## Paleocene Ostracoda from Outcrops in Maryland

The presence of outcrops of Paleocene sediments in the Middle Atlantic Coastal Plain was first established by Bennett and Collins in 1952 (1). They named this occurrence the Brightseat formation and based its Paleocene age upon foraminiferal and megafossil evidence. The presence of a Paleocene ostracode faunule in the Brightseat formation is here recorded for the first time.

It now seems conclusively established that the outcrops at Brightseat, Prince Georges County, Md., are of Paleocene age. They are more than 500 mi north of the nearest outcrop of sediments of the same age in Georgia and about 700 mi from the nearest outcrop in Alabama from which Paleocene ostracodes have been described (2). Sediments of possible Paleocene age based on Ostracoda and Foraminifera are recorded from deep wells in North Carolina (3, 4), and Midway group (Paleocene) equivalents based on Foraminifera are inferred in the subsurface of New Jersey (5, 6).

The approximate stratigraphic equivalence of the Brightseat formation to strata of known Paleocene age is substantiated by Table 1, which shows ostracode distribution. Only those species that are matched with specimens from the comparative samples are listed in the table.

The species shown in Table 1 are absent from the

TABLE 1. Ostracoda from the Brightseat formation identical with species from outcrop samples of Paleocene age.

Species -	Locality*					Holo-
	1	2	3	4	5	type
Brachycythere interrasilis						
Alexander, 1934	x		x	?		Tex.
Cytherelloidea? nanopleura						
Munsey, 1953					х	Ala.
Clithrocytheridea macrolaccus						
Munsey, 1953	х				х	Ala.
Clithrocytheridea cf. C. ruida						
(Alexander), 1934	х			х	х	
Cytheropteron hincheyi						
Munsey, 1953		х		х		Ala.
Haplocytheridea ruginosa						
(Alexander), 1934	х					Tex.
Orthonotacythere aff. O. cristata						
Alexander, 1934	х					
Trachyleberis bassleri						
(Ulrich), 1901	х		x	х	х	Md.
T. aff. T. prestwichiana						
(Jones and Sherborn), 1887			х		х	
T. aff. T. spiniferrima						
(Jones and Sherborn), 1889			x			

<sup>\* 1-</sup>U.S.G.S. loc. 10868; Clayton formation below Porters I---U.S.G.S. IoC. 10608; Clayton Iofmation below Porters
 Creek clay, Hardman County, Tenn. 2---U.S.G.S. loc. 18189;
 basal bed of Clayton formation, McNairy County, Tenn. 3- U.S.G.S. loc. 17282; Wills Point formation, Pulaski County,
 Ark. 4---U.S.G.S. loc. 18190; Clayton formation just above
 basal limestone, Tippah County, Miss. 5---U.S.G.S. loc. 15203; Coal Bluff marl member of Naheola formation, Wilcox County, Ala.; this is the type locality of Munsey (2).

underlying Cretaceous sediments, and only Trachyleberis bassleri is recorded in the Eocene.

This preliminary work suggests that Ostracoda may be more useful than is commonly appreciated in longdistance correlation of geologic age. Further study of the composition, distribution, and stratigraphic range of Paleocene Ostracoda is being undertaken.

I. GREGORY SOHN

U.S. Geological Survey Washington, D.C.

## References

- 1. R. R. Bennett and G. G. Collins, J. Wash. Acad. Sci. 42, II.4 (1952).
  G. C. Munsey, Jr., J. Paleontology 27, 1 (1953).
  F. M. Swain, U.S. Geol. Survey Profess. Paper 234-A
- 3. (1952). W. B. Spangler, Bull. Am. Assoc. Petroleum Geol. 34, 100 4.
- (1950)5. H. G. Richards, Bull. Am. Assoc. Petroleum Geol. 29, 885
- (1945)6. M. E. Johnson and H. G. Richards, Bull. Am. Assoc. Petroleum Geol. 36, 2150 (1952).

Received April 5, 1954.

## Another Cooperative Multiple-**Choice** Apparatus

Readers of the recent paper in Science by Peters and Murphree (1) may be interested in the similarity between their apparatus (which they believe to be "the only one so far developed for studying human cooperation in the same way") and a device that has been in use at the University of North Carolina since 1949. The comparison will serve to illustrate two familiar points: (i) the apparently independent development of similar methods when the time is ripe, and (ii) the difficulties of rapid communication between scientists even in so communicative an age as ours.

The North Carolina apparatus employs two-position rotary switches instead of multiple-choice boxes; in its fundamental plan, however, it is identical with that recommended by Peters and Murphree. Details of the design may be found in the 1952 publication by McCurdy and Lambert (2). The same type of apparatus was constructed and used by me as early as 1947 at Meredith College; the present model, which has six switches and has been used with individuals and groups as large as six, was constructed at the University of North Carolina with the technical assistance of Howard Page in 1949, on a grant-in-aid from the Carnegie Research Fund administered by the University's Research Council. The local Institute for Research in Social Science has supported experimental work with the instrument since 1950 by providing stipends for assistants.

Among written reports of our progress, in addition to the one mentioned, are a master's thesis by Van Cott (3), and publications by Eber (4), McCurdy (5), and McCurdy and Eber (6). Several oral reports have also been given, notably an informal sketch of technique and objectives at a gathering of small-group research workers during the 1950 convention of the American Psychological Association, and the paper