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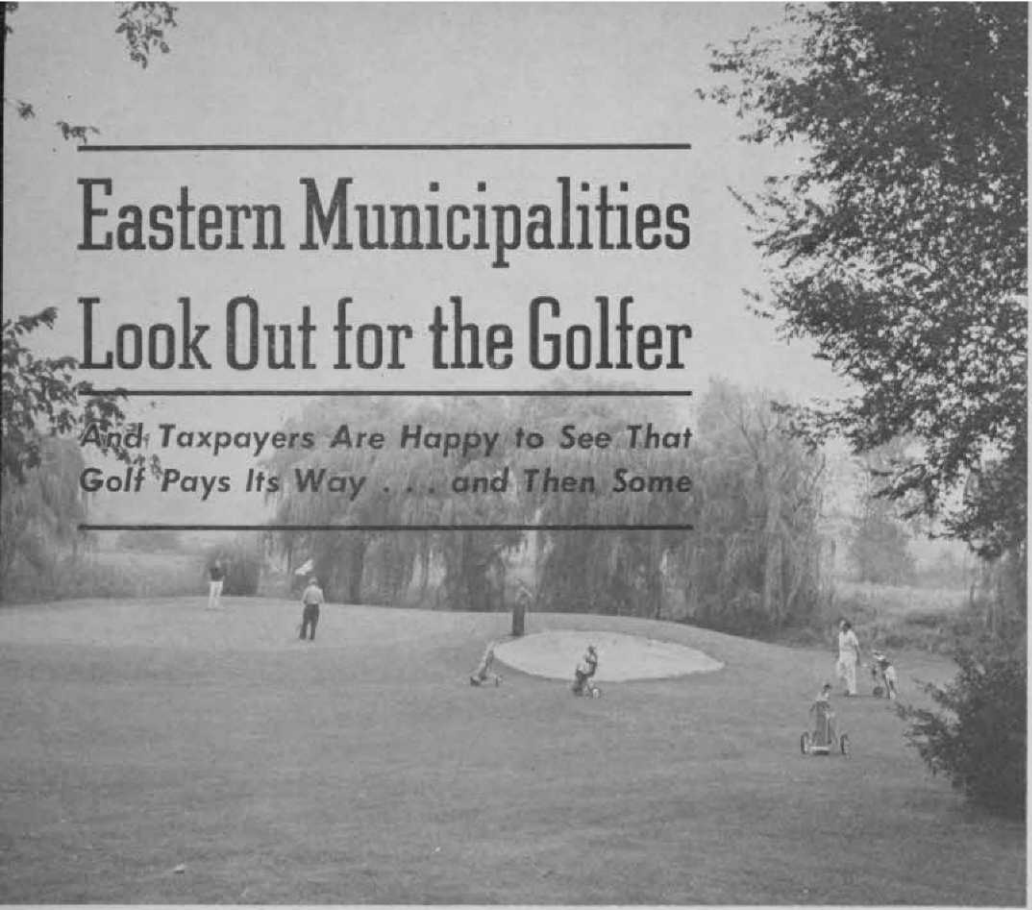

Eastern Municipalities Look Out for the Golfer

And Taxpayers Are Happy to See That Golf Pays Its Way . . . and Then Some

BY HARRY C. ECKHOFF

Director, Eastern Region,
National Golf Foundation

Much has been written about the popularity of municipal golf courses. About 40 per cent of the nation's golfers play on the 932 tax supported golf facilities which represent about 15 per cent of the 6300 regulation courses in the United States.

The number of rounds of golf played on public golf courses each year is staggering. New York City reports that annual play ranges from 60,000 to 115,000 18-hole rounds on each of its ten 18-hole courses.

Philadelphia, Bethpage (N.Y) State Park and Westchester County, N. Y., each report that from 250,000 to 280,000 rounds of golf are played annually on their five 18-hole public courses. Washington, D. C. has over 300,000 patrons each year on its 90 municipal holes. Pat Lordi, golf director for Nassau County (Long Island), N. Y., states that 287,000 18-hole rounds were played on Nassau County's Salisbury Golf Course (54 holes) in 1961.

