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Moose Run Rolls With Quake, Then Has Its Biggest Year

The earthquake that last winter shook Alaska to well below its foundation might have occurred on another planet so far as the golfers at Moose Run GC in Ft. Richardson are concerned. The farthest north layout in the U.S. wasn't completely immune to the ravages of one of the severest tremors ever recorded, but it escaped with relatively little damage. A huge stone fireplace in the clubhouse was badly mauled and had to be replaced, and several fissures of no more than finger-width proportion were detected on the course. Otherwise, Moose Run proved to be quakeproof.

So, it would hardly be accurate to say that the Ft. Richardson course snapped back in a hurry. But in 1964 it has had its best season since it was constructed 13 years ago. According to Mac Taylor, pro, supt. and manager of the GI layout, play as of early September was up 80 per cent over the previous season, pro shop sales were running 60 per cent ahead of those of 1963, and from a turf or agronomical standpoint, the course never was in better shape.

Being north of the 61st parallel, Moose Run isn't plagued by high temperatures and high humidity and turf disease is literally unknown. But this plus factor is counteracted by low soil temperatures, the makeup of the soil itself, and winterkill, which more often than not, has a devastating effect.

Low soil temperatures inhibit early germination of seeded bent, induce a deep freeze in the winter and consequent slow thawing in the spring. Soil in the Ft. Richardson area is glacial silt, which is similar to clay, and it isn't conducive to deep root growth. On a tract such as a golf course a constant battle to loosen the soil structure goes on. Taylor aerifies frequently during the playing season and, in his estimation, applies enough of a 3-1 sand-soil topdressing mix to make a continuing elevation change from year to year. But he is still a long way from approaching soil conditions that prevail in the "south 48", as he refers to the southern states.

Most winters Moose Run is afflicted with a series of freezes and thaws which build up solid ice sheets to a depth of five to six inches. Air simply does not circulate under the ice layer and winterkill becomes almost intolerable. But they say that Nature has a way of compensating for its misdeeds and that is what it did in 1963-64. Terrain that wasn't bulldozed by the earthquake came through in excellent shape. Nothing worse than sponge ice...
3 NEEDS FOR EVERY GOLF COURSE! ... ORDER NOW!

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<tr>
<th>Size</th>
<th>Natural embossed aluminum roof with natural mill-finish understructure beams</th>
<th>White baked-on enamel aluminum roof with natural mill-finish understructure beams</th>
<th>All-white roof including white understructure beams</th>
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<tbody>
<tr>
<td>8 x 15' with 6 10' Posts</td>
<td>$79.00</td>
<td>$89.00</td>
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<td>10 x 20' with 8 10' Posts</td>
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<th>$495.00 Complete Package</th>
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<tr>
<td>6'7&quot; x 12'9&quot; Size</td>
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<tr>
<td>Front 90&quot; High</td>
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<tr>
<td>Back 84&quot; High</td>
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<tr>
<td>Aluminum Roof 7'1/2&quot; x 14'</td>
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- Aluminum Roof with overhang.

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<td>4'3&quot; x 4'3&quot; x 8'4&quot; High</td>
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<td>5'7&quot; x 5'7&quot; x 8'4&quot; High</td>
<td>$455.00</td>
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<td>7'7&quot; x 7'7&quot; x 8'4&quot; High</td>
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October, 1964
covered the Moose Run layout, winterkill was superficial and in the spring the course was ready for play several weeks earlier than usual.

**No Sub-Drainage**

Taylor explains that winterkill is aggravated because it is impossible to install sub-drainage in Moose Run greens because the average depth of freeze usually exceeds six feet. Water lines in the city of Anchorage are installed 15 feet below the surface so there is no danger that they will freeze during the winter months.

In 1963, Taylor experimented with polyethylene as a cover for greens for the first time. He covered half of the putting surfaces on the 18-hole course late in October, anchoring them with brush. But because of a relatively mild winter and since only sponge ice covered the greens, the Moose Run factotum isn’t sure that it was worth going to the bother of covering any putting areas at all. Those that were not covered came through almost as well as those that were.

