fescues? We are thinking now of cool-season courses where Bermuda and zoysia will not perform well. Many years of effort tend to show that it will be possible to develop a tall fescue that will stand close mowing, that will be nearly evergreen and will be fine textured. Joe Duich at Penn State is well along in the development of a polycross tall fescue. We have been working for many years with a finer-leaved tall fescue that we call Traveler II. It is looking good in lawns. It still must be tested in fairway turf but it shows promise in that direction.

The need for a low-budget fairway grass that will stand up to disease, wilt, etc. is acute. Perhaps we need not limit this need to the low-budget course. Many courses are desperately seeking the "perfect" fairway grass to match the perfection attainable with Penncross on greens. It is our opinion that great effort should be devoted by turf experiment stations to developing the ideal fairway grass.

**Turf Schooling**

Q. After three years of military service overseas my nephew will return. He has had 1½ years of college, is a good golfer and he wishes to prepare himself for a combination job of pro, supt. or manager of a small club. Are there short courses which specialize in turf management or must he take a 2 or 4 year course in agronomy? (Nebraska)

A. Your nephew may apply to two schools with which I'm well familiar, and offer short courses in turfgrass management: 1) Pennsylvania State University, University Park, Pennsylvania, Dr. Joe Duich. 2) University of Massachusetts, Amherst, Massachusetts, Prof. Joe Troll. Iowa State, Illinois, Ohio State and Purdue are other schools that have fine turf management courses.

**Compacted and Diseased**

Q. Our greens of Midwest black soil are over 30 years old, compacted and diseased. We aerate 3-4 times a season, chopping the cores with a vertical mower, drag and overseed with Seaside bent, the original grass. We fertilize and spray for fungus alternate weeks.

1) How can we improve the existing soil to reduce or limit compaction?
2) Would spiking help?
3) Would overseeding with Penncross help? (Illinois)

A. Start changing the grass to Penncross by hydroseeding twice a year, spring and late summer, using ½ pound to 1,000 sq. ft. each time. Penncross is quite resistant to disease.

Improve soil texture by topdressing with a 50-50 mixture of medium sand and a good calcined clay. Keep up the aerating program to mix topdressing material with existing soil to prevent layering.

Spiking is only a partial answer, useful mainly in summer when heavy aerating is desirable.

Use every means possible to stimulate soil organisms which help significantly to improve soil texture. These methods include 1) sensible watering 2) using a good fertilizer as the source of nitrogen (the influence on bacteria is significant) 3) liming to keep soil pH values near 7.0. 4) keeping soil phosphorus low and using sulfate of potash each time nitrogen is applied.

**Turf Conferences**

SEPT.
9-10–Cornell University, Ithaca
10-11–Alabama-North Florida, Auburn University, Auburn, Ala.
14-15–Midwest Field Days, Purdue University, Lafayette, Ind.
16-17–Penn State Field Days, University Park, Pa.
18–Illinois Field Day, University of Illinois, Urbana
23-24–Lawn & Turf Conference, U. of Missouri, Columbia
23-25–Northwest Turf Conference, Vancouver, B. C.

OCT.
10–Rutgers Field Day, New Brunswick, N. J.
21-23–Central Plains Conference, Kansas State University, Manhattan

NOV.
4-6–Oklahoma Turf Conference, Oklahoma State U., Stillwater
16-20–American Society of Agronomy, Kansas City, Mo.

**On Canada Cup Team**

Arnold Palmer and Jack Nicklaus, who swept the Canada Cup matches for the U.S. in Paris last year, again will represent this country in the International Golf Association competitions which will be played at Maui, Hawaii, Dec. 3-6. Nicklaus won the 1963 individual title last year and paired with Palmer to take the team title. Spain was second, South Africa third and Canada fourth. U.S. has won six of 11 team titles, Australia two, and Japan, Ireland and Argentina, one each.