LETTERS TO THE EDITOR

Keep It Up

I just completed reading the article "How Much Must Be Spent For Turfgrass Irrigation" by Dr. William W. Wood (Feb. WTT, p. 14) and was so impressed with the approach that I felt committed to write and acknowledge same. There is no question that this type of approach has long been over-due in the field of parks and recreation. As a result, you can well understand that I was impressed with the information contained in the article.

I would only encourage you and your staff to continue to seek out individuals who are willing to provide direction in obtaining data that provides a realistic approach in the establishment for the expenditure of dollars. The article points out how negligent we have been over the years in not collecting data that provides a means to honestly substantiate dollar costs. It further emphasizes our responsibility to work and solicit information from the user as to what they in turn are willing to pay.

I look forward to reading future articles containing this same approach and concept. John P. Perkovich, director of parks and recreation, City of South St. Paul, Minn.

Answer To Tules

As an agronomy student at California State Polytechnic University, Pomona, I look forward to my issue of WEEDS TREES AND TURF each month. I find the articles to me both timely and informative.

In answer to a letter in the November issue regarding what tules are and how to get rid of them, I have found that they are an aquatic weed, generally ditch-bank or pondside in growth characteristic. To control, use a combination of dalapon with 2,4-D at a rate of 10 pounds of 85 percent dalapon plus two pounds 2,4-D ester per acre. This control should be followed as soon as all annual weeds have germinated in the spring.

The above information came from the Oregon Weed Control Handbook. Gary Kaplan, Arleta, California.

TIME TO RENEW: Your Renewal Card Is Bound In Above

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The McFarland Park Golf Course lies on a floodplain separating the business and residential section of Florence, Ala.

**18 Greens In The Air**

There may be another golf course in the nation that can boast of being downtown. That would be enough distinction for any course. But a new course in north Alabama goes one better. It's not only less than 7 blocks from the heart of a city of 36,000, but it was designed to survive more than 6 feet of fast moving flood water.

These are the reasons a lot of people are talking about the McFarland Park Golf Course in Florence, Alabama. Completed last summer, the 18-hole municipal course is part of a park complex bordering the Tennessee River. Besides the course, there is a driving range, baseball playing fields, a boat harbor, swimming areas, picnicking, and a large camping area.

The entire park is on a flat wooded floodplain designated by the Tennessee Valley Authority as an overflow area which is part of TVA's flood control system. From the beginning, park planners knew that the course would have to be "waterproofed."

All 18 greens with a total area of about 160,000 square feet are elevated to an average of about 7 feet above the surrounding area. That's high enough, say the engineers, to keep them out of the water under almost any conceivable high water condition along the Tennessee.

But even in dry weather, golfers aren't too far from water. The course has 10 lakes averaging about an acre in size; the largest covers 4 acres. Water comes into play on 13 of the 18 holes.

If that weren't enough of a challenge, the course also has 4 mud flats. They're mud for about 3 winter months when the Tennessee River is normally at its lowest. The rest of the year, they're covered with shallow water.

Water levels in the lakes are controlled by valves equipped with trickle tubes to allow water to flow (continued on page 32)
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For More Details Circle (104) on Reply Card
The growth and spread of aquatic vegetation has been a continuing problem in Louisiana since the late 1880’s. There are approximately 8 million acres of lakes, reservoirs fresh water streams and marshes in the state which are subject to infestation by aquatic plants. More than 230 genera of vascular aquatic plants and 25 algae species have been collected in the state.

Over the years, numerous physical, chemical and biological controls have been used to combat adverse effects from aquatic vegetation on navigation, drainage and water supply, recreation and public health. These include harvesting, drawdowns, herbicide treatments, use of nutria, alligatorweed flea beetles and, recently, water hyacinth weevils.

There has been a wide variance in results obtained from the different methods. Harvesting of water hyacinths and alligatorweed has been partially successful but progress is very slow and disposal areas along stream banks often become unavailable. Harvesting or cutting submerged vegetation in most water areas is not practical because of numerous snags and large amounts of debris that result from a lack of clearing prior to formation of lakes and reservoirs.

Drawdowns have been employed in many of the lakes for fisheries management and to control the growth of submerged vegetation. Some have proven successful, but in many cases it has not been possible to control the water level to the degree necessary to achieve effective results.

Biological controls have been tried without any marked success until recently. Within the last two years, the spread of the alligatorweed flea beetle Agasicles hygrophila, which was introduced into the United States as a result of research funded by the Aquatic Plant Control Program of the Corps of Engineers, has begun to reduce the total alligatorweed infestation in the state.

