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SLAVE-RAIDS OF
THE ANT *POLYERGUS LUCIDUS* MAYR*

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Since slave-making raids of the genus *Polyergus* are conspicuous and spectacular, they have been studied by a number of myrmecologists. Among these are Wheeler (1910), Forel (1928), Creighton (1950), and Dobrzanska and Dobrzanski (1960). This paper concerns the eastern "shining slave-maker," *Polyergus lucidus* Mayr, on the Edwin S. George Reserve in southeastern Michigan (Livingston County). Twenty-five colonies of this species have been found, scattered quite widely over the fields, on the 2 square miles of the Reserve. Most of the fields tend to be dry, with Canada bluegrass (*Poa compressa* L.) the dominant grass and with forbes such as wild bergamot (*Monarda fistulosa* L.) bush-clover (*Lespedeza virginica* (L.) Britt.), and goldenrod (*Solidago* spp.) common and characteristic. In addition to this main habitat, *Polyergus* colonies may sometimes be found at woods' edge, in low wet fields, and in openings in oak-hickory woods where blueberries (*Vaccinium angustifolium* Ait.), bracken (*Pteridium aquilinum latiusculum* (Desv.) Underw.), sedge (*Carex pennsylvanica* Lam.), and mosses are characteristic. No colony has been found completely within the woods, although the slave ant *Formica pallidefulva nitidiventris* Emery sometimes occurs there.

The slave-raid study was undertaken in the hope of determining the time of day of raids and the environmental factors which influence the time, the days on which no raids occur and the factors which determine this absence, the number of slave colonies used in the support of one *Polyergus* colony, the distances to these colonies and the amount of time it took to reach them, the number of raids in a season, the number of brood taken, the size and characteristics of a raiding force, and the method by which the band of ants could travel over a seemingly unknown path to arrive exactly at a nest to be raided.

Preliminary studies were made on the Lawn Colony, which lived in the cut grass outside the East Gate Laboratory and had been known

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