**He Was Surprised**

But Taylor did make these observations: When the greens were uncovered on April 20, which may have been a week or so too soon, the thaw depth was a rather spectacular 15 inches. On greens that hadn’t been covered, it was no more than three inches. Total recovery of covered greens came about a week or 10 days ahead of those that weren’t covered. The Ft. Richardson area gets no more than a 60-inch depth of snow during the winter and much of this is dissipated by thawing.

The Moose Run greens are overseeded each spring with Highland following aerifying, verticutting, a heavy application of 10-20-10 and topdressing. Poa annua comes in quickly and stays all season, thriving through the entire summer because there is no disease to waylay it. Summer temperatures in the Ft. Richardson area rarely exceed 70 degrees. Seed bents don’t survive through the winter, but Northland, a vegetative strain, holds up well. But Taylor says it’s too expensive to plant and anyway golfers wouldn’t stand for his tearing up the greens to do so.

For the past few years, Taylor and Dr. Harlow J. Hodson, research agronomist for the Alaska Agricultural Experiment Station, have been trying to develop a turfgrass that will overwinter satisfactorily. Hodson has found a native fescue that seems to have all the requisites, but its commercial development is several years away. He also has experimented with two Scandinavian strains that show promise. Another fescue strain, Duraturf, holds up well through Alaskan winter but, according to Taylor, it is hard to obtain. Unfortunately, Hodson has only a passing interest in bentgrasses and so it is up to Taylor, his maintenance foreman, M/Sgt. Paul Sessions, and a crew of nine men to look after their propagation and protection for the whole state of Alaska.

Moose Run’s temporary greens were put in play early in May, but it is usually mid-June before the permanent putting surfaces are ready. Through Labor Day, approximately 20,000 rounds had been played on the Ft. Richardson course. It will remain open until the last week in October.

**Harmon Breaks A Record**

Every year, Moose Run is the site of the Alaska State Amateur. This year it was won by Claude Harmon, Jr., a GI who assists Taylor in the pro shop. Young Harmon, who learned the fundamentals under his father at Winged Foot and Thunderbird in Palm Springs, captured the State title, shooting a record breaking 64 in the process. What makes that total even more imposing is that if a player strays off the fairway at Moose Run, he finds himself in rough that is worthy of being called that. It is cut at kneecap level. The women’s course record of 75 is held by Mrs. Peter Koeniger, who played in this year’s Trans-Mississippi. In the 1964 All-Army tourney at Fort Benning, Ga., Harmon, Jack Vollstedt and Col. Art Makholm finished among the top ten.

Mac Taylor, as has already been mentioned, is Moose Run’s pro, supt. and manager. He wears another helmet, too — that of budget officer for Special Services. The latter department runs the golf show at Ft. Richardson, and like most service courses, Moose Run is strictly self supporting. The Army won’t permit it to spend a nickel more on maintenance than it takes in.
For your complete soil materials preparation program. Use for turf maintenance and rebuilding, for production of planting materials. Thor-oughly shreds, blends and aerates soil materials wet or dry. The new Lindig D's are compact and ample—Process in volume: soil, peat humus, manure, commercial fertilizer mix, compost, sewage sludge-cake and sod. The Model D-20 with optional screener completely processes 20 yards per hour—ask too about D-15 (15 yds. per hr.).

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Most hydraulic systems incorporate a filtering arrangement to keep foreign material from damaging the pump, plugging the orifices or scoring the spool valves. Filter screens should be cleaned and elements replaced every 250 hours or oftener, if required. When the hydraulic system is noisy or slow acting, the filters and fluid level should be checked before any other service is performed.