What are municipalities doing to provide more direly needed public golf courses? Often, suitably located open space areas are not available at any price to cities and towns desirous of building new courses or expanding existing facilities. Westport, Conn., solved this problem about two years ago by purchasing the existing 18-hole Longshore Country Club for $1,925,000. The 182-acre facility was renamed Longshore Club Park when it became a muny operation.

With a $10 annual family membership fee, plus $2 green fees, it netted the city $60,000 during its first year of operation. Several other Eastern suburban cities now have plans under consideration for purchase of existing country clubs.

The City of Philadelphia recently purchased the Old Homesburg 18-hole golf course located in the northeast section of the city. This addition gives Philadelphia a total of 108 holes of municipal golf.

Philadelphia also has a plan for placing

Agrico-fed turf at Aronimink G.C. is "ready" for '62 PGA Championship

George Baskin

"I've never had finer greens, tees and fairways than I have this season for the PGA Championship Tournament," says George Baskin, Aronimink Golf Club superintendent, Newtown Square, Pennsylvania. "Agrico Country Club fertilizers have played an important part in my fertilization program.

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city owned property on bid for a lease arrangement to concessionaires for construction of public driving ranges and miniatures. Leases run for six years with options to renew for four more. Concessionaires are required to build and operate facilities according to specifications provided by the city. On expiration of the lease arrangements, facilities revert to the city.

According to William Capman, secretary to the city park commission, Philadelphia now has four driving ranges and 18-hole miniature golf operations under the jurisdiction of the park commission. Says Robert W. Crawford, city recreation commissioner, "We also have some plans for several par-3 golf courses".

Albin O. Olson, village manager, North Palm Beach, Fla., reports that that city has purchased the North Palm Beach 18-hole country club (it took possession in January, 1962) and is now operating it as a municipal setup on a daily fee basis.

County Golf Operations

Many counties are bringing needed courses into play. New Jersey is one of the leading states on the Eastern Seaboard with county golf operations. Among the New Jersey counties operating successful golf ventures are: Essex, 27 holes; Union, 45 holes; Passaic, 36 holes; Bergen, 18 holes; and Somerset, 18 holes. R. W. Myers, director of parks for Morris County, reports that the county will begin construction of an 18-hole county course this year. It is being financed by a bond issue. Several other New Jersey counties have golf course expansion programs under consideration.

Westchester County, N. Y., has an outstanding golf operation — five 18-hole courses with Charles E. Pound as general supt. Erie County (N. Y.) opened a new 18-hole course in 1960; Niagara County (N. Y.) opened 18 holes in 1961. Montgomery County, Maryland, also opened a new 18-hole county course in 1961. Allegheny County (Penna.) has had a successful golf operation for some time.

City-County Merger

Some county and city park departments are merging in an effort to plan and operate needed recreation facilities (including golf) more effectively. Says Wilbur E. Wright, director of parks, County of Monroe, N. Y.: "Last July the major parks of the city of Rochester merged with the parks of the County of Monroe, under the jurisdiction of the county. Four formerly city operated 18-hole golf courses were included in the deal. Monroe County is now considering the development of additional golf facilities."

Cobb County, Ga., completed a $1 million recreation center including the 18-hole O. B. Keeler course in 1960. The County purchased 500 acres near Kennesaw, Ga. and is using a portion of the acreage for choice building sites. The master plan calls for 450 lots. Here is an example of a county actually engaging in the real estate business. According to the Cobb County recreation authority, receipts from the sales of homesites will offset the cost of the recreation center. Thus this complete project is being made available at no cost to the taxpayer. Construction of Cobb County's magnificent recreation park was financed with revenue bonds through a Minneapolis, Minn., insurance company and will be repaid by the recreation authority over a 30-year period.

State Parks Courses

New York has found the practice of building public courses in many of its state parks very satisfactory. Its largest single golf operation is at Bethpage on Long Island, where it has five 18-hole golf courses operating out of a single clubhouse. New York has golf courses in six of its state parks and has plans for several more.

Some communities, among them Greensboro, N. C., that had closed their golf facilities because of integration problems, are now putting them back into play.

