

Meeting Dates



Keystone State Association of Cemeteries, Spring Convention, Shawnee on the Delaware, June 9-12.

Turfgrass Sprinkler Irrigation Conference, University of California Extension Conference Center, Lake Arrowhead, Calif., June 21-23.

Tri-County Chapter, California Landscape Contractors' Association, 17th Annual Convention, Ojai Valley Inn and Country Club, Ojai, Calif., June 25-29.

Landscape Seminar, Associated Landscape Contractors of America, Inc., for Michigan and Ohio, Dearborn Inn, Dearborn, Mich., July 13.

National Fertilizer Solutions Association, 1968 NFSA Round-Up, Regency Hyatt House, Atlanta, Ga., July 25-26.

Lawn and Utility Turf Growers Field Day, Rutgers University, College of Agriculture and Environmental Science Campus, New Brunswick, N. J., July 30.

Golf and Fine Turf Growers Field Day, Rutgers University, College of Agriculture and Environmental Science Campus, New Brunswick, N. J., July 31.

Midwestern Nurserymen's Summer Meeting, Zelenka Evergreen Nursery, Grand Haven, Mich., August 13-14.

1968 Turfgrass Field Day, Pennsylvania State University, Joseph Valentine Turfgrass Research Center, Campus, noon August 21-noon August 22.

Lawn and Ornamentals Days, Ohio Agricultural Research and Development Center, Wooster, Ohio, September 10-11.

1968 Southern California Equipment and Materials Educational Exposition, City Park, Lynwood, Calif., October 16-17.

American Society of Agronomy, 1968 Annual National Meeting, Jung and Roosevelt Hotels, New Orleans, La., Nov. 10-15.

Weed Science Society of America, Annual Meeting, Las Vegas, Nev., February 10-13.

Red Alert for Spraymen

(from page 9)

less calcium, or other elements in water samples.

The question among spraymen who deal with aquatic weed control is how to apply findings such as these. The answers, once water samples are analyzed are simple. For example, Dr. Toth reports that rainbow trout and other fish suffer from nickel and other heavy metals. Rainbow trout do not survive in water with more than 0.1 ppm of nickel. But at the same time, brook and brown trout can survive in water at this level of nickel content.

Dr. Toth reports that, based on atomic absorption analysis of water, his research group can accurately predict what water can be stocked with certain fish in order to assure maximum productivity and eliminate fish kill. For the spraymen who treats water for weed control before a restocking program, such information based on water analysis may prevent many later problems.

Sterile Lakes Are Problem

Further, Dr. Toth says, the damming of a stream to form a lake without checking the tributary water may lead to creation of a sterile impoundment. This is illustrated in the case of Matawan Lake at Matawan, N. J. Two tributaries to this lake contribute sufficient sulphuric acid and soluble aluminum to kill almost all of the animal and plant life. The pH of this lake has been as low as 2.8 with soluble aluminum content exceeding 25 to 30 ppm and with an iron content of 12 to 25 ppm. It is obvious that water of this type is unsuitable for recreational or industrial use.

Establishment of farm ponds in the New Jersey inner coastal plains area often leads to conditions similar to that in Matawan Lake. Use of water from such ponds for irrigation of lettuce, tomatoes, and peppers can lead to severe crop damage. Waters

of this type, however, can be treated with superphosphate and lime to raise the pH and precipitate the heavy metals.

Dr. Toth reports that his group can analyze with atomic absorption and accurately predict what water can be used effectively for irrigation of crops and golf greens. Burning of golf greens after irrigation has been common in the past. Recently, Dr. Toth reports, he analyzed irrigation water used on a golf course which was suffering burned greens. Water being used was high in copper and acid, thus causing the burning. Analysis of the water before irrigation could have prevented this situation and others like it.

Establishment of farm ponds in the New Jersey coastal plains area of the Southern region also creates problems when these ponds are used for recreation. The low content of bases and other nutrients in water of this region requires that the waters be periodically limed and fertilized for fish production. Large natural or impounded lakes and ponds in this region cannot be treated economically in this manner and must be considered as having very low fish productivity ratings.

Attempts to modify the composition of stream waters in this area using limestone or basic slag beds have not been successful.

WTT is indebted to Dr. Stephen J. Toth, Department of Soils and Crops, Rutgers University, New Brunswick, N. J., for his assistance in the foregoing presentation. Dr. Toth reports that his laboratory can process water samples on a custom basis, at cost, if commercial laboratories are unable to do so. Work is performed by graduate students who receive the fee. Spraymen, irrigation contractors, golf course superintendents, and turf specialists may contact him directly at Rutgers.