All connections and openings should be well sealed. The entire system must be tightly sealed at all times to prevent loss of fluid and entrance of air in the inlet side of the system. Air entering the system causes increased vibration and unsteady pressure. The presence of air is noted by a noise in the pump or when the pump labors while operating under high pressure.

After connecting cylinders and hoses and adding fluid, the operator should start the engine and run it at a moderate idle speed. Then he should set the stroke limit collar at the yoke end of the piston and operate the piston to its maximum stroke in both directions. This should be done about ten times by moving the proper control handle back and forth. This fills the cylinder and hoses with fluid and removes the air from the system.

**Handle with Care**

Sand and grit should be kept out of the hydraulic system. When disconnecting or connecting the hose, care should be taken to prevent the end of the hose, or any of the connecting parts, from touching the ground or any object where dirt or sand is present. The oily surfaces will pick up foreign matter, resulting in the quick destruction of the working parts of the pump and control valves.

Hydraulic cylinders should be fully retracted when parking or storing implements so that the cylinder rod will be protected from moisture and damage. This also prevents accidental dropping of the machine due to movement of the valve, or fluid leakage past the spool in the valve.

**Selecting A Crankcase Oil**

Tractor mechanics and operators often like to compare experiences with different brands of oil and different oil qualities.
FEED YOUR SOIL... DR. ALLEN'S TRUE ORGANIC... COMPLETE WITH BILLIONS OF LIVING SOIL BACTERIA. DIGESTED and READILY AVAILABLE PLANT NUTRIENTS... PRODUCES STEADY VIGOROUS GROWTH and ASSISTS YOU IN MAINTAINING HEALTHY TURF... THE PERFECT COMPANION TO REGULAR FERTILIZING PROGRAMS.

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IMPORTANCE of SOIL BACTERIA

Soil organisms are very effective in reducing organic residues to humus. An active soil microflora can prevent thatch formation by breaking it down as fast as it forms. Bacteria produce enzymes and colloids (glue-like material) which cement tiny soil particles together to form aggregates (grape-like bunches) which greatly improve the soil aeration and water absorption. Clay soils may act like sandy soils if the soil microflora is provided with a generous source of energy (carbon) and ample food (nitrogen). High bacterial populations seem effectively to reduce fungus attacks. Also they make available to plants so-called insoluble minerals that are "locked up" in the soil. To be fertile a soil must be plentifully populated by bacteria. Reprinted from Golfdom Magazine.

Manufactured By

PAUL E. ALLEN CO. Route 584, Palm Harbor, Florida

October, 1964
But they should keep in mind that any crankcase oil should do these things for an engine:
1. Reduce friction and wear between surfaces;
2. Remove heat caused by friction;
3. Provide a seal against escaping gases;
4. Act as a cleaner in carrying away solids such as carbon, grit and metallic particles, and hold carbon and sludge in suspension until the oil is drained;
5. Give protection against rust and acids or other corrosive agents.

Viscosity is defined as resistance to the flow of a liquid. Low viscosity oil flows easily and is often called a "light" oil. High viscosity oil has more body and is referred to as "heavy" oil.

**Viscosity Measure**

Since proper viscosity is important to satisfactory engine operation under different weather and temperature conditions, a viscosity measure has been established. It varies with different types, sizes, models and operating conditions of engines. This is due to such factors as design of the lubrication system, clearances of moving parts, loads, and operating temperatures.

If a too light oil is used, it may be forced out between the bearing surfaces. This may allow metal-to-metal contact, resulting in rapid wear and higher oil consumption.

If too heavy oil is used, needless power is required to circulate it and tight-fitting bearings may be poorly lubricated.

Besides selecting the proper oil viscosity it is important that the mechanic select the proper type of oil to fit conditions under which a tractor operates.

**Terms Revised**

Improvements in engines in the last 20 years have called for improved oils and even revised terms in describing them. Consequently, what the operator's manual says about the type of oil to be used depends on when a tractor was manufactured. It is important that the mechanic or operator keep this in mind.

