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Wheel Horse offers you a choice of 11 garden tractor models, ranging from 8 to 18 HP for 1973...backed with 25 years of experienced craftsmanship. Wheel Horse offers six automatic and five standard transmission models. See your service-oriented Wheel Horse dealer today. He's listed in the Yellow Pages under "lawn mowers." Write for your free copy of our new 1973 catalog.



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Wheel-Horse Products, Inc., Dept. WTT, 515 West Ireland Road, South Bend, Indiana 46614



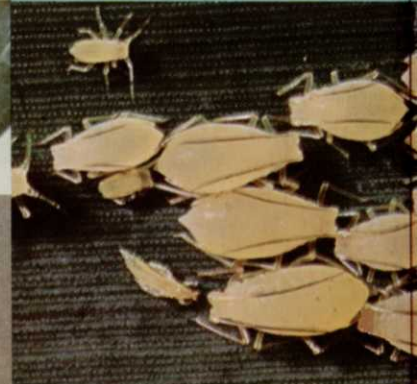
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Bad for bugs of turf and ornamental plants. And bad for household and structural bugs. Because Dow has a pair of insecticides that will make their lives miserable. There's ZECTRAN* insecticide, a general use biodegradable insect killer that works on almost all major foliage-feeding insect pests—even the hard-to-kill kinds. Use ZECTRAN on over 600 different flowers, ground covers, trees, shrubs and turf. And then there's DURSBAN* insecticide. Its effectiveness, economy, non-phytotoxicity and biodegradability make it the choice of professional turf men for golf greens, turf farms, home and



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Grasshopper

Aphids

Whiteflies

Cockroach

Cutworm

Hairy Chinch Bug

Bagworms

Mealybugs

Leafhopper

Ag-Organics Department, Midland, Michigan 48640

industrial lawns—or wherever grass and ornamentals are grown. It's especially effective to control the hairy chinch bug and sod webworm. DURSBAN insecticide is also preferred by PCO's for controlling household and structural pests—especially resistant roaches that laugh at other sprays. Please remember to read and observe all precautions on the product label. Bugs, get ready for 1973!

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For More Details Circle (126) on Reply Card



With the advent of hot, spring winds, Bermudagrass comes alive for April and early May play. There is no summer play because temperatures daily climb up to 134 degrees.

GOLFING OASIS
(from page 25)

Course there are many challenges. One would expect this. Opened for play in the late twenties as a nine hole links, it was expanded to eighteen in 1967 by William P. Bell, well known west coast golf architect.

Manual fairway irrigation replaced the former flooding type of water application. Bell carefully selected tree forms that would provide a green oasis atmosphere in this desert environment. Although playing only 5800 yards, the country mile shot does not come so easy as on conventional layouts—below sea level at-

mosphere, you know.

The Environment

What kind of grass grows where the temperature of 134 degrees last summer equaled the all time high established in 1913; where the humidity at the same time was at zero, and the ground temperature one inch below soil level was 209 degrees?

Bermuda is the answer for this location in the hot months which cover the greater span of the calendar.

Naturally no one plays golf during the peak of summer. Man seeks his recreation here only during the season known as winter outside the valley, the period of November 1st through May 1st, truly a delightful time in the valley.

For early fall and spring growth, 25 tons of annual ryegrass are sown. This converts the playing areas of tees, greens and fairways to a pleasing facility that is indeed inviting to the patrons. By late April as the warm winds blow up from the open desert areas of the south, the Bermuda makes a comeback and continues through the remainder of the year.

Problems

Paul Woitke, a GCSAA Scholarship winner at Penn State Turf School last March wanted a western location for his first position as golf course superintendent. He elected to try his hand in this hell hole on the
(Continued on page 40)



This is Devil's Golf Course. Looking much like the pictures taken on the moon, this area represents part of the most ancient of all the rock formations of the Pre-Cambrian Era.



This view of Death Valley is only a short distance from Furnace Creek Ranch Golf Course. Note the saltbushes whose roots radiate 30 feet to gather sufficient moisture.

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Because practically everything MAINTAIN touches grows slower.

Just how much slower depends on what the weather does to your greenery and what kind of greenery it is.

For example, 200 acres of grassed median in Pennsylvania were treated with MAINTAIN early last spring, just after the first mowing. The grass was cut once more before Labor Day, and that was it. MAINTAIN saved the State Department of Transportation approximately 5 mowings that year.

What's more, MAINTAIN works on trees, shrubs and vines as well as grasses.

While it slows down the growth of turf, it practically stops broadleaf weeds in their tracks. Which, naturally improves the quality of the turf, as well as the effectiveness of your maintenance program.

And MAINTAIN can be sprayed where machinery can't go. Up steep slopes. Around guard rails. Along fences.

At Washington National Airport in Washington, D.C., MAINTAIN was used on a dangerously steep bank between two levels of the airport. MAINTAIN saved the maintenance department 5 mowings, and the chance of injuries was reduced immeasurably because the equipment was not used as often.

