During the past 15 years Minnesota has witnessed a phenomenal growth in fertilizer consumption. Total tonnages increased from 236,000 tons in 1960 to 1 million tons in 1974. Nitrogen and potash were used at roughly half the rate of phosphorus in 1960 whereas in 1974 the relative rate of use was 410-268-322 thousand tons for N-P-K, respectively.

**SOURCES OF N USED IN MINNESOTA - 1974**

<table>
<thead>
<tr>
<th>Source</th>
<th>%N</th>
<th>Tons (1000)</th>
<th>% of Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anhydrous ammonia</td>
<td>82</td>
<td>279</td>
<td>56%</td>
</tr>
<tr>
<td>Blends</td>
<td>103/</td>
<td>748</td>
<td>223%</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>34</td>
<td>117</td>
<td>9.7%</td>
</tr>
<tr>
<td>Nitrogen solution</td>
<td>30</td>
<td>90</td>
<td>6.5%</td>
</tr>
<tr>
<td>Urea</td>
<td>45</td>
<td>40</td>
<td>4.3%</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>9.4</td>
<td>0.6% (Includes organics)</td>
</tr>
<tr>
<td>Ammonium phosphates</td>
<td>153/</td>
<td>13.6</td>
<td>0.5%</td>
</tr>
<tr>
<td>Aqua</td>
<td>20</td>
<td>8.7</td>
<td>0.4%</td>
</tr>
<tr>
<td>Ammonium sulfate</td>
<td>24</td>
<td>4.9</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Now that you have read this very interesting article and studied the charts you should be in the mood to sell your club, if you have not already done so, on supporting the MGCSA Research Program. Many of the clubs have already sent in their contribution and they are greatly appreciated. However, this is a program that is beneficial to all clubs and their members and we therefore urge 100% support. Have your club make their check payable to the MGCSA and mail it to Keith Scott, Secretary-Treasurer % Oak Ridge Country Club, 700 Highway 18, Hopkins, Minnesota 55343. If you are wondering what amount your club should contribute, a good gauge is 50c per member but any amount your club feels they want to contribute will be thankfully accepted.

**GREEN CLIPPINGS**

With the article on "Fertilizer Arithmetic" we made mention that Dr. Martin enclosed a booklet on Recommended Chemical Soil Test Procedures for the North Central Region and we advised this booklet was available by contacting Dr. John Grava, Department of Soil Science, University of Minnesota, St. Paul, Minnesota 55101. We are listing the contents for your information:

Introduction..................................................................................................................W. C. Dahnke

(This contains valuable information including some history)

Soil Sample Preparation.................................................................................................Kalju Eik, E. L. Hood and J. J. Hanway


Recommended pH and Lime Requirement Tests...............................................................E. O. McLean

Importance of Soil Extraction Techniques......................................................................John Grava

Recommended Nitrate-Nitrogen Tests.............................................................................P. L. Carlson

Recommended Phosphorus Soil Tests................................................................................D. Knudsen

Recommended Potassium Tests......................................................................................P. L. Carlson

Micronutrient Tests........................................................................................................David A. Whitney

Just a list of the contents indicates the value of the booklet.

(continued on page 8)
THEFT OF EQUIPMENT - We have previously reported the theft of equipment of various kinds, including items as large as golf carts. We have now learned of the theft of a couple of Hahn Triplex Greens Mowers including attachments such as 3 Verti Cuts, 3 Greens Reels; these were stolen from the Winthrop Golf Course in Winthrop, Minnesota and had a value of $5000. Another one was stolen in the Detroit, Michigan, area (this was a new one) and would be of greater value. The owner of the Winthrop equipment did not have the serial numbers registered or shown on the equipment, which will make it more difficult to identify. We do not have the information on the Detroit equipment. We suggest important information such as serial number, name of club, phone number etc. be punched into the frame of your equipment so that it cannot be erased without replacing the part; if it is stamped in the frame, for example, it would be difficult to erase. By just putting the information on a plate and attaching the plate to the equipment is not enough as a plate can be taken off fairly easy. Please do not purchase any equipment, new or used unless you are sure the seller is the rightful owner.

ATTENTION - Don’t lose track of the fact that we in Minnesota are the Hosts to the 1976 GCSAA Conference and Show. We will have more definite information for you in future Hole Notes. (continued on page 9)
One reason Baron is the choice of most professionals is the combination of fast germination, slow growing and its ability to quickly form what sod growers call “a tight-fisted root system.” You can mow Baron as low as 3/4-inch — and that's another reason Baron is ideally suited for golf courses, sod fields, fine lawns, industrial and other landscaping areas. Since Baron is winter hardy, it keeps its deep green color well into the cold months... highly disease resistant, too.

For more details and the name of your nearest Baron distributor or sod grower, call or write:

*U.S. Plant Patent #3186, Dwarf Variety

Exclusive North American Grower and Distributor:
Lofts Pedigreed Seed, Inc.
Bound Brook, N.J. 08805 / (201) 356-8700

GREEN CLIPPINGS (continued from page 8)
Tartan Park proved to be a popular spot for the May meeting. Among those playing golf were Dr. George Blake and Dr. William Martin, both from the Soil Science Department of the University of Minnesota. There were also several from outstate points as far distant as Cloquet, represented by John Lightfoot, Clif Vohs from St. Cloud and there was an entire foursome from Rochester, and these are only a few, there were many others from various locations. Keep it up, it is nice to have you attend the monthly meetings and get in a little golf, visiting with old friends and meeting new ones.

The May meeting was also known as Cushman Motor Day and Jerry Commers had a very nice and interesting display of his equipment. He also had some gifts, such as pens, flags and world globes; the flags and globes were given as door prizes - and don't forget, nice cold beer and soft drinks that were boosters on a warm sunny day (continued to page 11)
Pictures taken at Tartan Park
Glenn Rasmussen (Minnesota Toro Inc.) and wife announced the arrival of a baby boy. He arrived on May 7 and weighed in at 6 lbs. 7 oz. and all are doing well, including Glenn. Glenn has labeled him No. 2 Fisherman. No. 1 is now 3½ years old. Congratulations to the Rasmussens.

We have received an article written by Dr. James Watson of the Toro Company. The title of the article is "MAINTENANCE IN TODAY'S ECONOMY." It is very exciting, interesting and educational. It may be necessary to run it in installments, starting with the July issue of Hole Notes. Be on the lookout for it and keep all issues, if it is necessary to run it in installments. It will be well worth your while.

The Great Lakes Biochemical Co. announces a new Pelleted Formulation for Algae Control. It is a slow release Algimycin PLL-C Pellet. A new and different approach to algae control in ponds, lakes and similar bodies of water. It is a copper-based formulation which saves time and labor and requires no mixing, special equipment or trailing bags. The pellets will stay in place on the bottom and slowly release the algae control chemicals while water currents create natural distribution. They also announce that Minnesota Toro Incorporated is now carrying this item.