It is debatable as to whether changing brands causes an increase in oil consumption. In carefully controlled laboratory tests, for instance, consumption varies without apparent reason. If consumption does increase it may be due to: (1) increased detergency of the new oil which eventually will correct itself; (2) using a lighter viscosity oil even if it is of the same SAE grade (viscosity specs are broad); (3) different loads or temperature conditions under which a tractor works; and (4) varying amounts of oil clinging to the higher parts of the engine when the oil level is checked when the engine is cold.

There is no advantage in mixing oil (Continued on page 129)
Let's Look on the Brighter Side!

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A Reliable Source of Supply Since 1920
Elec Mangrum, Dudley to PGA Hall of Fame

Membership in the PGA Hall of Fame has been increased to 35 with the addition of Lloyd Mangrum and the late Edward B. Dudley. Mangrum was selected for the honor by vote of the membership at large, and Dudley was elected by members of the Hall of Fame. Ed, a native of Georgia, died about a year ago at the age of 62.

The 50-year old Mangrum turned professional at the age of 15 and between 1940 and 1956, won 37 major tournaments and placed among the top three more than 100 times. His career was interrupted in the early '40s when he served in the Army. He was awarded two Purple Hearts and four Battle Stars while in service.

Lloyd's most notable victory came in the 1946 USGA Open when he outlasted Byron Nelson and Vic Ghezzi in 36 playoff holes to claim the Championship. He won four Los Angeles Opens, three All-American Opens, the 1948 World Championship and the Western Open in 1952 and 1954.

Given Police Escort

But Mangrum's most memorable victory came in the 1951 St. Paul Open. After shooting a third round 62 for a 196 and the tournament lead, Lloyd received a phone call ordering him to lose the tournament or forfeit his life. He played the final round with a police escort and shot a 70 to edge Fred Hawkins by a stroke.

Mangrum played on five Ryder Cup teams and was honorary captain of the American squad in 1955. His most profitable year was 1951 when he won more than $26,000 in tourney prizes. He is 16th on the all-time money winners' list with $201,000.

A club designer for Golfcraft, Inc., Mangrum lives with his wife, Eleta, in Apple Valley, Calif. In recent years he has suffered ten heart attacks. Lloyd will be inducted into the Hall of Fame at the PGA's annual meeting in December.

Ed Dudley left Belmont College in North Carolina after two years of schooling to turn professional. He won several important tournaments including the 1929 California Open, the L.A. and Western Opens in 1931 and the 1932 International Four-Ball. Dudley was a member of three Ryder Cup teams and was honorary captain of the 1949 contingent.

Dudley, who served as professional at Augusta National, Dorado Beach and Broadmoor in Colorado Springs, probably was better known as a teacher than a player possibly because Dwight D. Eisenhower, Bob Hope and Bing Crosby, to name only a few celebrities, took lessons from him. However, the great English star, Henry Cotton, once pronounced Ed's swing the most beautiful he had seen.

Dudley served as president of the PGA from 1942 through 1948.

PGA Home Pro Award Goes to Lyle Wehrman

Lyle Wehrman, professional at Merced (Calif.) G & CC, has been named PGA home pro-of-the-year for 1964. Announcement of the selection was made by Warren Cantrell, president of the PGA, in early October.

Born in 1916, the year the PGA was organized, Wehrman worked as a caddie and range assistant in his youth and became an assistant pro in 1936. From 1942 to 1946 he served with the Army Transportation Corp, winning a bronze star and being discharged as a first lieutenant.

