

HISTORY OF SCIENCE

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ABSTRACTS

John and William Bartram, Botanists at the time of our Nation's Birth. ARTHUR T. GUARD, Purdue University, West Lafayette, Indiana 47907.—The area of the thirteen colonies and later the first states of our nation was a veritable Garden of Eden for botanists. However, most early settlers were too busy with other pressing problems to take advantage of this plethora of plant life. The Bartrams' botanical studies have been left to us through their accounts of their travels and especially William's book, "The Travels of William Bartram", 1791.

A Backward Look at Academy Presidential Addresses. RAYMOND E. GIRTON, Department of Soils and Plant Nutrition, University of California, Berkeley, California 94704.—In retrospect the fifty-year period (1973-23) included 20 presidential addresses in the area of biology, 14 dealing with educational subjects, four classified as ecology, three each in chemistry, geology, and pharmacy, two in physics, and one in mathematics.

Ten-year-period trends show a decline in biology addresses from five to two, whereas those classed as education began with two and remained constant at three addresses each over the last four decades. Ecology addresses were given in three of the five decades: two in the 1963-54 decade and one each in the second (1943-34) and in the last decade (1973-64). Two chemistry addresses were read in the 1973-64 decade and one in the 1953-44 decade, whereas one pharmacy address was given in each decade of the 1973-44 period. Three addresses relating to geology were presented in alternate decades beginning with the first. The two physics addresses were both given in the earliest period whereas the one in mathematics was presented in the middle period.

As to the 17 institutions represented, Purdue with 10 and Indiana with 9 addresses headed the list. DePauw and Notre Dame each were represented by five addresses, Eli Lilly & Co. by four, and Indiana State by three. Ten other institutions contributed one or two addresses each.

The remainder of this paper is devoted to sketching individually the more recent addresses—those of the 1973-48 period. These include the subjects of biology (8 addresses), education (7), ecology and pharmacy (3 each), chemistry (2), and geology and mathematics (1 each).

Describers of the Indiana Fauna—A Bicentennial Study (Progress Report) B. ELWOOD MONTGOMERY, 906 North Chauncey Ave., West Laf-

ayette, Indiana 47906.—In 1973 a study was presented to this section on the Linnean “elements” in the Indiana Fauna and Flora (7), in which the number of taxa in selected groups of the Indiana Biota named by Linnaeus were presented. During the bicentennial years this study is being extended to determine other authors of genera and species of animals known to occur in Indiana and to tabulate the dates at which the taxa were described. These data are being compiled from available state lists and catalogues; those used thus far include: Ensifera-McCaffert & Stein (4), Odonata-Williamson’s and Montgomery’s published records, as cited in the 1971 paper (6), Pisces-Gerking (2), Amphibia and Reptilia-Minton (5), Aves-Mumford (8) and Mammalia-Lyon (3). None of these furnish all the information on authors and dates desired, but this has been obtained from other sources, especially Neave’s Nomenclator (9) and the A.O.U. list (1). However, complete information of the dates of descriptions of the species of several groups has not been secured yet.

It should be noted that few of the authors were ever in Indiana and that most of the species were originally described from other areas, some far removed from the state. Of the authors who did work, or visit, Indiana, all worked on material from wide areas and their “Indiana” species are likely to have been described from other regions.

The political history of the country may have had little direct effect upon the activity of taxonomists, but it may be interesting to compare such activity as measured by the number of taxa described with certain periods of national and state development:

- 1758 Beginning of our system of zoological nomenclature
- 1759-1774 The colonial period
- 1775-1783 The Revolutionary period
- 1784-1815 (Indiana) territorial period
- 1816-1825 Early statehood period
- 1826-1834 The New Harmony period

The beginning of our system of nomenclature came during the colonial period, and there had been considerable biological exploration in this country before that time, but none in or near Indiana. Of course, the colonial period began much earlier but the biological activity cannot be reflected by the date of establishment of taxa before the beginning of the accepted system of names. Some biologists, as Audubon and Rafinesque, even Say on the way to his western and north-western explorations, visited Indiana during the early statehood period. There appears to be no reflection of such visits in the published descriptions by these authors, however.

Listing of the Indiana taxa by authors is in progress but will require much more work for completion as some of this information is not readily available and the identification of the authors even when their names are known has not been possible yet.

TABLE 1. *Tabulation of the dates of description of genera and species of selected groups of animals listed as known from Indiana*

Periods	Aves						
	Ensifera	Odonata	Pisces	Amphibia	Reptilia	"Water" birds	Passi- formes
1758	-----22- 1	1- 2	5-1	1-1	2-1	5-35	9-38
1759-1774	-----0- 6	0- 6	2-	3-	1-	4- 9	3-26
1775-1783	-----0- 2	1- 1	1-	0-	0-	0- 4	21-58
1784-1815	-----1- 0	5- 6	7-	0-	5-	4-10	0-12
1816-1825	-----1- 1	0- 0	28-	4-	3-	11- 2	13-50
1826-1834	-----1- 1	1- 0	4-	0-	5-	8- 2	12-13
1835-1865	-----8-20	23-90	30-	7-	13-	11- 7	16-12
1866-1899	-----5-28	13-23	15-	0-	2-	0- 0	28-14
1900-date	-----8-21	8-17	3-	0-	0-	0- 2	0- 0
Totals	-----26-80	52-145	93-182	15-42	34-63	45-70	45-70
							221-358
							66-99

¹The state lists which were used to compile the data for these groups did not cite year of description; dates of establishment of the genera have been obtained from Neave, 1939 (9), but those for the species have not been obtained.

Literature Cited

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