ZOOLOGY

Chairman: James C. List, Ball State University

Ralph D. Kirkpatrick, Ball State University, was elected Chairman for 1970

ABSTRACTS

Some Modifications in Rat Ovaries and Uteri Following Aminoglutethimide Treatment. Egerton Whittle, Indiana State University.—Immature female albino rats (Charles River Strain) were injected subcutaneously with aminoglutethimide phosphate (AGP) for a 15-day period beginning on day 25 *post partum*. The experimental animals were given dosages of either 50, 100, or 200 mg/kg body weight per day. At the end of the period of treatment the ovaries and uteri were excised and the weights compared with the weights of ovaries and uteri of control animals to determine whether AGP produced a definite effect on the size and weight of these organs and the general stature of the animals.

The overall body weight of the treated groups displayed an increasing retardation with increasing dose levels of AGP. The amount of weight gain decreased almost linearly with increased amounts of AGP injected.

The effect of AGP on ovarian weight in the treated animals was that of an apparent intial stimulation to growth at the lower dose level but an abrupt reversal of this trend when higher dose levels were administered. It would seem likely that AGP effects involve more than a single mechanism of action.

The growth of uteri was inhibited increasingly with increasing dosage of AGP. At the highest dose level the uterine weight was only about ⅓ that observed in control animals.

The evidence from this study indicates some relationship between presence of AGP in a system and the amount of estrogen present in the system, as circulating estrogen is the main governing factor for development and growth of the organs observed.

Big Brown Bat *Eptesicus fuscus* Movement in Tunnel Cave, Clifty Falls State Park, Indiana. James B. Cope and Richard Mills, Earlham College.—The senior author and students have studied the bat population in Tunnel Cave for the last five winters. During this time, the disturbance by banding and the subsequent reading of bands caused unnatural movements in the cave. Color banding techniques were tried which reduced the disturbance considerably after the initial banding. Movement was greater than expected and further refinement of technique was employed.

Every 6 hours (6 AM, 12 Noon, 6 PM, and 12 Midnight) for a 5-day period during the last week in January, the cave was monitored for banded bats. Flashlights were used and only color bands that were visible were recorded. No bats were disturbed even if the band could not be read. There is overwhelming evidence that some bats come out of torpor and fly during this period even when the outside temperature is 0°F.