Of course, the best way to find out what MAINTAIN can do for you is to try it. And the best way to do that is to get in touch with your U.S. Borax

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ASPA SUMMER MEETING

(from page 30)

Mountain Sod Growers Association has been devoting a great deal of effort and time in preparation of what should prove to be an outstanding and very meaningful event.

The modern and sprawling Richlawn Turf Farms will be the host site for the field day activities. Holiday Inn, Southeast, will serve as the headquarters and lodging facility.

The program will include a wide range of activities which should appeal to a wide range of interests. During registration on the evening of July 16, those in attendance will be welcomed to Colorado with a reception hosted by the Rocky Mountain Sod Growers Association.

The following three days will be bustling with activity that will include an educational program, organized bus tours and a field day.

Included in the educational program will be a discussion on accounting by Mr. R. K. Reynolds, Farm Management Specialist at VPI; use of the accounting forms in the ASPA Accounting System by a representative of Reynolds and Reynolds Company; labor relations, OSHA and other legislative issues of

concern to sod producers by William Harding of a legal firm recognized for their competency in such matters; new developments in determining seed quality by Paul Florence, actively engaged as a seed broker as well as a sod producer, and the importance of nematodes in turfgrasses by a recognized nematologist.

Dr. Jack Butler, Extension Specialist in Turf at Colorado State University, will discuss the Colorado Sod Industry at the annual banquet on July 18.

Organized bus tours will highlight many points of interest to sod producers. A half-day tour during the afternoon of July 17 will be conducted to the U. S. Air Force Academy and West Turf Farms.

On the following day, an all-day tour will be conducted to Colorado State University at Ft. Collins. Highlights featured on this tour will be water resource development, water and its uses in the arid West, plant environmental research and turfgrass research. The annual business meeting will be held immediately following lunch. The day's activities will be concluded with the annual banquet.

Activities on July 19 will begin with an early morning tour to ob-

serve a Richlawn sod installation complete from soil preparation to the final service call. Activities for the remainder of the day will be centered at the sprawling Richlawn Turf Farm. Suppliers of products and equipment essential to the sod industry will exhibit and field demonstrate the newest and latest equipment and products. The field day activities will provide an excellent opportunity for an update on new developments as well as see equipment in action under field conditions.

Aside from the planned activities, Colorado offers unlimited opportunities for sight-seeing. The beauty of Colorado and the ASPA program for the summer meeting will provide a mid-season break that could prove to be exceptionally enjoyable and educational. Printed programs with complete details are available from Dr. Henry W. Indyk, Executive Secretary, P. O. Box 231, College of Agriculture and Environmental Science, New Brunswick, New Jersey 08903.

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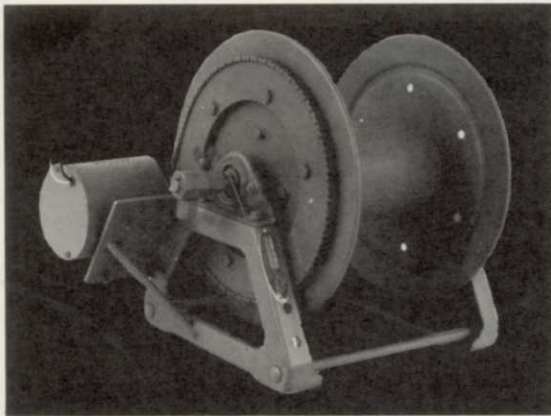
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—insect report—

INSECTS OF ORNAMENTALS

ARMORED SCALES

FLORIDA: Adults of *Lepidosaphes maskelli* and *Carulaspis minima* moderate on 2,000 *Juniperus* sp. plants at Hudson, Pasco County. All stages of *Duplaspidiotus tesserratus* and MINING SCALE (*Howardia biclavata*) collected on *Camellia japonica* at Arcadia, De Soto County. These are all new county records.

AMERICAN COCKROACH

(*Periplaneta americana*)

GEORGIA: Severely damaged bark of poinsettia and kalanchoe plants in Spalding County greenhouse.

DIASPIDID SCALE

(*Morganella cueroensis*)

FLORIDA: Adults heavily infested *Myrica cerifera* (wax myrtle) growing in deep shade at Yeehaw Junction, Osceola County. This is a new county record.

BAGWORM

(*Thyridopteryx ephemeraeformis*)

ALABAMA: About 50 percent of eggs hatched on trees and shrubs examined along Highway I-85 in Lee, Macon, and Montgomery Counties. First instar larvae very heavy on Juniper and cedars; expected to destroy plants.

TREE INSECTS

PINE SAWFLY

(*Neodiprion taedae linearis*)

ARKANSAS: Hatch began in south-central counties about 2 and one half weeks later than normal.

EASTERN TENT CATERPILLAR

(*Malacosoma americanum*)

NEW JERSEY: First hatch of season observed in crab apple trees at New Brunswick, Middlesex County. Few larvae observed on each egg mass. MARYLAND: First larvae of season reported from Montgomery County. Most egg hatch expected to be completed in 7-14 days in central area. SOUTH CAROLINA: Larvae moderate to severe in most central and Piedmont counties. FLORIDA: Larvae abandoning most tents in *Prunus* spp. in search of pupation sites at Gainesville, Alachua County. ARKANSAS: Heavier in southern area than for many years.