Lyle was named pro at Merced shortly after returning from service. In his 18 years with the club he has doubled as its supt. for 14 of them and also had a two-year stint as manager. He has been president of the Northern California PGA section for the last two years and is a member of three national PGA committees.
# Velsicol Turf Chemicals

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<td>Controls brown patch, dollar spot, copper spot, melting out (Helminthosporium), gray leaf spot of St. Augustine Grass, and cottony blight (Pythium) or Rye grass. An emulsifiable concentrate that mixed fast, does not need constant agitation, and leaves no sediment in spray tanks.</td>
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<td><strong>Soil Fumigation</strong></td>
<td><strong>Velsicol Pestmaster® Soil Fumigant-1</strong></td>
<td>Soil Fumigant-1 contains methyl bromide with 2% chloropicrin. It will remove weeds, weed seeds and obnoxious grasses in an old golf green, or in the soil before new grass is planted. Economical, easy-to-apply, fast acting.</td>
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<td><strong>Pre-Emergence Crabgrass Control</strong></td>
<td><strong>Chlordane Bandane®</strong></td>
<td>Chlordane provides exceptionally effective pre-emergence crabgrass control, and complete protection against damaging soil insects. Bandane is a newer pre-emergence control, notable for effective control plus safety to seedling grass and established turf. It also kills ants, grubs, and other insects.</td>
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<td><strong>Chlordane Heptachlor</strong></td>
<td>Both Chlordane and Heptachlor kill most common insect pests of turf, plus many harmful or annoying insects that live on the surface of the soil. Grubs, mole crickets, wireworms, cutworms, ticks, chiggers, ants, mosquitoes, sod webworms, earwigs and many other insects can be controlled with these versatile insecticides.</td>
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Contact your distributor now for the complete line of Velsicol Turf Pest Control Chemicals! For more information write Velsicol Chemical Corporation, 341 E. Ohio Street, Chicago, Illinois 60611.

October, 1964
Supts’ Booster Cheered by Improved Publicity

Dr. Alfred R. Higson, a past president of Bel-Air CC, Los Angeles and long an understanding friend of the golf course supt., recently wrote to GOLFDOM:

"After reading in GOLFDOM an article by Harry E. Lorence on substituting for the grass-cutter image the true picture of the golf course supt., I was upset by the sign-off of the National Open TV program. Acknowledgment of almost the entire list of club officials and department heads connected with the Open was made, but as so often is the case, the supt. was not mentioned.

"I am sure that from what I heard about the Congressional course at the time of the Open it must be managed by a man who does an outstanding job for the club and who deserves recognition when the club and its people are getting the credit due them.

"Surely the GCSA must have a publicity department to see that the television and newspaper reporters give the supt. his share of praise for a successful tournament.

Continuous Campaign

"This campaign to get the supt. known for his essential and difficult work in golf must be continuous. When I was in office at our club the supt., Joe Martinez, had his name posted on a club pickup truck. He had informative publicity each month in our club publication and he attended green committee meetings so we’d all know what was going on and what was needed. Joe invited O. J. Noer, Fred Grau, Charlie Wilson and other noted turf experts to lunch at the club. Members realized that we had in our supt. a man who knew the best men in the business, who was regarded by them as a leading practical authority and who, obviously, was making use of the best knowledge available in maintaining Bel-Air’s course.

"But unless club officials and members are continuously aware that a good golf course does not run itself, but must be managed by a very able man, the supt. won’t get the recognition his work justifies. There will be everybody’s name on the club programs except that of the man who provides the good course.

"It was pleasing to hear the Columbus (O.) CC supt., Bob Mueller, praised when the telecast of the PGA championship was concluded. It was good to see that Congressional supt., John Henley, was lauded in GOLFDOM for his great job in the National Open.

Juniorized Clubs Put Life in Dead Season

From late September until the Christmas gift buying began club sales in past years had been nearly dead for many pros. But the Pro Juniorizing of trade-in clubs is changing that old picture and will produce considerable profit in new and juniorized club sales, say energetic pro merchandisers.

An easy market survey by the pro can be made before bags are removed from storage and taken home by members. The survey will show what members should be in the market for new clubs. Then, if a member has one or more children in the 9-15 age group, the sales promotion procedure is obvious.

