

HISTORY OF SCIENCE

Chairman: WILLIAM R. EBERLY
Manchester College, Manchester, IN 46962

Chairman-Elect: GERTRUDE L. WARD
Earlham College, Richmond, IN 47374

ABSTRACTS

Rafinesque Revisited. GERTRUDE L. WARD, Joseph Moore Museum, Earlham College, Richmond, Indiana 47374.—The life of Constantine S. Rafinesque (1783-1840) was reviewed with comments on his employment as a teacher for the family of Edward Livingston at Germantown, N. Y., his walking tour to Indiana and Kentucky in 1818, and his meeting with John J. Audubon. Several genera, species and subspecies of plants that he described were illustrated. His comments on speciation in plants, predating Darwin and Wallace's, were included.

Further Studies in the History of the Phosphate Detergent Ban. WILLIAM R. EBERLY, Manchester College, North Manchester, Indiana 46962.—In 1971 the Soap and Detergent Association and/or its affiliated member companies filed suits challenging the constitutionality of bans on phosphates in detergents enacted in Indiana, Dade County (Fla.), Erie County (N.Y.) and Chicago (Ill.). In the first 3 cases, the courts found the laws not unconstitutional. In the Chicago case, the regulation was ruled unconstitutional. That case was appealed and on January 15, 1975, the U.S. Court of Appeals reversed the decision of the lower court. When the Supreme Court refused to hear an appeal by the Soap and Detergent Association, the Appeals court decision became final. All court action has now found such laws restricting phosphorus in detergents to be legal and appropriate action.

Indiana was the first state to ban phosphates in detergents on January 1, 1973, with New York following in July, 1973. In 1975 the Minnesota Pollution Control Agency held hearings on a proposed regulation banning phosphorus detergents in Minnesota. The ruling (WPC 37) was adopted on April 27, 1976 and becomes effective January 1, 1977. The Senate Natural Resources Committee of the Vermont State Legislature held hearings on a bill to restrict phosphates in Vermont (S.128). The bill was narrowly defeated in the 1976 legislative session. The bill will be considered again by the 1977 legislature. The Michigan Department of Natural Resources held hearings on a regulation to ban the sale of phosphate detergents in Michigan. They are scheduled to act on this proposal in December, 1976.

In a report issued in December, 1975, the International Joint Commission (IJC) analyzed the phosphorus output from 12 municipal sewage treatment plants which collectively contributed more than 80% of all the municipal sewage flowing into Lake Erie. Most of the plants had supplemental phosphorus removal operations. Only Fort Wayne

(Indiana) and London (Ontario) had achieved the goal of 1 ppm P in the sewage effluent in 1974. The report strongly suggests that phosphorus removal treatment by itself is not adequate to reach the desired concentration of P in the effluent and that restrictions of P in detergents is necessary also. In their annual report (July, 1976) the IJC repeated their recommendation that "all the Great Lakes states that have not already done so should seriously consider the imposition of phosphorus limitations in detergents marketed in the Great Lakes Basin."

In August, 1976, for the first time the United States Environmental Protection Agency adopted a position urging all the Great Lakes states to restrict the use of phosphorus in detergents. An official position paper is in preparation by the EPA.