Duchess leads the field in terms of heat tolerance."

He sees money-saving uses for Logro on golf courses, athletic fields, schools grounds, office complexes, roadsides, cemeteries and airports. □

LANDSCAPING

ALCA study analyzes costs

FALLS CHURCH, Va. — A recent nationwide study reveals that cash flow is the most critical factor in the success of a landscape management company.

The 1988 ALCA (Associ-

Before you fertilize . . .

GET THE THATCH OUT!

According to turf experts, **excessive thatch** must be **removed** after a hard winter in order to have healthy turf in the spring. Thatch prevents **nutrients** from reaching down into the root structure. Result: the lawn cannot breathe and grow properly.



BLUEBIRD INTERNATIONAL®



knife reel



flail reel

BlueBird has the **most complete line** of power rakes in the industry, a rake for every lawn and purpose. Spacings for every application. Interchangeable flail reels and knife reels are available for vertical mowing, and together they answer **every need** of lawn service professionals in every part of the country. Call your distributor **today** for a BlueBird catalog. For the name of your distributor call the BlueBird Action Center. BlueBird International Inc., 2778 South Tejon, Englewood, Colorado 80110. Phone (303) 781-4458.

Circle No. 107 on Reader Inquiry Card



Beaver Creek Resort, Colorado

Get all the yellow nutsedge and none of the innocent bystanders.

Now you can really control yellow nutsedge from sod and ornamental grass* – without damaging the grass.

It's simple. Just put down BASAGRAN® herbicide from BASF. No need for you to be selective. BASAGRAN does that for you.

It's safe to grass and easy to use. And as effective against

yellow nutsedge as anything you can buy.

Always follow label directions.

*Do not use on golf course greens.



BASF Corporation
Chemicals Division

BASF

BASAGRAN is a registered trademark of BASF AG.
© 1988 BASF Corporation.

Circle No. 194 on Reader Inquiry Card



The Average Person's Idea Of Overpowering Allies.

Get all the yellow nutsedge and
none of the innocent bystanders.

Scotts TGR® Poa Annua Control has joined forces with the Penn Pals to help you win the war on Poa.

When you apply Scotts patented TGR Poa Annua Control to enemy-occupied territory, it weakens Poa annua, while Scotts

controlled-release fertilizer helps surrounding bentgrass thrive and overtake the Poa.

On bentgrass fairways and greens, overseeding two weeks later with one of the Penn Pals (Penncross, Penneagle, PennLinks or Pennway blend*) helps speed up

*Fairway use only.

Agrotac Sprayers Deliver

Whether you spray once a day or 20 times a day, 50 gallons or 200 gallons, you can see, collect, or commercial landscapes, you need a PRO-CARE Sprayer from Agrotac. Agrotac PRO-CARE Sprayers are the professional choice because they're built right. They're tough, they're reliable, and they're available with 50 or 200 gallon tanks. So, you can get your work done right.



The Scotts Tech Rep's Idea Of Overpowering Allies.

the transition to desirable turf. Soon you can stand astride lush fairways and greens and declare total victory.

Your Scotts Tech Rep is ready, willing and able to help you plan

your attack, and supply your TGR Poa Annua Control and creeping bentgrass needs.

For more information, contact your Scotts Tech Rep or simply call 1-800-543-0006.