The City of Asheville (N. C.) has authorized its city manager, J. Weldon Weir, to explore the possibilities of a second 18-hole course. Last year 27,705 golfers — in addition to the 145 holding season memberships — played the existing 18-hole municipal layout. They paid $38,151 and there was $8,000 profit in the till at the end of the year. Actually, there are now about 80 communities that have tax supported golf facilities in some stage of planning in 17 eastern area states. The five leading states are New York with 15; Florida and Pennsylvania each with 12; Connecticut 7 and North Carolina 6.

Some municipalities are discovering that Par-3 courses are popular and profitable operations and are constructing such fa-

(*Continued on page* 120)

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'Tough But Not Treacherous,' Describes Aronimink Layout

See front cover, page 3)

Aronimink GC, Newton Square, Pa., site of this year's PGA Championship (July 19-22), is not treacherous, isn't beset with cliffs and doesn't have unreadable greens, but according to those familiar with the course, it isn't a setup — even for the country's finest pros. The course extends 7,045 yards from the back tees and has a par of 70. Some changes were made in tee positions last fall, traps have been slightly revised and there, of course, will be the usual narrowing of the fairways.

General chairman of the event is Jack A. MacInnes, who is in the bleacher seat manufacturng business, and so there will be plenty of seats for the spectators. In fact, there will be 10,000 of them, located in the strategic spots, and all will be free. More than nine miles of rope and about 3,000 metal stakes will be used in cordoning off the fairways and greens.

Built in 1926

The name, Aronimink, is of Indian origin, of course, and means "by the beaver dam." There is no evidence that a tribe of the same name ever existed. The club, one of the country's oldest, is located 15 miles southwest of Philadelphia and covers about 300 acres. Residential properties and highways are rather remote and persons who play or view the course get a feeling of being in the unspoiled open spaces. The club is in its fourth location since being founded in 1895. It moved to its present site in 1926. The course was designed by Donald J. Ross.

Each of the holes bears an Indian name ranging from Apache (No. 1) to Aronimink (No. 18) and including Comanche, Sitting Bull, Cherokee and others. The No. 1 hole has a spectacular elevated tee; No. 2 is one of the tougher ones, requiring smart trap playing to match par; No. 6 and No. 7, both par 4s, can work to the disadvantage of those who overdrive; No. 8, fronted by a lake, is a scenic beauty; No. 9 extends to 610 yards; No. 10 may be the most formidable hole on the course, being a 449-yard copy that demands the best possible shots for a par 4; No. 12 which crosses a gulley, also is a tough par 4; No. 13 probably will turn out to be the birdie hole; No. 15 is well trapped and calls for a good degree of sharpshooting; No. 16, also well trapped, is 541 yards long and eagles are almost impossible to make on this hole; No. 18 is something of a sleeper, presenting a long, uphill haul to the green.

Joe Cappello is Aronimink's professional and George Baskin is the supt.

One of the contenders in the pro-am that will precede the playing of the Vermont State Open at Lake Morey CC, Fairlee, June 17-18, is 74-year old Paul Dickinson of Lisbon, N. H. Last year, with a six-stroke handicap, the venerable Paul recorded a blistering 68. Dickinson gave up golf between 1909 and 1950, plays with a brace, and is just a little perturbed when he doesn't come awfully close to shooting his age.

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Delaware Decision

Supt. Entitled to Same Warning As Caddie, Player

By WILLIAM JABINE

A Delaware case involved a supt. who was watering the first green of a course on which he had been employed for about five years. He was hit by an approach shot played from about 80 or 90 yards from the green, the ball hitting his cheekbone and causing a painful injury.

Testimony showed that he was watering the green at about 6:45 p.m. on a summer day. When he saw some players approaching, he pulled the hose off the green to a point on the opposite apron about seven yards from the pin. While standing there he was hit by the nine iron shot played by the defendant.

The plaintiff testified that he did not actually see the defendant and heard no warning. The defendant, however, testified that he had called, "Watch it, Fred", but there was considerable question as to whether he had called out before making the shot, or when he realized that the supt. was in danger.