Pro Juniorizing the adults’ old clubs at a nominal charge not only gets the used clubs out of the way in case the pro makes a trade-in allowance, but converts the clubs into useful reconditioned sets that will delight young players.

Helps to Counter Competition

The Pro Juniorized idea was introduced this year and has figured in a good deal of new club selling and in booming Junior golf programs. The plan was conceived by pro merchants and clubmakers at a conference during the PGA Business School in Clearwater, Fla., two winters ago when several professionals mentioned that trade-in club sales were slowing down due to cheap new club competition. Mention also was made of the population explosion, causing a shortage of kids’ clubs. Thousands of older children outgrow clubs that can be passed along to younger brothers and sisters. Those two factors — trade-ins and juvenile golf promotion — accounted for the Pro Juniorized plan.
How long will this plastic pipe last? Only Carlon could tell for sure.

Yes, Carlon takes the lead by developing a new method of determining the expected performance of plastic pipe in golf course irrigation systems. The Carlon Cycle Rating Method developed exclusively in our laboratory, can tell you the expected performance of plastic pipe based on your own operating conditions.

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Please send me complete information on the Carlon Cycle Rating Method.

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October, 1964
If you have mowing problems...

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Toro’s 76" Professional® mows 'round half dollar. "Squeeze" the hand lever, "Pivot-Power" steering spins the Pro on its axis. Mows up to 20 acres a day. Ideal for tees, approaches.

Toro’s 21" Whirlwind® ignores uneven ground. All-steel housing, 4 hp. engine and six height-of-cuts let you mow practically anywhere. Ideal for trimming around traps. 4-hour gas tank. Self or hand propelled.
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Free Planning Service. Toro has a mower and a model to solve any problem—and over 51 years of experience in doing it.

Let Toro make a free analysis of your mowing problems, then recommend the combination of mowers to solve them. You may find you need less equipment than you thought you did. See your Toro distributor or write direct to Toro.

Toro's Parklawn® manicures formal turf. Easy handling, 25" cut and speeds up to 3½ mph make this the ideal all-around golf course mower. Trims close to trees, takes up to 40° slopes, height of cut from 3½" to 3".

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October, 1964
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**PGA Cancels Four Winter Events; Teacher Re-Scheduled**

Four of the five tournaments normally played at the PGA National GC in January and February won't be played in 1965 because the pro organization is without a course or club. The national merchandise show and the series of clinics and seminars annually conducted by the PGA education committee also have been cancelled for the same reason.

The PGA terminated its occupancy of Palm Beach Gardens GC in August pending litigation with the John D. MacArthur interests, which built the club which the pro group was to operate. A law suit involving the PGA and the MacArthur interests over a contract between the two parties is pending in the circuit court of Florida in Palm Beach county.

Tournaments that have been suspended because of the legal difficulties are the PGA National Golf Club Championship, the PGA National Golf Club Match Play Championship, the Quarter Century Championship and the Senior-Junior Best Ball Championship. The 25-year old Seniors' Teacher Trophy Championship originally was included with this list, but it has been re-scheduled for the Ft. Lauderdale (Fla.) CC and will be played Feb. 25-28. There is a chance that the four cancelled events also will be re-scheduled at other clubs, but the PGA will not be involved in sponsoring them.

The Teacher Trophy tournament will have a purse of $30,000. Senior players will compete in eight age groups. A total of $19,000 will be awarded to low scorers at the end of 72 holes and the remaining $11,000 will be divided among the winners in the various age group divisions. The Ft. Lauderdale club has two 18-hole courses.

The three business schools conducted by the PGA will not be affected by the suspension of the winter program.

East Meadow GC, Nassau county, L.I., is enforcing a safety rule on its back nine (3,137 yards) for night play. All players must wear white shirts and dark slacks, shorts or skirts so they are easily seen.

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Henry Castillo, professional at Palma Ceia Golf and Country Club in Tampa, proudly displays his pro shop with its durable TUFLEX floor.