The new officers and directors for the National Arborist Association, Inc. are:
(from left)  H.A. Morrison, arborist, Wilmette, Ill., Walter E. Money, Guardian Tree
Experts, Inc., Rockville, Md., W. Roland Shannon, president, Shannon Tree Co.,
Milford, Pa., Kenneth Kirk, Shield Shade Tree Specialists, Clayton, Mo., John A.
Shullenbarger, Gustin Gardens Trees Service, Inc., Caithersburg, Md., John A.
Holkenborg, Holkenborg Nursery, Inc., Sandusky, O., Robert Felix, new executive
sec., Wantagh, N.Y., Gerald Farrens, Farrens Tree Co., Eureka, Calif., Boyd Haney,
B. Haney and Sons, Inc., Franklin Park, Ill. and Paul S. Walgren, Walgren Tree
Experts, Inc., West Hartford, Conn.

Energy Conservation Tips
Available From Toro Co.

While the energy shortage may be causing higher prices and upsetting
turfgrass maintenance programs, it also represents an opportunity for
improving management procedures
and operational techniques.

A new energy conservation "tip
sheet" by Toro Co. offers suggestions
for evaluating and adjusting man-
gerial and operational procedures
under five headings: budget, facili-
ties, equipment, turfgrass and peo-
ple.

It points out that fuel costs repre-
sent only two to three percent of
operating budgets for turfgrass maintenance but that labor costs average between 65 and 70 percent.
Consequently, it suggests, doubling
or even tripling of fuel costs
can be offset by more efficient man-
agement of the labor factor.

Capital expenditures for higher
capacity, more efficient mowing and
irrigation equipment are suggested
as one step for reducing both labor
and fuel costs.

Also suggested is a retraining pro-
gram in mowing techniques and
equipment operation and adjust-
ment.

Watson views the energy shortage
as a positive force for improving ef-
ciciency in all aspects of turfgrass
maintenance. "It introduces a new
element of challenge that neces-
sitates both the learning of new
skills and procedures and a more
disciplined utilization of skill levels
and proven techniques," he said.

Lessons learned from meeting the
challenges caused by the energy
problem, he said, will make a long-
lasting beneficial contribution to the
quality of life in America.

Copies of Energy Conservation
Tips are available by writing: Dept.
EC, The Toro Company, 8111 Lyn-
daile Avenue South, Minneapolis,
Minn. 55420.

Recent Herbicide Study
Detect Minute Runoff

According to researchers R. L.
Rogers, G. H. Willis, T. G. Hargrod-
er and J. L. Kilmer of the Louisiana
Agricultural Experiment Station,
Baton Rouge, only minute quantities
of linuron (Lorox) and diuron
(Karmex) were found in a recent
study of runoff waters.

The study was conducted on a
series of test plots—24 feet by 200
feet and graded to a slope of 0.15
percent—all at one location in the
lower Mississippi River alluvial
flood plain. The soil type in the test
plots varied from a commerce silt
loam to a mhoon silty clay loam.

Linuron 2.0 lb ai/A, and diuron 0.75
ai/A, were applied broadcast as pre-
emergence surface treatments, and
the linuron and diuron plots were
planted to soybeans and cotton, re-
spectively.

Results of the study, the authors
reported, indicate that there is
usually little surface drainage water
from fields in this area in late spring
and early summer.

Generally, the researchers noted,
there was a progressive decrease
with time in the amount of herbi-
cides detected in runoff water. Ex-
ceptions to this occurred when
heavy rainfalls followed light rain-
falls. And approximately three
months after application, the re-
searchers concluded, the quantity of
herbicides in surface drainage water
had decreased below the point of
detectability.

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