operation. Its facilities include the 27-hole Galloping Hill course at Kenilworth and the 18-hole Ash Brook layout at Scotch Plains. According to George Cron, General Superintendent, Galloping Hill serves about 85,000 players a year; Ash Brook averages 60,000 annually.

Galloping Hill Golf Course maintains a fleet of 30 powered cars; Ash Brook has 25. Rental fees are \$8 for 18 holes; \$4 for 9. Union County has a special green fee schedule for county residents who annually qualify for a golf identification card. This fee is only about half the amount charged non-resident players. Green fees for out-of-county players for 18 holes are \$4 weekdays; \$6.50 weekends and holidays.

Increased Maintenance Costs

Like most expenses, those for course maintenance are increasing, so some municipalities are raising green fees. Atlanta, Ga., this year increased its 9-hole weekday rate from \$1 to \$1.50 and 9-hole weekend rate from \$1.50 to \$2. Eighteen-hole weekday rate went from \$2 to \$3; weekend and holiday rate, \$3 to \$4.

Asheville, N.C., raised its annual resident season permit from \$80 to \$100. Fees were also upped this year at the eight Denver, Colo., municipal golf operations. As stated previously, Milwaukee County plans to raise its green fees 33½% next year—from \$2 to \$3 for 18 holes. The prevailing rate at many mid-Atlantic municipal courses for 18 holes is \$3 weekdays; \$4 weekends and holidays; after 5 p.m.—\$2 any day.

Maintenance costs increased about

6% last year. Over the past 15 years they have increased 85% .Findings of a nationwide survey of 75 representative courses reveal maintenance costs averaged \$4,577 per hole of which \$2,824 was for salaries and wages and \$1,753 for all other expenses. Range for an 18-hole layout was from about \$60,000 to more than \$100,000.

Golf Course Planning

When should a municipality consider the develoment of public golf courses? An acceptable yardstick for daily fee and municipal courses is one 18-hole operation for every 20,000 to 25,000 persons. City and town officials considering the development of a municipal golf course often appoint a citizens committee to make a detailed study for such a project along with specific recommendations for its accomplishment—if the project is deemed feasible.

Included in the study will be complete justification for the need and desirability of a golf course for the area; suggested sites along with expected land acquisition and course construction costs; suggested methods of financing the entire project and estimated operating income and expenses for the planned facilities.

Many municipalities developing golf facilities are taking advantage of a state grant-in-aid program administered by the Bureau of Outdoor Recreation, U.S. Department of Interior. Under this program, local governments may submit requests to their respective state offices for outright grants to acquire

or develop urgently needed public outdoor recreation facilities.

Most existing municipal golf courses were financed by general obligation bonds issued by the municipality concerned or by general budget allocations. In recent years, cities and counties having legal authority to do so have financed many municipal courses through the issuance of revenue bonds which are payable from the net income received from the operation of the golf course.

Such net income can be and often is substantial. Municipal golf courses can be profitable if realistic green fees are charged and the facilities are properly managed. Actually, golf course revenues can and frequently do go a long way toward providing the free recreation facilities for communities since the golf course usually is the largest revenue-producing unit in a recreation program.

And this is but one of the ways in which a golf course benefits a community. There are many others. Golf facilities stimulate civic pride and create new business; they beautify and preserve open space and increase property values in surrounding areas; they attract new industry, tourists and conventions and —perhaps most important — they provide healthful, enjoyable recreation for all age groups.

It is doubtful that the nation will ever have sufficient municipal golf courses to meet the constant growing need. It is certain that municipal golf will play an increasing role in the overall American golf scene in the years ahead.

insect report

TURF INSECTS AN AEROCCOCCID SCALE

(Eriococcus carolinae)

MARYLAND: Light infestation on beachgrass near Ocean City, Worcester County. This is a new state record.

A MARCH FLY (Dilophus orbatus)

CALIFORNIA: Larvae 1,000 per square yard in oneeighth acre of *Lippia* sp. and grass sod in nursery at Oakland, Alameda County. Larvae 15 per square foot in some lawns and up to thousands along walks and driveways at Sacramento, Sacramento County; 50 per square yard at Fresno, Fresno County. Adults heavy in some lawns at Madera, Madera County.

INSECTS OF ORNAMENTALS A CONIFER APHID

(Cinara tujafilina)

OKLAHOMA: Counts and colony size increased on

arborvitae in Payne County past 21 days. Up to 25 aphids per colony.

YUCCA PLANT BUG

(Halticotoma valida)

MISSISSIPPI: Moderate to heavy on yucca plants in Montgomery, Choctaw, and Oktibbeha Counties.

TREE INSECTS

ELM LEAF BEETLE

(Pyrrhalta luteola)

KANSAS: Overwintering adults found under firewood at roadside park north of Syracuse, Hamilton County, and same location in park at Tribune, Greeley County. These are new county records. Now occurs statewide.

OBSCURE SCALE

(Melanaspis obscura)

ALABAMA: Dominant scale species on 80% of oak trees growing on lawns and streets at Auburn, Lee County. Many heavily infested with lower limbs dead or dying. Scales on many limbs touch and overlap.