Scotts
ProTurf

Circle No. 179 on Reader Inquiry Card

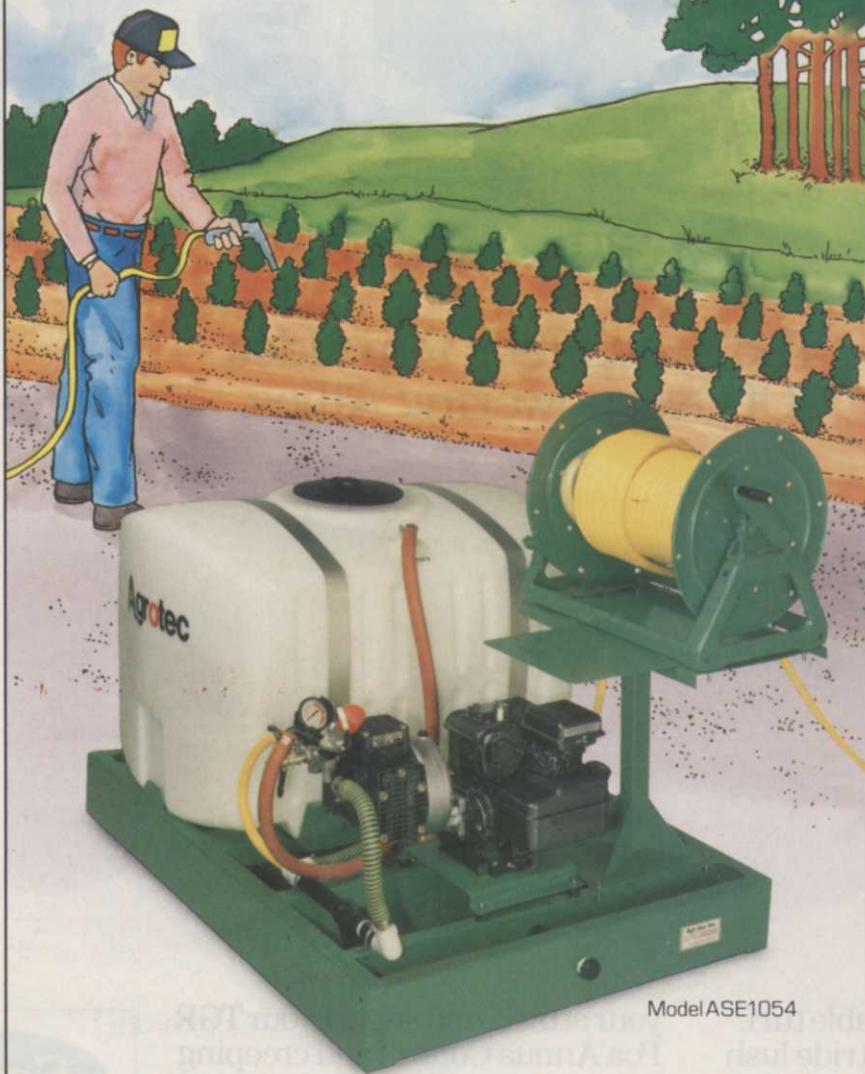
Agrotec Sprayers Deliver

Whether you spray once a day or 20 times a day, 50 gallons or 200 gallons, golf courses, tall trees, or commercial landscapes, you need a PRO-CARE Sprayer from Agrotec.

Agrotec PRO-CARE Sprayers are the Professional choice because they're built right. They're tough. They're reliable. And they deliver.

Available with 50, 100, 150 or 200 gallon polyethylene tanks, low or high pressure pumps. Skid-mounted for your pick-up or truck. Optional equipment includes boom kits, hose reel kits, and wheel/trailer kits for golf courses, nurseries, or towing.

Call or write for our free brochure and location of the distributor nearest you.



Model ASE1054

Agrotec

Highway 35 • P.O. Box 49 • Pendleton, NC 27862-0049
1-800-638-9363 • (919) 585-1222

ated Landscape Contractors of America) Operating Cost Study examines financial information provided by 326 contractors. The study was done by Ross-Payne & Associates of Barrington, Ill.

The study presents model financial ratios and industry averages for three separate groups of contractors: exterior landscapers, landscape management firms and interior plantscapers.

The study notes that while contractors have incorporated better management practices since 1979, profits have fallen by more than 50 percent. Much of this is attributed to their inability to pass along equipment cost increases.

Major categories include assets, liabilities and equity, sales, gross margin, indirect overhead, administrative overhead, and net profit before taxes.

In addition to the total averages, separate sets of averages are presented for three different revenue groups: under \$750,000, \$750,000 to \$2 million, and over \$2 million.

The report also explains various financial ratios, such as debt-to-equity, net fixed to current assets, degree of fixed asset newness, and others.

The 64-page study costs \$20 for ALCA members and \$30 for non-members. For information, contact ALCA at 405 N. Washington St., Falls Church, Va. 22046. (Phone: 703-241-4004.) □

LAWN CARE

Public image an issue for '90s

STATE COLLEGE, Pa. — First, some stats: recent industry surveys indicate 30 percent of a potential 7.5 million single-family home lawns are being treated by professional applicators. The EPA has detected traces of 17 pesticides in 23 states' groundwater. Fifteen others have been detected, but their sources are not identified.

continued on page 22



Keep your reputation
spotless.

Golfers may not know leaf spot by name, but it can mark the difference between your course and someone else's.

DYRENE® 4 Turf Fungicide has been effectively controlling leaf spot for years. And for every day of control you get, nothing costs less.

DYRENE 4. Proven control. Because we have a reputation to consider, too. For more information, contact Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120.

Dyrene 4

Mobay Corporation
A Bayer USA INC. COMPANY

Bayer 

DYRENE is a Reg. TM of Mobay Corporation.

Circle No. 152 on Reader Inquiry Card



In the under 40-hp game,

Introducing the new compact tractor lineup from John Deere. Now you have a choice of nine models all under 40 horsepower.

The new 70 Series Tractors have a brand new look. And a brand new set of performance features to choose from.

Including collar shift and synchromesh transmissions,

continuous live PTOs and power steering to name a few.

But no matter which performance package

Durable cast-iron constructed "TN" series engines provide increased power and improved fuel economy.

you select, the new 70 Series are packed full of other improvements you've been waiting for.

Like a new, open operator's station for an uncluttered working area. New fuel efficient "TN" series engines. Plus loader/mower compatibility just like we have on our 55 Series

