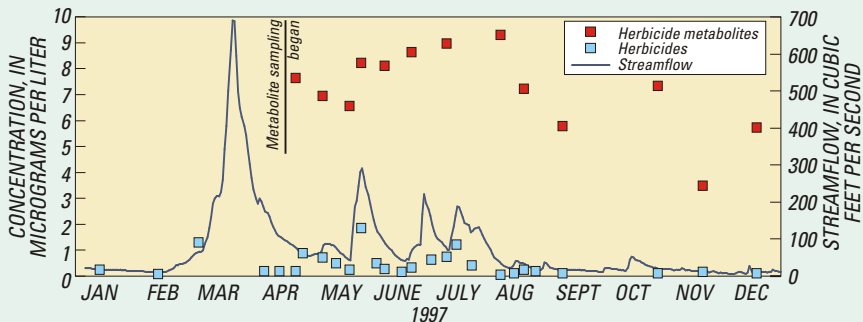


## CONCENTRATIONS OF DEGRADATION PRODUCTS OF AGRICULTURAL HERBICIDES WERE GREATER THAN THEIR PARENT COMPOUNDS IN LITTLE COBB RIVER NEAR BEAUFORD, MINNESOTA, 1997

Eight degradation products (metabolites) of four commonly used agricultural herbicides (acetochlor, alachlor, atrazine, and metolachlor) were detected in samples collected from the Little Cobb River, an agricultural stream. Summed metabolite concentrations were always greater than summed parent compound concentrations. Metabolite concentrations were least during the fall and greatest during the summer. Four metabolites were present year round at substantial concentrations (metolachlor-ethane sulfonic acid and metolachlor-, acetochlor-, and alachlor-oxanylic acid). The affects of these metabolites on aquatic and human health are not known, their persistence and relatively high concentrations are a cause for concern.



This figure taken from: **Stark, J.R., Hanson, P. E., Goldstein, R.M., Fallon, J.D., Fong, A.L., Lee, K.E., Kroening, S.E., and Andrews, W.J., 2001, Water quality in the Upper Mississippi River Basin, Minnesota and Wisconsin, South Dakota, Iowa, and North Dakota, 1995-98: U.S. Geological Survey Summary Circular 1211, 35 p.**