Warning Inadequate

His two companions gave differing testimony on this point, and in commenting on the situation the superior court of Delaware said: "In any event the warning here given to the supt. in full view, standing approximately 20 feet or seven yards from the pin on an 80 or 90 yard drive, appears inadequate. As a general rule, one who is about to strike a golf ball must, in the exercise of ordinary care, give an adequate and timely notice to those who are unaware of his intention to play and who may be endangered by the play." Commenting on the situation, the court said that although it could find no cases involving injuries to a supt., there seemed to be no good reason why a supt. should not be entitled to the same warning as a player or a caddie.

The trial court awarded the sum of $1500 as damages for pain and suffering, plus special damages of $160.50. The defendant appealed the verdict to the supreme court of Delaware.

That Court upheld the decision of the trial court. It disposed of the defendant's contention that the supt. had voluntarily placed himself in a position of danger in the following language: "In this case, according to the testimony most favorable to the plaintiff, the plaintiff did not even see defendant and had no knowledge of his presence until after the injury. We do not see how it can be said under such circumstances that the plaintiff voluntarily exposed himself to a danger which he did not know existed."

No Contributory Negligence

To the contention that the supt. was guilty of contributory negligence, the supreme court replied: "Plaintiff was required to make reasonable use of his faculties and to discover any dangers or any conditions to which he might become exposed. His responsibility is that of an ordinary prudent person under similar circumstances. (Citation) But a failure to look for any danger when there is no reason to apprehend any is not contributory negligence. (Citation) The fact that the plaintiff was where his duties called him to be also is a matter to be considered in determining the question." (Robinson v. Meding, 163 A. 2d 272.)

N. J. Turf Scholarship

The New Jersey Golf Association has established a four-year scholarship program of $500 per year for the study of turfgrass management at Rutgers University. The recipient will be a candidate for a Bachelor of Science degree. The purpose of the scholarship is to encourage greater numbers of agricultural college graduates to become supts. or work in some related phase of turfgrass management. The funds will be raised as a part of the caddy scholarship program of the N. J. Golf Association. Contributions of member clubs have been the main source of support for the very successful caddy scholarship awards of the past.

Jaycee Golf Handbook

The U. S. Jaycees, in collaboration with four other groups, has published a booklet, "Jaycee Junior Golf Instructional Handbook." The Jaycee international tourney is scheduled for Huntington, W. Va., Aug. 20-25.

Turf Questions ...and answers

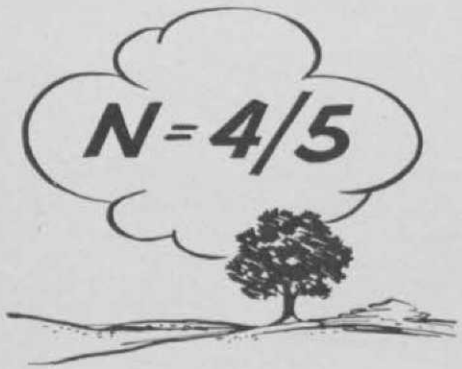
FRED V. GRAU

How Nitrogen Works

Nitrogen makes grass green! What a simple, beautiful statement! What a complexity of physical, chemical and biological processes there are that make such a statement possible!

The development of color, density and other features of quality turf is more dependent upon nitrogen than upon any other mineral element supplied by the soil. Nitrogen is needed in larger quantities than any other element. It must be available constantly in continuously adequate supply for the amount and quality of growth desired.

Nothing is static in the nitrogen cycle



in nature. In this dynamic system, everything is in a state of constant change and conversion from one form to another. This is growth and life and death. Nothing is lost. As a cell dies its constituents are reworked to provide new life for other organisms.

Growing points of grass (leaf tips, new shoots) are richest in nitrogen which exists mainly as protein (large complex nitrogen substances). When the supply of nitrogen is low, the plant transfers nitrogen from older leaves to the growing points. Evidence of this is the yellowing and, sometimes, death of older leaves. Carried too far, turf becomes thin, unthrifty, weedy.

Where does nitrogen come from? Most of it is in the air. About 4/5 of the atmosphere is elemental nitrogen (N), a colorless, odorless, tasteless inert gas. The 1957 Year Book of Agriculture states: "There are about 34,500 tons of nitrogen over every acre of the land area. This supply is constant." As rapidly as N is removed from the atmosphere, it is replaced from many sources by many processes. We tend to think of nitrogen for turf in terms of using a few pounds to 1,000 sq. ft. for the season — from 6 to 16, give or take a few pounds. The total supply in the atmosphere amounts to about 1,550 pounds of N for each 1,000 sq. ft. of land. There is no danger of running out of nitrogen!