FOREST TENT CATERPILLAR

(*Malacosoma disstria*)

TEXAS: Severe damage to oaks and other trees reported in Matagorda, Calhoun, and Colorado Counties. Some trees completely defoliated in area.

ELM SPANWORM

(*Ennomos subsignarius*)

CONNECTICUT: Due to an egg parasite *Ooencyrtus clisiocampae* (an encyrtid wasp) this defoliator not expected to be problem except for few localized infestations.

BENEFICIAL INSECTS

EULOPHID WASP

(*Coccophagus albicoxa*)

COLORADO: Parasitized and unspecified scale insect infesting *Arceuthobium cyanocarpum* (a mistletoe) which in turn was parasitizing *Pinus flexilis* (limber pine) about 18 miles west of Fort Collins, Larimer County, at about 7,700 feet elevation. This is a new State record.

CONVERGENT LADY BEETLE

(*Hippodamia convergens*)

OKLAHOMA: This species and *Nabis* spp. (damselfly bugs) increased in alfalfa in west-central area; *H. convergens* still light in McCurtain County alfalfa.

MERTECT® 140-F Tough on disease. Easy on you.

You can easily control the major turf diseases with nonmercurial MERTECT 140-F. It works systemically against dollar spot, brown patch, and *Fusarium* patch.

But along with that, it also saves you time and money.

Measuring, mixing, and dispersion are

easier because MERTECT 140-F is flowable. It won't clog spray nozzles even in low-

volume fairway spraying. Its long residual (2-3 weeks) control means fewer applications. And the low dosage rate makes it economical.

Follow the simple instructions on the label. MERTECT 140-F is not phytotoxic to grasses when used as directed. See your Merck distributor for a supply now. Or write us for his name.

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Measure out the recommended amount of MERTECT 140-F (1-2 fl oz in 5-10 gal of water/1,000 sq ft). Notice the handy pouring spout included with each gallon.



Pour the measured amount directly into the spray tank. No need for a slurry, no hard-to-handle powder to mess with.



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A NATIONAL MEETING DEDICATED to AQUATIC WEED CONTROL

July 15-18, 1973
New Orleans, Louisiana

You are invited to join Hyacinth Control Society members in a program which includes reports of research work, operations, and field techniques relating to control of noxious aquatic weeds.

Delegate Registration: \$40 Spouse: \$20
(10% discount for pre-registration)

All hotel rooms for either single or double occupancy: \$10-\$14.

Meeting registration begins Sunday p.m. at the headquarters hotel. Formal program sessions begin 9:00 a.m., Monday, July 16.

For more information: Contact Brandt G. Watson, President
Naples Mosquito District, Box 725
Naples, Fla. 33940

Headquarters for Meeting: Monteleone Hotel
214 Rue Royale
New Orleans, La. 70130
(Hotel Tel.) 504/523-3341

THE HYACINTH CONTROL SOCIETY, INC.
P.O. Box 2237
Fort Myers, Florida 33902

For More Details Circle (149) on Reply Card

GOLFING OASIS

(from page 34)

face of this planet.

To be successful, both plant and man must work at survival.

Above all, both must be adaptable.

The desert is unbending. "Once we sow the ryegrass, it would seem that the migrating birds appear from everywhere by the many thousands." This is understandable because this is the only oasis within hundreds of miles.

Many of the birds, like the paying patrons, elect to remain all winter. With a fresh water reservoir that is continually replenished from springs located in the mountain canyons 16 miles away, the birds, especially the coots, do remain and become a continuing problem by constantly drilling holes in the putting surface looking for insect food or sprouting seed.

"We have many other problems", Paul reports. "Coyotes often dig holes around the cups out of sheer curiosity in attempting to find out what is in the hole. The riding stable horses tear down the paddock to reach the green grass that they can smell." Occasionally rattle snakes crawl in from the desert seeking relief from the heat.

"Just don't put your hand into any high grass areas, it could get you in trouble," he says. How much water is necessary seemed a logical question. "Too much water is lost in mid-air if we irrigate during the daylight hours, Paul notes. With only the golf course demands to meet it is just possible to get through the heat of the summer. The Bermuda is allowed to grow long and often cattle are brought in to graze until October 1st. Then the preparation for the winter season begins.

"We can supply 1200 gallons per minute to our sprinkler heads," he says. "During the 'season' we are careful to use only a 30-1-0 fertilizer for growth stimulation and avoid any addition to the salinity content of the soil, irrigating only for immediate use."

Curious as to whether the famous weed-grass, *Poa Annua*, could be found surviving in this high temperature environment, we searched in the longer grass near the compost heap and, sure enough, there it was about ready to bloom.

I suppose a specimen plant should be forwarded to the Park Naturalist just to make sure it was not left out of the total count of the 600 plant species recorded. Perhaps they don't know of its existence. Ask almost any golf course superintendent! □



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