

WATER WELL MANUAL: A practical guide for locating and constructing wells for individual and small community water supplies by Ulric P. Gibson, Executive Engineer, Water Supply, Rural Areas, Ministry of Works and Hydraulics, Guyana, and Rexford D. Singer, Associate Professor of Environmental Health, School of Public Health, University of Minnesota. 1971—156 Pages—Illustrated, Paper, \$5.50.

Ground water is one of our most important natural resources. Its proper development by means of wells is a matter of considerable interest. This book covers the fundamentals of the occurrence and movement of ground water; the location, design, construction, and maintenance of water wells; pumping equipment; and sanitary protection of ground-water supplies. Written in a clear and easy-to-read manner, the book contains more than 100 illustrations.

The authors have intended it to serve as an introductory textbook for water well drillers, engineers, geologists, agriculturists, water works operators, and students, as

well as others interested in understanding ground water. In addition, scientists, teachers, home builders and owners, and public health officials will find it full of valuable information. The book should prove to be a useful reference source in libraries and offices.

WATER WELL MANUAL was originally published by the Agency for International Development of the U.S. Department of State to assist people living in the developing countries of the world who are without adequate supplies of good quality water. Because of the paramount importance of this subject to everyone, Premier Press is pleased to make this book available for distribution on a world wide basis.

Authors

The authors are both professionally qualified and experienced in the water supply field. They bring together in **WATER WELL MANUAL** an ideal combination of the fundamentals of ground water together with the practical knowl-

edge of modern field methods, equipment, and practice.

Publisher

Premier Press publishes quality books on all aspects of water resources. Emphasis is placed on timely and useful books, clearly and attractively printed, and published in paperback formats so as to be available at modest prices. A note to Premier Press will insure that you receive all future book announcements.

Additional copies

Water well contractors, equipment manufacturers, and suppliers will find **WATER WELL MANUAL** a useful book to distribute to present and prospective clients. Ground water is often regarded as an unseen and therefore an unknown water source by the lay public. This book will do much to dispel this impression and to promote an understanding of how ground water occurs and is developed. On orders of five or more copies, the book is available at \$4.95, a discount of ten percent.

insect report



**TURF INSECTS
MEADOW PLANT BUG**

(*Leptopterna dolabratus*)

MISSOURI: Adults collected in Sullivan and Linn Counties. These are new county records.

WESTERN TENT CATERPILLAR
(*Malacosoma californicum*)

OREGON: Light to moderate on bitterbrush in central Jefferson County. About 30 percent of plants examined at one locality 1-5 active tents per bush. Two percent of bushes completely defoliated. Tents also noted along highway north of Bend, Deschutes County. Late instars present.

**INSECTS OF ORNAMENTALS
BAGWORM**

(*Thyridopteryx ephemeraeformis*)

MARYLAND: Second instars active throughout state. Heavy on junipers and deciduous plants. TENNESSEE: Caused severe damage to planting of white pines for Christmas trees in Hamblen County. Trees 4-5 feet tall with top 2 feet of each tree dead. Immatures feeding on needles, bark, and woody portion of trees. Damaging white pines and junipers in Franklin County. Heavy on cedars in Fayette County.

HOLLYHOCK WEEVIL
(*Apion longirostre*)

KANSAS: Adults found on hollyhock in nurseries in

Wabaunsee, Cloud, and Saline Counties. These are new county records. MISSOURI: Adults collected at Eldorado Springs, Cedar County. This is a new county record.

**TREE INSECTS
JACK PINE BUDWORM**

(*Choristoneura pinus*)

WISCONSIN: Severe defoliation occurred in portions of six townships in Douglas and Bayfield Counties. Infestation covers 20,000-30,000 acres.

SPRUCE BUDWORM

(*Choristoneura fumiferana*)

MAINE: Pupating in southeast area. Survey shows pest over much of spruce and fir area of state from Calais, Cooper, and Robbinston to Baxter Park and Upton. PENNSYLVANIA: Heavy on hemlock, many trees completely defoliated in Centre County; heavy in Elk and Cameron Counties. MICHIGAN: Larval feeding completed in Upper Peninsula, damage evident; pupating. Damage very heavy again this year in Michigan area of Marquette County. Aerial survey of infested area to be made.

FRUITTREE LEAFROLLER

(*Archips argyrospilus*)

PENNSYLVANIA: Peak moth emergence observed; damage unusually severe on ornamentals and shade trees in central areas.

PINE LEAF CHERMID

(*Pineus pinifoliae*)

MAINE: Eggs hatching on white pine needles; nymphs settling on 1971 shoots.