Must Be "Fixed"

Grass cannot use nitrogen directly from the atmosphere. First it must be "fixed" in forms that then can be converted for use by turf. Nature fixes small amounts of nitrogen with electrical discharges (lightning). These oxides of nitrogen ars dissolved in rain water and thus enter the soil. Some soil microbes can fix annually up to 200 pounds of nitrogen per acre. For turf, the source of nitrogen is principally manufactured or processed

materials derived from organic residues, from by-product chemical processes, or from the atmosphere by a series of chemical transformations.

No one fully understands the chemical nature of soil nitrogen. As soon as a nitrogen material enters the soil it begins to decompose, affected by nearly every factor that affects life itself. Virtually every organism present in soils has the ability, in its own fashion, to convert nitrogen-bearing compounds into ammonia, the first step in converting complex, unusable forms into simple usable forms. Much of the nitrogen in soils is present as proteins associated with lignin and clay. Some soil minerals can absorb and hold ammonia.

Release Agents

Microorganisms cause the release of soil nitrogen for grass growth through the activities of two great groups:

1. Ammonifiers (produce ammonia,) which embrace most bacteria and fungi, in fact, nearly every type of organism;
2. Nitrifiers (produce nitrites and nitrates), usually the Nitrosomonas which oxidizes ammonia to nitrite; and Nitrobacter which further oxidizes nitrites to nitrates.

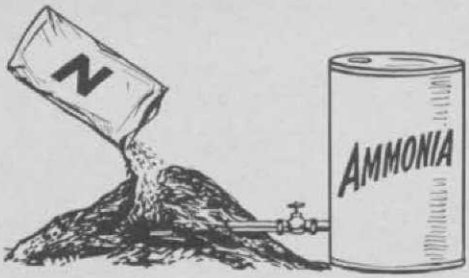
Nitrates react with calcium, magnesium, potash and sodium to form soluble nitrate salts which root hairs can absorb.

Grass can use ammonia as well as nitrates. Rarely can either form be detected in soils on which grass actively is growing. Most grass effectively can use much more nitrogen than it gets. Losses of nitrogen can be measured through crop removal, erosion, leaching and as gases. Good soil aeration not only favors conversion of nitrogen into useful forms but also reduces losses.

Soil Organisms

Soil nitrogen can be understood only to the extent that soil microbes are understood. Bacteria are the smallest and the most numerous. It takes about 25,000 of them end to end to measure one inch. An acre of rich soil may hold 1,000 pounds of bacteria. One teaspoon of soil may contain billions of living organisms.

Some bacteria derive both carbon for energy and nitrogen for food from organic substances. Others draw carbon from the air and obtain energy from oxidation of simple chemical materials. Most



bacteria need nitrogen that first has been combined into mineral forms or into organic forms.

Intensive microbial populations may be found on the surface of roots and root hairs to the extent of 50 times greater concentration than in the soil away from the roots.

Use of Enzymes

Soil organisms do a great deal of their work of decomposing organic materials by means of enzymes, organic catalysts which bring about or speed up chemical reactions. (A catalyst assists in a chemical change but is not affected by the reaction.)

Fungi are numerous and varied in soils. They are important in the decay of organic materials, producing cell substances, carbon dioxide and water. Some fungi form close harmonious and beneficial associations with plant roots. Actinomyetes resemble bacteria but have branched filaments like fungi. They contribute to the "earthy" odor of freshly plowed sods and are important in organic matter decay.

Algae are relatively insignificant except when conditions favor harmful surface scum formation.

Essential for Decay

Taken together, bacteria, the actinomyetes, and fungi are essential for the decay of organic materials, and for the mineralization (nutrification) of plant and animal residues. They constantly recycle important chemical elements. Over every acre there are about 20 tons of carbon dioxide, the amount returned in a year to the atmosphere by the activities of these organisms. When organic materials are decomposed, not only carbon and nitrogen, but many other minerals also are released. Phosphorus, iron, manganese and sulfur are made more available by microbial processes.

(*Continued on page 96*)