



(Left) Tree inventory and maintenance record overlay.

(Below) Painting the course.



Aerial Photography and Maintenance Mapping

by GARY A. WATSCHKE

Agronomist, Northeastern Region, USGA Green Section

THE ABILITY to communicate plans and programs to both superiors and staff is of critical importance and often more than a little challenging. Many are aware of horror stories where daily work orders were misunderstood by crew members. Areas to be watered weren't, areas not to be sprayed were, and in some extreme cases, wrong trees removed.

Pat Lucas, golf course superintendent at the Innis Arden Golf Club, in Old Greenwich, Connecticut, has found that an aerial photograph of the golf course is a very effective means of orienting new employees as well as aiding him in giving detailed instructions, planning, etc.

A new aerial photo of Innis Arden was needed, so Pat painted all sprinkler heads with six-foot Xs and outlined all greens and fairways with broken white lines. The local power company cooperated by marking underground electric lines leading to the pump house and maintenance facility.

Making arrangements for an aerial photograph is no easy task itself. The

following conditions must be met for the project to be successful:

1. Clean course of fallen leaves and other debris.
2. Absence of snow or ice cover.
3. Trees should be in their dormant stage, without leaves or bud break, which would impair visibility.
4. Flyover should occur at noon, guaranteeing minimum shadows.
5. Clear weather conditions.

Gary A. Watschke



6. Adequate lead time for proper painting of the course.

The flyover was done in mid-March, and the photo turned out exactly as planned. It was mounted in a wood frame, recessed, and placed in a prominent area of the staff's quarters. In addition to the instantly improved orientation of crew members for daily work assignments, it was obvious that additional visual aids could be made in conjunction with the photo. The idea of designing different overlays to incorporate various maintenance programs proved valuable. A dozen pieces of clear plexiglass were purchased, each cut to fit precisely over the photo, yet held by the wooden frame. To date, the following overlays are in use:

1. Tree Inventory and Maintenance Record Overlay: Major trees are identified and coded. Complete history of maintenance work is recorded.

2. Wilt Map Overlay: All areas susceptible to wilt are recorded. Aids in training new irrigation personnel.

3. Crabgrass/Goosegrass Areas Overlay: Problem areas highlighted to help develop pre-emerge herbicide program.

4. Wet/Soft Areas Overlay: Helps new staff members familiarize themselves with problem areas on the course.

5. Weed Whip Areas: Allows summer help to identify areas to be cut prior to going out to their field assignments.

These are but a few programs Pat Lucas has maintenance mapped through the use of overlays. Certainly there are other programs for which maintenance mapping would be appropriate.