Clearance was obtained in August 1972 for release of the water hyacinth weevil Neochetina eichhorniae and they will be introduced and distributed throughout the state as soon as sufficient populations are available.

At present, in Louisiana, the most effective and economical method of combating problems associated with undesirable aquatic plants is with environmental protection chemicals. Applications are generally accomplished by two man crews who either work in waterways within commuting distance of their home stations, or, in isolated areas, from a quarterboat with complete living facilities. Each crew is equipped with an outboard motorboat and motor, spray pump driven by an air cooled gasoline engine and other necessary equipment.

Until recently, 10 gallon per minute piston type pumps were used, but within the last year several crews have been furnished 20 gallon per minute pumps. This is permitting these crews to treat areas more quickly and has increased the distance that the spray pattern can reach.

In order to permit our crews to spray continuously and eliminate

(continued on page 66)
Riding on a controlled cushion of air, the Flymo mower cuts smoothly through the toughest jobs. In wet grass or dry, long or short, and on flat surfaces or steep inclines, Flymo maneuvers easily, trims clean and close.

In use on golf courses and institutional grounds throughout the world, and meeting with enthusiastic acceptance in the U.S., the job-proven Flymo cuts expensive hand trimming by gliding under bushes and benches, and by floating right up to trees and posts. Cutting height is adjustable from ½” to more than 2¼”.

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Probably the hottest golf market in the west at the present time is the greater Phoenix area. In the past year, a number of new courses have been opened or planned by all types of developers. Many of the suburbs are planning municipal courses and the ever present mobile home has attracted retired persons in record-breaking numbers. New industry is a daily occurrence in this desert city and more and more housing developments are starting, many with golf courses planned or under construction.

This spurt in activity comes on the heels of a golf course development slowdown in 1971. That's all changed now. The curve is definitely rising and this upward trend should continue for the next five years, at least.

The west has always been a precedent setting region of the U.S. in many arenas. The same seems to hold true in golf course development. It has witnessed the overwhelming number of recreation-residential developments like most other sections of the country, seemingly a phenomenon produced because of the willingness of people to pay an extra premium for homesites adjacent to lush green fairways. Yet other trends seem to be growing without signs of abatement.

One of these is a rapidly growing number of "executive" type golf courses. This type of course has a wide range of flexibility and can be satisfactorily used by golf course developers of all kinds to suit their particular needs and available space. Most 18-hole executive courses range in length from 1900 yards to 2800 yards, using 25 to 50 acres. Their new-found popularity is not surprising when one considers the kinds of options open to the owners.

They use a smaller area than the regulation course. This means that many sites not ordinarily usable can be considered for this type of short course.

They are less costly to construct, require less maintenance and can be played in half the time of a regulation course. In addition, the executive course offers the dedicated golfer the opportunity to hit wood shots on several holes, unlike the par-3 which is usually played only with irons.

This type of course also is a good facility for the "impromptu" market, made up of those who cannot afford the time it takes to play regulation golf.

Examples of this type of course include: The Tucson Estates Golf Course, a new 18-hole layout surrounded by a mobile home development. It was designed by GCA Robert Lawrence of Tucson; The Maricopa Country Parks and Recreation Dept. under the leadership of Tom Wardell, Recently opened their 9-hole Paradise Valley Executive Course in Phoenix, Ariz.; Rancho Bernardo, Calif., a massive new town development in San Diego County, has 27-holes of executive golf to complement their two 18-hole courses, one private and one open for public play. Ted Robinson of Palos Verdes, Calif. designed the new Executive tracks; Monterey Park, Calif., in the heart of metropolitan Los Angeles, opened its new 9-hole executive course in 1971. Built on a garbage fill, this course is heavily played every day the weather permits; a new 27-hole Ted Robinson designed Executive layout is under way in Wilsonville, Ore. just south of Portland; a new 18-hole Executive course is nearly finished on Salt Lake City's east side. It was designed by Bill Neff, Salt Lake City GCA and is being developed by Vaughan Barker.

Many others are in the planning stages and will add to the growing popularity of this newly-discovered type of golf course in the future.

Another emerging trend is the golf course that is related to a mobile home development. With vast numbers of our nations population escaping higher taxes and rising home costs, the mobile home has become a haven for the consumer. Many of those living in these types of dwellings have migrated to the western states, seeking lower retirement costs, year-round good weather, and recreation. Some representative developments are:

Palm Springs, Calif. — The Palm Springs Mobile Home Country Club, offering Palm Springs living at reasonable prices.

Hemet, Calif. — The Colonial Country Club Estates is new and offers many amenities to its residents.

Ogden, Utah — A huge new mobile-home development by local physician, Rex Alvord, is now under construction and should open in 1973.

Federal Way, Washington — The Belmor Park C. C. is part of a large mobile home park.

This trend will continue. Most are being planned on low-cost acreage in order to justify the expense of a golf course, and the relatively low cost of mobile home space.

In terms of new openings, The Western States kept a good pace during the last year. Between Oct. 1, 1971 and Sept. 30, 1972 new course openings in the following states were: Arizona — 12; Idaho — 2; Oregon — 3; Utah — 3; California — 18; Nevada — 2; Washington — 9.

There are indications that the California market is leveling off. Giant companies like Boise Cascade are halting all development in California. So many new second-home housing developments now compete for the consumers money that competition is fierce. California has led the nation in establishing new environmental laws restricting extravagant development of the land, particularly coast-line and mountain properties, prime targets for developers.

Conversely, the Northwest is rebounding from its own economic depression and golf course development, especially in Washington, is going strong once again.

Utah has emerged as a relatively strong golf market, with a strong push in municipal courses. The Bureau of Outdoor Recreation funds in that state have gone to many cities, with 25% of the grants going for golf courses.

Idaho has a long way to go in terms of meeting the demand for new courses. The city of Boise (continued on page 44)
Question: How do you clear a right-of-way adjacent to herbicide-sensitive crops and ornamentals?

Answer: Very, very carefully.

It's a tough job clearing weeds and brush that infest roadsides and utility rights-of-way. Doubly so since you have to protect bordering private property at the same time.

With normal spraying techniques, no matter how careful you are, it's impossible to control drift. This can result in damage to crops and ornamentals and lead to costly damage suits. So it's important that an effective weed control program also be an effective drift control program. And of course, economical as well.

The Visko-Rhap program was designed to minimize the spray drift problems while economically and effectively controlling weeds and brush.

Visko-Rhap herbicides are special formulations made to resist drift and withstand wash-off. They're applied in thick, controllable streams that break up into heavy, oil-coated droplets before contact. So when they hit, they stick. And you control only the growth you want to control. You'll also be able to see where you've sprayed.

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For information on how Visko-Rhap can help you, see your supplier or write Mr. R. P. Rich, Rhodia/Chipman Division, 120 Jersey Avenue, New Brunswick, N.J. 08903.
Weed Wall For Aquatics

Mechanical methods of containing aquatic weed growth are being considered increasingly where undesirable vegetation cannot be controlled with chemicals. Indeed, chemical and mechanical as well as biological means are often necessary to bring prolific species of aquatic weeds under control.

One of the newest mechanical systems to be introduced is N-Bar floating barrier. It has successfully been used to control the movement of water hyacinths in Florida. Presently, installations can be seen in Lake Apopka and in the Hillsborough River near Tampa.

How does N-Bar work? The barrier combines features of a floating boom and an underwater fence. It is constructed in 50 foot lengths of plastic-coated metal mesh, 4 feet high, to which risers of polyethylene pipe are attached using nylon tie-wraps. An inflatable rubber boom protected with a sleeve of polyester, rubber coated fabric extends the length of the unit and floats the barrier. Barrier is anchored to concrete blocks. Weeds are contained behind the barrier while water is permitted to travel across the system.

Douglas W. Troll, president of Sea Guard, Inc., manufacturers of the product, says that the plastic and rubber coated system is essentially rust proof. Once installed, the barrier permits passage of water, conforms to wave and wind action, but will screen out most solids. Position of the barrier can be changed when desired. "It can be removed and placed in other desired areas with minimum effort," Troll told WEEDS TREES AND TURF.

Pleasure craft can still use water, notes Troll. By making a series of turns, boats can enter and leave a baracaded area without damaging the barrier or disrupting the weed screening action.

"Our first installation was at the Tampa Water Plant Intake," recalls Troll. "Aquatic weeds had been breaking loose upstream in the Hillsborough River and fouling the plant intake. Pump auctions were restricted. Placing the barrier ahead of the intake area kept unwanted vegetation back yet permitted water to pass."

Sea Guard suggests that other uses for the N-Bar would be in ponds used for irrigation. Algae and weeds could be contained and kept away from intake pumps.

For more details, circle (719) on the reply card.